An Insight into Youth Mental Health

A mixed methods research study of experiences and perceptions of youth mental health.

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Abstract

Background:

The mental health of youth within New Zealand is an imperative matter that needs to be immediately addressed. The rates of youth struggling with their mental health is a concern for all health professional in New Zealand.

Objectives:

The objectives of this research are to firstly, look at what are common mental health issues that youth are currently living with. The second objective is to find out what the perceptions are that nurses have on youth mental health within New Zealand.

Participants:

The first part of this research examined quantitative data using the YouthCHAT instrument from 778 students from secondary schools within the Waikato and Coromandel regions. The second part of this research, comprised individual interviews with eight nurses based in the Waikato.

Methods:

The study used a mixed methods design. The quantitative data was extracted from an existing YouthCHAT . This data was analysed through parsimonious modelling and analysis of covariance (ANCOVA). The data was examined utilising the Statistical Package for the Social Sciences (SPSS). The qualitative data was generated by interviewing eight nurses about their perception of youth mental health. The findings from the interviews were analysed utilising a general inductive approach.

Results:

The research undertaken provides valuable insights into youth mental health in New Zealand by combining qualitative interviews with nurses and quantitative data from YouthCHAT. It explores the emotional response of nurses, barriers to accessing mental health services, the impact of social media, and associations between depression, anxiety, and other factors in youth mental health.

Conclusion

The study shows the importance of addressing youth mental health issues and also recognising the crucial roles nurses play in addressing youth mental health within New Zealand.

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Contribution

I, the researcher undertook all aspects of this study under the direct guidance of my supervisors. This entailed selecting the appropriate research design, the data collection and analysis, and the publishing of the findings in this thesis.

Dedication

This research is dedicated to the youth of New Zealand.

"Happiness can be found even in the darkest of times, if one only remembers to turn on the light."

-Albus Dumbledore

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Chapter I: Introduction

Research is formalised curiosity. It is poking and prying with a purpose.

Zora Neale Hurston, 1903 – 1996

The mental health of the New Zealand youth population is an important and urgent topic that needs to be addressed. Mental illness can have a significant impact on the well-being and quality of life of young people, and addressing this issue is crucial to ensuring that future generations can lead healthy and fulfilling lives. This thesis explores the mental health of the youth population (13-19 years) and the perceptions that nurses have of youth mental health. For this research, data was collected and analysed through a mixed methods study. The research was conducted in two stages. Stage 1 was an analysis of an existing anonymised set of YouthCHAT data. Stage 2 involved semi-structured interviews conducted with nurses about their perceptions of youth mental health.

I have worked in the Te Whatu Ora (formerly Waikato District Health Board) mental health and addiction sector for over three years. During this time, I have worked in an acute inpatient mental health unit, where tangata whaiora with the highest acuity and most complex needs are cared for. I have seen and worked with tangata whaiora when they are at their most unwell. I have worked in a community drug and alcohol team where I saw the detrimental effects addictions can have on an individual, whānau, and their communities. I learnt of the link between trauma, mental health issues and addiction. I learnt of the stigma many individuals face while trying to access mental health care. Currently, I am working in a community mental health service where I have the opportunity to meet individuals and help them strive for and/ or maintain mental health and well-being.

In New Zealand, the youth population (12-24) is approximately 800,000 (Ministry of Health, 2022). The Ministry of Health (2022) highlights that in the past few decades positive changes have happened, with a decrease in substance use, risky driving behaviours, unprotected sex, and improved outcomes for youth with preventable illnesses and youth living with complex health conditions. The Ministry, however, outlined the many challenges that the healthcare systems face in providing care for an

overall healthier youth population. There is evidence of a rapid increase in mental distress in youth within New Zealand (Ministry of Health, 2022). As well as an increase being reported worldwide (Ministry of Health, 2022). Inequities are also apparent, predominantly in Māori, Pacifica, and individuals living in low socioeconomic areas (Ministry of Health, 2022). Worldwide, according to the World Health Organisation (2021) one in seven (14%) of 10–19-year-olds experience mental health issues to some extent (World Health Organisation, 2021).

Mental health experiences amongst youth can vary widely, ranging from occasional distress, sadness, or nervousness through to a diagnosable mental illness. Some mental health needs of youth are classified as "mild to moderate," meaning they are not severe enough to require referral to a specialist. However, if left unaddressed, these mild to moderate issues can potentially worsen over time (Oranga Tamariki, 2019). Common examples of mild to moderate mental health issues among youth include feelings of stress and distress. Stress is a prevalent issue among youth which can lead to harmful effects on their mental and physical well-being. Various factors can contribute to youth stress, such as academic pressure, social expectations, family dynamics, and environmental factors. Symptoms of youth stress may include physical symptoms such as headaches and stomach aches, as well as emotional symptoms like anxiety, depression, and irritability (Bhargava & Trivedi, 2018).

There are many different types of mental health issues that the youth of today may experience. Generalised anxiety is defined as excessive worry and anxiety. Youth experiencing this may find it difficult to rationalise and control these feelings. Another example is having negative apprehensive thoughts toward a variety of future events that are out of proportion to reality (American Psychology Association, 2017). WHO states that 4.6% of the age group 10-14 years are living with an anxiety disorder.

Depression is another common mental health issue affecting youth. Depression can vary from intermittent or persisting feelings of low mood to a diagnosable mental illness (World Health Organisation, 2021). Depression is estimated to affect 2.8% of 15-19-year-olds and 1.1% of 10- 14-year-olds worldwide (World Health Organisation, 2021). Additionally, it is highlighted that these conditions can affect attendance at school and the outcomes of school studies. These mental health conditions also may

lead to self-harm and suicide (World Health Organisation, 2021). Depression is diagnosable when there is ongoing low mood that last more than 2 weeks, and the person lacks motivation and no longer finds interest in activities that they previously enjoyed (American College of Obstetricians and Gynecologists (ACOG)), 2017).

Panic attacks are an additional mental health issue that youth may experience. Panic attacks are described as intense fear that lasts for a period of a few minutes. Panic attacks cause multiple symptoms, physically and mentally. Heart palpitations are commonly experienced, as well as shaking, chest tightness, and sweating. Cognitively, derealisation may occur, which is the feeling of being out of touch with reality, as well as feeling like the person is losing touch with themselves and losing control (ACOG, 2017).

Eating disorders are commonly seen within the youth population. The World Health Oroganization (WHO) (2021) define eating disorders as having negative attitudes and behaviours towards eating and food. Eating disorders are also shown to put someone at high risk for suicide (WHO, 2021). Alongside this, people with eating disorders may have fixations on their body shape and weight. Some common examples of eating disorders are bulimia and anorexia nervosa. Eating disorders may lead to an array of physical complications and poor physical health. This disorder is more prevalent within the youth population.

Post-traumatic disorder is a manifestation of a variety of symptoms following a traumatic event. Events could include but are not limited to, violence, sexual assault, serious injury, neglect, and verbal abuse. Symptoms may manifest through emotions, behaviours, cognition, and physical (ACOG, 2017).

Another common disorder experienced is obsessive-compulsive disorder (OCD). This disorder is difficult to define as it may involve an obsession with a variety of things. It is important to note that while obsessive behaviours are common, they are usually not problematic. However, there is a potential for obsessive behaviour to have a negative impact on the person's life and develop into a diagnosable disorder. An example of OCD is repeating and ordering things. Another example is compulsive cleaning and organising. Experiencing intrusive thoughts also falls under the OCD

category. This is when a person experiences frightening and/or taboo thoughts, such as wanting to harm someone (ACOG, 2017).

Attention deficit hyperactivity disorder (ADHD) is also a common condition in youth. ADHD is defined as impulsivity, low attention threshold, and excessive activity. WHO (2021) states that ADHD occurs in 2.4% of 15-19 years old and 3.1% of 10-14 years old. Living with this condition may affect education, relationships, and may be associated with criminal behaviours (ACOG, 2017).

There are many common mental health issues that youth experience, but there are also issues that are less common, but more severe. For example, another mental health issue identified is an individual experiencing a form of psychosis. This may include experiencing hallucinations and delusions. Hallucinations can be experienced by the way of visual, auditory, olfactory, and tactile senses. Experiencing these symptoms has a great negative impact on how individual functions with society and impacts overall well-being (WHO, 2021).

WHO (2021) reports that adolescents are more prone to risk-taking behaviours than adults. This includes sexual risk-taking and substance use. The prevalence of using alcohol heavily is estimated at 13.6% in 15-19-year-olds (WHO, 2021). Concern was also given to rising rates of adolescents using cannabis and tobacco products. Another example of risk-taking behaviour is violence. Interpersonal violence is shown to be a highly common cause of death in adolescent boys. These behaviours can lead to incarceration, injury, and death (WHO, 2021).

Support for a youth mental health problem can be received from peers and whanau, and other sources of informal social support, and specific services. In general, there is an array of youth mental health support throughout New Zealand. These supports can come in through phone helpline services, online services, mental health and well-being apps, community mental health services, general practitioners (GP) and practice nurse support, community mental health services, counselling and psychotherapy, and hospital or residential care (Patterson et al., 2018).

Counselling can be accessed throughout community agencies. Cognitive behavioural therapy is one of the most accessed forms of therapy, this is usually through referrals.

General practitioners can offer free counselling sessions through local primary health organisations. If a person meets the criteria, they may be eligible for 10 free counselling sessions through work and income disability allowance. The Accident Compensation Commission (ACC) funds support counselling sessions for people with a history of sexual violence. The mental health telehealth service number '1737' is also commonly used. This is where a person can ring or text and speak to a trained counsellor if they are in distress and need mental health support (Ministry of Health, 2022).

Nurses can play an important role in supporting youth mental health. Nurses can work with youth in a variety of settings, such as schools, primary care clinics, mental health clinics, and hospitals, and may provide a range of services, including screening, assessment, counselling, medication management, and referrals to other agencies (Farley, 2020). Nurses may also work collaboratively and holistically with other healthcare providers, educators, and community members to promote mental health and prevent mental illness among youth. Nurses are trained in promotion of youth mental health and prevention as well as the ability to provide culturally appropriate care to youth and their whanau (Farley, 2020).

Addressing the mental health of the youth population in New Zealand is a crucial issue. Mental illnesses can significantly influence the quality of life and well-being of young people, and addressing this issue is critical for ensuring a healthier future generation. There is a continuum of mental health issues that youth may experience, ranging from stress to a diagnosable disorder. There are many types of mental health issues that youth can experience, including generalised anxiety, depression, panic attacks, eating disorders, post-traumatic disorder, and obsessive-compulsive disorder. At present, there are a various sources of support for youth mental health in New Zealand. Nurses can also play a vital role in supporting youth mental health in various settings.

Research questions:

1. What are common mental health issues the youth population experiences?

2. What are the perceptions that nurses have on youth mental health?

Chapter II: Literature review

Research is formalised curiosity. It is poking and prying with a purpose.

Zora Neale Hurston, 1903 – 1996

2.1 Introduction

Literature reviews are a comprehensive summary of previous research about a specific research topic. Literature reviews are about summarising research and fusing or synthesising existing literature. There are many reasons why one would complete a literature review before undertaking a research project. A reason could be the identification of the gaps in the literature to better shape the questions asked. Another purpose is to identify the strengths and deficits in the field of study. Lastly, a literature review aims to gain a broader understanding of the research topic (Rocco & Plakhotnik, 2009). The following section of this chapter will give an overview of each section that is covered in the literature review. It will also highlight definitions of terms that are seen throughout the review.

2.2 Sections within the literature review

Youth mental health

This literature review begins with a general overview of the definitions of mental health, well-being, mental distress, and mental illness. A definition is given of what it is like for youth who experience positive mental health.

Factors that negatively influence youth mental health

This part of the literature review reflects on the multitude of influences that may affect youth mental health. Research is showing both within New Zealand and worldwide. The literature chosen to demonstrate this section is wide in variety, worldwide views are shown through the world health organisation as well as introducing the *He Ara Oranga* report (Patterson et al., 2018). Influences include socioeconomic, physical, psychological, biological, social media, and discrimination.

Youth suicide

In this part of the literature review, youth suicide is discussed, and statistics are given from within New Zealand and a wider perspective. Data is given about how New Zealand ranks within countries of the Organization for Economic Cooperation and Development. Further literature gives evidence of the possible reasons why youth suicide rates are so high within New Zealand.

Adverse childhood experiences (ACEs)

ACEs are discussed as what they are caused by, as well as what effects they have on the young person who experiences them.

Māori youth mental health.

This part of the literature review reflects on Māori youth and mental health. Data is shown from the youth19 surveys on how Māori youth's mental health is reported higher than non-Māori. The 2018 *He Ara Oranga* report is used again to highlight whānau and communities' responses to the current care that is being provided to Māori youth for their mental health. Te Tiriti o Waitangi is discussed and detailed. Possible reasons are shown for why Māori youth are falling through the cracks or not receiving adequate care. Based on the *He Ara Oranga* report, there is feedback on how the healthcare system to better cater to Māori needs. Lastly, the Te Whare Tapa Whā (Durie, 1984) model is discussed .

LGBTQ+ youth mental health

Statistics give evidence to this community having a high likelihood of struggling with their mental health at some stage. Reasons are also provided on why LGBTQ+ communities are also receiving inequitable mental health care.

Developmental theorists

Developmental theorists Erik Erickson, Jean Piaget, and Lev Vygotsky are discussed. All three have theories that pertain to child and youth development. Within the

frameworks, age groups that are most relevant to the age group within this research are shown.

The youth of today

In this part of the literature, the review captures what it means to be a 'youth' in the year 2023. The literature will demonstrate the fast-changing world and that being a youth by definition changes. Research studies are provided that demonstrate the different views on the mental health of the current youth generation compared to the older generations. In this section, there is literature highlighted through surveys and statistics.

Prevention vs intervention in mental health care

The term prevention is discussed as well as intervention is discussed through a mental health lens. Literature is shown discussing the merits of both and what part each of these play in addressing youth mental health needs.

Mental health supports

Literature shows where youth are most likely to successfully receive mental health support. Statistics are also shown on the likelihood of youth accessing support from these sources, as well as data showing the confidence these places must provide it.

Barriers to accessing support

This part delves into the barriers experienced by people trying to access mental health services. Statistics are given of target times to be seen compared to how many people are currently being seen for mental health. Literature is provided on the common barrier's youth may experience while accessing mental health services.

Engagement

This section provides literature about feasible methods to improve the engagement of youth accessing mental health services.

2.3 Definitions of terms

Healthcare **inequities** are described as unjust and fair differences in health care received by different groups (Braveman & Gruskin, 2003). Oppositionally, **equity** is defined as fair care being provided equally to all groups. Equity involves addressing the social determinants of health through a model that looks through the lens of justice. This includes the distribution of resources to ensure that each person receives the minimum requirement for their needs. Equity is not be confused with equality, where equality means that resources are split evenly and then given to everyone (Braveman & Gruskin, 2003).

Socioeconomic status refers to a person, group, or community, the many factors have a variety of influencers. This may include; income, housing, and place of residence. Education, religion, ethnicity, occupation. Research shows that low socioeconomic status correlates to healthcare inequities (Salmond, 2006).

Culturally appropriate care is provided to many different populations, including ethnicity, age, sexual orientation, socioeconomic, religion, spirituality, and people living with disability. To provide culturally appropriate care that health professionals need to be self-reflective on their own biases and be educated on how to provide care that is appropriate for a variety of different people and communities (Curtis et al., 2019).

Discrimination is when someone is treated unfairly or in an inequitable way because of their gender, religious and ethical beliefs, sexual orientation, socioeconomic factors, disability, and many more listed (Bhui, 2019).

Intervention within mental health care usually is the act of initiating, stopping or changing a treatment plan. It may present as interfering with the current plan and trying something different to help manage. **Prevention** is the act of utilising a variety of factors and addressing a person's risks and aiming to minimise these. Prevention comes in three different stages **primary**- minimising the risk of symptoms, **secondary**- managing symptoms while preventing further exacerbation and **tertiary** prevention- the act of managing negative effects or further exacerbation of symptoms and trying to promote quality of life (American Psychology Association, n.d).

Part 1: Youth mental health

2.4 Introduction

The term mental health can be defined as when a person can deal with life's stressors and challenges (Burton, 2022). Positive mental health care respects culture, equity, social justice, personal dignity, and individualism. These are all key factors that contribute to achieving overall wellness. Well-being is characterised as when an individual subjectively perceives their life as going well, they are fulfilled by their employment, living conditions, family, friends, and their role in society (Burton, 2022).

Similar to physical health, good mental health is not measured by a lack of illness. Instead, it takes into account psychological, emotional, and social well-being as a whole. Positive mental health in youth can look like resilience and being able to navigate life, especially through the adolescent years. This includes being able to establish meaningful and long-lasting relationships. Positive mental health also includes being able to utilise adequate and safe coping mechanisms during tough times in their lives. Being able to make their needs known and met, as well as realise their full potential (youth. GOVT, n.d.).

2.5 Factors that negatively influence youth mental health

Many factors may influence the mental health of individuals in their formative years. The World Health Organization (WHO) (2021) states that during this time individuals' experience changes both mentally and physically. The social environments to which youth are exposed can have a negative impact. Individuals who experience poverty, domestic abuse, and an unstable household have a higher risk of developing a mental illness (WHO, 2021). In addition to the direct impact of mental health problems, there are also secondary effects. Adolescents who live with mental illness are particularly vulnerable to experiencing discrimination, social exclusion, poor physical health, inadequate education, and work outcomes. There is a strong correlation found between living in poverty and poor mental health. Additionally, the social determinants of health spoke to safe housing, community connections, and support. When these needs are not met, negative stress can be put on whanau, therefore, resulting in compromised overall well-being (Peterson et al., 2007). "Young people deserve to be supported and empowered to reach their full potential and enhance their mana. Having

healthy young people ensures a healthier society for New Zealand, both now and in the future" (Ministry of Health, 2022, para. 1).

At hand, there is an abundance of research that suggests that if a child's physical, psychological and emotional needs are all met this has a positive effect on the child's development and growth (Colizzi et al., 2020). Contrariwise, there is also research that indicates that if there are issues at the beginning of life, during pregnancy, experiencing neglect, and traumatic events these may negatively influence the child later in life (Colizzi et al., 2020). Interestingly, there is evidence from gene and environment interaction studies showing that children that carry certain genes have an increased risk of behavioural problems later in life (Colizzi et al., 2020). This research suggests, however, that this was predominately shown when growing up in dysfunctional families. This study further suggests that experiencing stress and traumatic events as a child puts that child at a higher likelihood of developing mental and physical health difficulties. In the absence of a stable environment and supporting caregiver, the child's neurodevelopment may be impacted. This puts the child at risk of developing anxiety, suicidality and other adverse health outcomes (Colizzi et al., 2020).

A report by Menzies et al., (2020) identified multiple factors that could have an impact on youth mental health. The most commonly identified were social media and the use of substances, which are contributing to rising rates of mental health issues. Other complex reasons were identified such as having a negative outlook on the future, regarding climate change and other evolving worldwide issues. The Covid19 pandemic has been shown to hurt youth mental health, worldwide. A study was taken that surveyed the prevalence of experiencing mental distress in youths following the emergence of Covid19. It was found that 40.4% of the youth's surveyed reported experiencing physiological distress to a degree. An alarming 14.4% of participants were assessed as having post-traumatic distress syndrome (Liang et al., 2020).

The Menzies et al. (2020) report further detailed that the current youth generation has a diminished ability to be able to exercise emotional self-control as compared to previous generations. An important note was given to the need for mental healthcare providers to be able to analyse these many influences and their intricate complexities.

2.6 The He Ara Oranga report

The *He Ara Oranga* report began following the 2018 government inquiry into mental health and addiction. The 2018 report uncovered multiple concerns within mental health and addiction services and beyond. The findings of the reports cause a nationwide call to help from whanau, tangata whaiora, employees of these sectors, Iwi, and advocacy groups. Hence, the *He Ara Oranga* report was established (Paterson et al., 2018).

The report aimed to uncover misheard and underrepresented voices of New Zealand. The report hears reports from people with lived experience, survivors of suicide, and families affected by suicide. An emphasis is on collecting information to aid in prevention and identifying the needs of people that need the service. The inquiry started in February 2018 and shortly after submitted to the Ministry of Health in 2018. The inquiry received over 5,200 submissions. The report states that there were over 400 meetings held with tangata whaiora and their whanau. As part of the inquiry, it found that youth were showing an alarming rate of mental health issues. These are anxiety, self-harm, behavioural issues, and social ideation. They completed a survey on 1,000 youths and found multiple factors that contribute to stress and anxiety. Some of these included low socioeconomic status, self-esteem, oppression, and dread of the future.

The *He Ara Oranga* report (Patterson et al., 2018) outlines the factors that influence youth mental health in New Zealand. This report identified the most predominant issues and determinants contributing factors to youth mental health. These are substance use, social media, stigmatism, fear of seeking help, poor model of focus, the social determinants of health, cultural aspects, lack of community connections and access. A strong statement made was expressing concern about the 'culture of normalisation' that substances have within society. The report highlighted the increase in the number of liquor stores in communities as well as gambling outlets. It was also outlined the easy access youth has to these places, especially placements near schools and it is shown that these places are more common in poorer communities (Patterson et al., 2018). The report further talks about the robust link between mental illness and social media. Predominantly in the youth population, there is a link between suicide, bullying and social media (Patterson et al., 2018).

There are also findings linked to accessing the internet and social media, making it easier for the youth to access harmful information and images. On the other hand, a study by O'Reilly et al., (2021) show that social media may have some merits for mental health promotion and other benefits if it is used appropriately. Abi-Jaoude et al. (2020) concur that there are merits for both sides of this argument, concluding that technology and social media have their place for connection, self-expression, and being able to easily access mental health support, while also stating that it may also have a negative influence and be harmful to the young person's mental health.

The *He Ara Oranga* report also mentions discrimination being a prominent issue in youth mental health. The labelling of diagnosing someone with a mental health disorder 'puts them in a box' and may make youth feel alienated from society. Further, there are reports of the detrimental effects that stigmatism can cause within the realm of culture, ethnicity, sexual orientation, and disability. (Patterson et al., 2018)

With research showing the negative effect of giving a youth diagnosis, a point to note is that the *He Ara Oranga* report also states that living with mental health issues does not always mean a 'diagnosis' of a mental illness. It is important to recognise that there is a fine line between someone who is 'distressed' possibly due to outside events and situations rather than someone who is in distress because of mental illness.

Another main point that this report covers which links into this research is about suicide. The main point taken away from the suicide section is the reiteration of support for whanau and friends who have experienced the suicide of a loved one. It was also found that suicide prevention is severely underfunded and under resourced. As well as this, it was found that there is a lack of systems put in place, with no leadership or set government body that was dedicated to suicide prevention. More note was also given to prevention and a set target mark of a suicide rate reduction of 20% by 2030 (Paterson et al., 2018).

The *He Ara Oranga* reports acted as the catalyst for government changes of policies. Following the release of this report, the Mental Health and Wellbeing Commission was established (Mental Health and Wellbeing Commission, 2020). The aim of this organisation is to uphold the wero laid in the *He Ara Oranga* report. The role of the mental health and wellbeing commission is to ensure that the momentum gained from

the *He Ara Oranga* report was continued and upheld. The mental health commission is its government entity, which works between the *He Ara Oranga* report and the government. This report shows evidence of the recommendations that were made for a change in the mental health and addiction sectors and the response it was given by the government (Mental Health and Wellbeing Commission, 2020).

2.7 Youth suicide

The rates of youth suicide are a prominent issue within New Zealand. The He Ara Oranga reports calls the high suicide rates of youth in New Zealand "a national shame" (Patterson et al., 2018). The *He Ara Oranga* report speaks to hearing accounts of people who are outraged with the lack of mental health services that were provided to their whānau and the prevention/ intervention that was provided when early signs are shown. Additionally, a 2020 report made by the United Nation Children's Fund (UNICEF) stated that New Zealand's youth suicide rate is ranked the second highest among developed countries in the world. The report noted that In New Zealand there were 14.9 deaths per 100,000 in the youth population, twice the average of all 41 OECD countries that were analysed. The report explored possible causes behind this disturbingly high number. Some of the factors suggested were the intergenerational trauma from the colonisation of Māori, cultural influences, inequalities, and low socioeconomic communities (UNICEF, 2020). Further data show that suicide is the fourth leading cause of death for the age group of 15-19-year-olds worldwide (WHO, 2021). WHO states that identifying the risk of suicide is multifaceted and non-linear. However, the main factors that WHO identified were trauma, substance use, discrimination, socioeconomic determinants, access, and having access to being able to suicide (WHO, 2021).

2.8 Adverse childhood experiences (ACEs)

Adverse childhood experiences, also known as ACEs can contribute to long lasting mental and physical health issues. ACEs may be caused by prolonged or acute physical abuse, sexual abuse, or neglect. This trauma has long-lasting effects on the child that cause problems with their physical and mental health long term. Within New Zealand, First identified in a large United States study by Felitti et al., 1998) ACEs affect more than half of the children within New Zealand before school age. This statistic shows a

proportionally higher rate of Māori children (Walsh et al., 2019). ACEs are associated with mental disorders such as PTSD, depression, anxiety, and borderline personality disorder (Herzog & Schmahl, 2018). Consistent exposure to high levels of stress through childhood can lead to the child also developing unhealthy behaviours such as smoking, substance use, and general antisocial behaviours. Von Cheong et al. (2017) explain studies that show that people who reported ACEs are at a much higher risk of developing depression symptoms than those who do not.

2.9 Māori youth mental health

Māori youth mental health is a particularly important aspect of youth mental health within New Zealand. The youth19 surveys found that there are ethnic-specific insufficiencies in youth mental health with Māori youth reporting much higher rates of depressive symptoms than Pakeha. For example, 38% of female Māori youth report experiencing these symptoms compared to 24% of female pakeha (youth19, n.d.).

In the *He Ara Oranga* report, it was found that many Māori highlighted how the current mental health services provided do not honour the partnership of Māori and the crown (Patterson et al., 2018). Research shows the importance of implementing the principles of Te Tiriti Waitangi into the healthcare that is provided to Māori youth. These principles were made when the courts and the Waitangi Tribunal laid out a framework for the healthcare systems that incorporates the principles of Te Tiriti o Waitangi (Ministry of health, 2019). The first is, tino rangatiratanga, which is providing care that is self-determined by the individual. Secondly, providing equitable healthcare for Māori. Thirdly, active partnership from the crown to ensure that equitable care is provided. Thirdly, to provide options and support that are culturally appropriate and incorporate a Māori model of care. Lastly, to provide a partnership between the Crown and Māori (Ministry of Health, 2014).

An additional point brought up was the detrimental effects of colonisation that have had a significant impact on Māori health and well-being. This has been reflected through many years of generational trauma. Within the mental health care system, it was also flagged that the model of focus that is being provided in mental health care is not sufficient. The youth 19 findings describe the current model of focus as failing to take a holistic view of a person (youth19, n.d). Patterson et al. (2018) raised

concerns about the labelling of people with a diagnosis e.g., anxiety, and adopting a 'one size fits all' treatment plan for the diagnosis. Further reports of their mental health have suffered from generational trauma from the impact of colonisation and alienation from their land. A suggestion made was that to ensure overall well-being, Māori needs to have reconnection to their land, history, whakapapa, and thus personal identities. Criticism was directed to the healthcare system, as it does not consider these aspects, therefore resulting in the acceptance and reinforcement of this trauma (Patterson et al., 2018).

The *He Ara Oranga* report provided feedback about how healthcare providers need to recognise the importance of hapu, whanau, iwi, and community connection (Patterson et al., 2018). Another point noted was on people receiving treatment that did not account for holistic care and proper respect given to culture and ethnic identity. Tse and Ng (2014) explain the importance of providing culturally sensitive care, a tool that has been shown the benefits in providing better care to Māori is the Te Whare Tapa Whā model.

2.9.1 Te Whare Tapa Whā

The Te Whare Tapa Whā model was developed by Sir Mason Durie in 1984 (Mental Health Foundation, 2022). This model was established to improve culturally appropriate care that is provided to Māori. Māori are a marginalised group within New Zealand, research is showing that inadequate culturally appropriate care is being provided, and Māori youth are experiencing poorer mental health issues than non-Māori are. The Te Whare Tapa Whā model encompasses the four walls of a whare and health and wellbeing. The base of the wharenui is called whenua. This is feeling a connection to your land, whether it be a space you feel comfortable and/or a connection to where your whanau and ancestors are from. A wall is taha whanau, this is your whanau and your connection to them. Taha whanau is not just about the people you are related to, instead, it can mean your connection with other people and support. taha tinana is the relationship to your body and how a person treats it. The first sector of the roof is called taha wairau, this explores the connection you must have those around you and those in your past. It also covers someone's spiritual or religious beliefs. Lastly, taha hinegaro is a person's mental health and mental health care (Mental Health Foundation, 2022).

2.10 LGBTQ+ youth mental health

The lesbian, gay, bisexual, transgender, queer and plus (LGBTQ+) community is another marginalised group within New Zealand that is living with mental health issues. Research shows the extent of mental health disparities in the LGBTQ+ youth community (Patterson et al., 2018). Reports from the rainbow youth group stated that they do not feel confident and safe accessing mainstream healthcare services for fear of discrimination (Patterson et al., 2018). A study found that someone that identified as LGBTQ+ had significantly more mental health issues than someone who did not identify as LGBTQ+. It was found an LGBTQ+ youth experienced depression 1.9 times more than non-LGBTQ+, as well as also experiencing anxiety 1.7 times more. There were 3.9 times more reports of self-harm and suicidal ideation being 3.2 times more. As well as LGBTQ+ youths were found to have 3.1 times more suicide attempts than non-LGBTQ+ youths (Painter et al., 2017).

2.11 Developmental theories

Utilising theories within child development helps give specific guidelines that may help explain and forecast the development of a child. Theories provide a framework that gives clear reasoning to what is expected to be seen during developmental years. This is beneficial as deficits can be more easily identified which makes the areas that may need improvement more apparent (Berk, 2015).

Erik Erikson is a theorist who is commonly known for his works on the developmental stages of life theory (Widick et al., 1978). One of Erik Erikson's stages of development labels the ages of 11-19 years as the years of identity versus role confusion. During this time, youth are acutely aware of how they appear to other people. Erikson believed that during this time is when the person must find their role in society through schooling, career perspective, and gender, cultural and religious beliefs. Establishing these roles helps youth find a sense of purpose within themselves. Erikson further believed that society might force a person to commit to certain roles before personal identity is established, and this can lead to identity confusion. Identify confusion is when there is a time of confusion, and a sense of self cannot be defined. According to Erikson, identity confusion can be resolved through seen measures. Examples of these

is having experiences that help a person identify their personal beliefs, goals, and interest. As well as this, having to make choices and commitments, to exercise their own autonomy (Widick et al., 1978).

Jean Piaget is another developmental theorist in child development research. The formal operational stage is the last stage of Jean's theory, which captures youth 12 years and over. When the youth enter this stage, the theory dictates that they should be starting to think abstractly and have a more experienced in having the ability for reasoning. When someone reached this stage, the youth should be able to think presently, towards the future and abstractly. This stage encompasses being able to understand politics, ethical dilemmas, physics and solve hypothetical problems. Piaget's research states that intellectual development happens when this stage is met and achieved (McLeod, 2023).

Lev Vygotsky's social-cultural theory theorises that the environment and other people that the youth is surrounded by is the main influence on their human development. The theory suggests that social interaction is also the foundation of human learning. By observing and learning from people in a caregiver role around them, the youth learn behaviours that will influence who they are (Cherry, 2022).

These frameworks may help aid in looking at youth mental health and can support in identifying what is expected and what is not in childhood development (Berk, 2015). However, it is important to note that while these theories do have merit, there is a lack of evidence on how applicable they are in more modern times (Côté, 2014).

2.12 The youth of today

The need to recognise that the youth of the year 2023 may be vastly different from the youth in previous years or generations should be taken into consideration. Gluckman (2017) notes that it is difficult to encapsulate what the term 'youth' means. Gluckman further explains that there is a constant change in the meaning of what it is to be a young person. Over the decades, and even more so recently, how and the way a young person lives their life has been continuously changing. For example, family dynamics have changed over the years as well as parental engagement while growing up. There is now technology that poses a risk through social media which can create unrealistic standards for a young person. Even the role of community groups, sports clubs, and

community social gatherings has declined within society. There has been an unprecedented about of changes in the world. Kutcher and Venn (2008) state that it is not surprising that so many young people's mental health is suffering. Due to ever evolving changing of times, the mental health care and support that youth may need will certainly need to change along with the current times. If youth mental health morbidity is left unaddressed, it may manifest and negatively influence many aspects of the person's life. The person can be left feeling socially isolated, experience stigmatism, stunted social development, and be unable to thrive in their academic, social lives, and interpersonal relationships.

As well as looking at the differences of youth today, acknowledging the generational gap is important in this research, as an investigation into youth mental health completed outside of this generation may not apply to the youth today. The matters of the mind survey (Lorusso & Barnes, 2020) looked at mental health issues and challenges experienced by today's youth. They stated that the youth today grew up hearing about a variety of mental health issues, and inherently becomes more accepting of them. The younger generation are more comfortable in reaching out to loved ones they notice are struggling. Contrastingly, the older generation (generation x) grew up with mental health issues being a taboo subject and not something that was openly discussed. In the survey, it was found that approximately 3 out of 4 participants in the younger generation believed that their generation is much more open to discussing mental issue than older generations. Further, 8 out of 10 participants believe that they have better opportunities and access to mental health care than the older generation (Lorusso & Barnes, 2020).

As well as this, UNICEF (2021) released findings of a report from a global survey of the ages (15-24 years) in 21 different countries. This survey also examines the older cohort (40-plus years). With the cohort being 21,000 participants. It was found that 59% of the youth cohort believed that they have more pressure on them to succeed than the previous generation. The older cohort agreed with this in 15 out of 21 countries. 36% stated that they found anxious, worried, and stressed daily, while 30% of the older generation found they were experiencing this. 1 in 5 youth from the survey states that they feel frequent low moods and have little interest in their usual hobbies. While 15% of the older cohort reported this.

2.13 Physical and mental health

Mental and physical health are closely related, with mental health problems having a significant impact on physical health. A study by O'Loughlin et al. (2022) found that children with poor mental health had a much poorer quality of life than children who have poor physical health. According to Aoran et al. (2008) there has been an increase in attention and concerns to research that shows the connection between mental health issues and physical. People with mental health issues are at a much higher risk of developing physical issues than those who do not. Particularly in youth, mental illnesses that are most linked with physical illness are depression, behaviour disorders, and anxiety. An example of this is that research tells us that depression has been linked to a decreased immune system and immune response (Aoran et al., 2008). As well as this, depression may cause unhealthy behaviours such as poor diet, not exercising, and poor sleep hygiene. Because of this correlation, research suggests the need to provide mental health care in primary care environments.

Commonly, primary care and mental health care work are completely different. Primary care usually deals with multiple medical issues, with diagnosis and treatment given steadily. In practice, clinicians generally do not view mental health as a main concern in primary care. Mental health care is more exact and more prone to working in a multidisciplinary team and outside organisations. Thielke et al. (2007) explain suggestions for the integration of primary care and mental health care. The first is, utilising systemic screening tools for mental health issues. This is to ensure prompt detection of mental health concerns. The other suggestion is to provide more mental health training to clinicians in primary care. As well as, solidifying and distributing guidelines and models of care.

2.14 Prevention vs intervention

Promoting youth mental health is a substantial undertaking worldwide. Research shows the benefits of prevention. A mass of evidence suggests that interventions in youth mental health can help prevent the exacerbation of mental health issues and stop the development of chronic disorders (Kieling et al., 2011). The Ministry of Health (2022) describes the importance of prevention, instead of intervention to help promote a healthier future society for New Zealand.

Simeonsson (1991) states that prevention can be measured in three hierarchal levels. These are primary, secondary, and tertiary interventions. Of course, the type of stage varies from different areas and perceived needs. Primary prevention is to prevent the condition from developing- especially for children that are identified as being predisposed to developing that condition. Secondary prevention is to aid in reducing the prevalence of the condition. Lastly, tertiary prevention is described as reducing and managing symptoms and effects. Colizzi et al. (2020) explain that, in mental health care, the pathways of care that are provided primarily focus on secondary prevention. This means that it aims to detect symptoms at an early onset and treat at as soon as possible. A study looking at minimising negative youth health outcomes suggested that early intervention and health promotion are not being implemented when it comes to youth mental health needs.

Starfield et al. (2007) argue that the term 'prevention' has such a vast range of concepts that it is losing its true definition. This article further describes the many influences on health like a "web," arguing that the possibility of identifying where the need is for prevention is a vast and vague task. There are many aspects of the "web" health professionals must assess- then they need to choose their priorities through their individual perception.

Recognising the need for mental health care may only become apparent after a mental health crisis occurs (Goodyear-Smith et al., 2017). The importance of early detection of warning signs that a young person's mental health is deteriorating is imperative to prevention. This allows healthcare professionals to intervene and provide care that is adequate for early intervention. Some examples of care that this article suggests is to empower the young person to recognise their positive qualities and additionally provide skills to promote resilience and reduce barriers to accessing help if further issues arise.

2.15 Mental health supports

A study by Mariu et al. (2012) examined students in secondary schools seeking help for their mental health. Findings from this research found that students are twice as likely to access health care through their general practitioner. However, the majority (80%) of the youth surveyed would not seek formal help. Instead, it was found that

the youth would be more likely to seek help and advice from a friend or family member. In some cases, a youth would go to a teacher or school nurse, if they felt comfortable doing so. Because of this, research suggests that teachers need to be provided more education in mental health and learn how to detect when a student is struggling and offer support where needed. This study further suggested the need to explore different ways mental healthcare can be provided within schools. These need to be age-appropriate and cost-effective which may reduce the barriers to access.

Dune et al. (2017) explain the important connection between schools providing appropriate support and the well-being of the students. A different study conducted by Moon et al. (2017) looked at common youth mental health issues within schools and the teacher's confidence to address these needs. It was found that 93% of the teachers had concerns for their student's mental health, while a notable 85% of these teachers reported that they felt they needed to be provided with more training to help deal with the issues that they observe. Within in New Zealand, a national survey interviewed secondary schools about student's overall well-being (Bonne & MacDonald, 2018). The findings of this report showed that 68% of principals reported that they recognised the need for external agencies to provide mental health support for their students however, lacked access to get help. This report offers that due to this, there has been an increase in the internal hiring of counsellors, nurses, and other healthcare nurses within the schools. Findings also concluded that the need for increased mental health and well-being support was in decile one to two schools in New Zealand (Bonne & MacDonald, 2018).

2.16 Barriers to accessing mental health supports

He Ara Oranga, the Government Inquiry into Mental Health and Addiction (2018) examined barriers to accessing mental health care within New Zealand. One issue found was that the current mental health system is completely stretched to breaking point. Clinicians are becoming burnt out and overworked, because lack of staff and funding makes it difficult for people trying to access mental health services. The inquiry found that an increasing number of people are having to fight for themselves just to receive equitable healthcare. The inquiry also outlines that due to the above-mentioned issues, people had tried to access help for feelings of depression, self-harm, and suicide

but did not meet the threshold for specialist services, therefore being denied access to care.

The New Zealand Mental Health and Wellbeing Commission (2022) reports that accessing support for youth mental health is the most difficult across all healthcare sectors. District health boards are required to meet a target of 80% of youth being seen for non-urgent mental health within three weeks of referral. As well as the target of 95% of youth to be seen within eight weeks of referral. In the years 2020-2021, it was shown that young people referred were being seen within three weeks 65% of the time and 87% within eight weeks (New Zealand mental health and wellbeing commission, 2022).

Another study explored the gap between youth experiencing mental health issues and the likelihood of accessing healthcare services (Islam et al., 2022). This study found that 47.4% of participants in the study identified that they need to access mental health care. Of that almost half of the 47.4% identified used mental health care services. It was suggested that their findings show that the youth's parent plays a critical role in their child accessing mental health care. Consideration was given that the parent has the role that they can witness their child in distress but may not know what to do to seek help. This study suggested that more education for parents needs to be given so they can better understand and help their child's mental health (Islam et al., 2022).

Leading on from above, another barrier for youth to accessing mental health care services may be, at times, their parents. Hansen et al. (2021) conducted a survey of 244 parents of children who were referred to outpatient mental health support. Of this, 41% of parents interviewed stated they would be hesitant to reach out for professional help for their child. This study suggests this may be due to the parent needing to come to terms with the possibility that their child's issues are out of the realm of them being able to deal with them on their own. Other reasons were historical situations where the parents were not listened to by health professionals and felt excluded from their child's care. Interestingly, the main concern that arose from the survey was that the parent was afraid to put their child in the system or give them a label for fear of discrimination.

Discrimination is another reason why youth are not accessing mental health. In 1993 New Zealand, passed legalisation that made discrimination based on disability illegal (Community law, n.d). This was regarding it being illegal to discriminate against people with disabilities accessing housing, employment, health and goods services, and education. People with mental health illnesses fell under the category of disability. Despite this, a report by Peterson et al., (2007) found that discrimination was still being reported in an array of settings. A survey was distributed to people in New Zealand who have had experience with mental illness, asking about their experiences with discrimination. There were 785 responses to the survey received. Particularly in mental health services, 34% of participants reports that they had experienced discrimination when accessing mental health services. One participant stated that the discrimination. and abuse they received exacerbated their mental health issues (Peterson et al., 2007).

A study completed by Salaheddin and Mason (2016) found that 35% of the participants did not access mental health support when they knew they needed it. A range of barriers was discovered in this study. The first one is being, unable to identify one's symptoms and the necessity to access help. Another suggestion included, not wanting to be a 'burden', or being unwilling to express their feelings to anyone. Additional barriers were fears of what the outcomes would be following seeking help, possibly stemming from a lack of trust in the healthcare system.

2.17 Engagement

Improving the engagement of youth with mental health services is fundamental to achieving positive outcomes. It is important to note that the term 'engagement' may convey many possible meanings. Health professionals need to look at initial engagement, participation, and perseverance. There is a global agreement emerging that better engagement involves a multidimensional approach. To encourage initial engagement, basic factors such as money and transport need to assess and the barriers identified. Stigma from family, friends, and society may need to be addressed. Health literacy is to be considered, particularly involving family members of the youth. There are strategies suggested that enhance participation. Research points to the importance of empowerment for the youth attending. Verbal congratulations and rewards during the treatment process. Elements such as rapport and trust building between the health professional and youth were also found to be particularly important (Lindsey et al.,

2014). Dune et al. (2017) also states that there is no particular method that can be found to improve engagement. For improvement in engagement to occur multiple factors such as personal needs, whanau needs, and resources available need to be considered.

2.18 Summary

Youth mental health is a serious issue in New Zealand and worldwide with suicide rates of youth being devastatingly high within the OECD countries. There are many different mental health issues that youth may live with. Research shows that if these mental issues are left unaddressed they may stay and exacerbate throughout the child's adulthood years. Minority groups such as Māori, LBGT community, and youth living in low socioeconomic areas are particularly vulnerable to having struggles with mental health. Developmental theorists were discussed and the ideas that may influence and help us understand youth health and development. Influences on mental health were also discussed, with an emphasis on the social determinants of health and the need for recognition of the issues faced by different generations and comparison and analysis of the needs that youth may have today. The discussion of intervention and prevention, and what research suggest which is the most viable options. It is also outlined what mental health support is provided both nationwide and locally. As well as this, literature is shown that suggests what is the most beneficial types of supports. Barriers to access were discussed as well as suggestions from research to aid in engagement. The common theories that are applied in counselling in mental health services were discussed. Lastly, the correlation between physical health and mental health was also briefly outlined.

Part 2: Underpinning literature

2.19 Introduction

While completing this literature review there was an abundance of literature identified that focuses on youth mental health. While selecting research it was important to focus on literature that pertains to the youth of New Zealand. The literature that provided the foundation for this study was from a variety of research articles that were taken on

youth mental health. Within each section, the objective, methods, and findings are presented from each research report. The youth19 Rangatahi smart survey's findings are firstly discussed. Following this, a focus group study about youth perceptions of suicide is discussed. A report on the correlation between youth mental health and Māori cultural identity is then presented. Research is highlighted which was taken from the youth2000 survey series which discussed youth help-seeking behaviours. Lastly, a research report on the feasibility of YouthCHAT is shown.

2.20 Research underpinning the study

The youth19 Rangatahi smart survey's initial findings report (Flemming et al., 2020) outlines the findings from the youth19 smart surveys. The method of these surveys was that secondary school students were asked questions about their mental health. This report shows findings and conclusions from surveys spanning from 2001 to 2019. The findings are categorised and collated based on gender and ethnicity. The main findings of the report were that most students were generally happy with their lives and reported nil symptoms of distress or depression. Conversely, the data also shows a large number of students reporting high levels of distress. Interestingly, the high levels of distress with symptoms of depression were largely reported by females. Throughout the years, it had been found that students were reporting more distress than the data collected the years before, the most noticeable jump being since 2012. Another noteworthy mention is that it was found that there is a steady increase becoming apparent of mental health inequity in Māori compared to other ethnic groups. The last main finding was that symptoms of depression and higher suicide rates are found in lower socioeconomic communities (Flemming et al., 2020).

Suicide rates are a concerning issue within New Zealand, Stubbing and Gibson (2018) conducted a thematic analysis of why young people commit suicide. This study involved focus groups with 38 participants aged 15-22 years. The gender range was awkwardly skewed, with 30 females and 8 males. The purpose of this study was to understand why and what leads a young person to commit suicide in New Zealand. From the findings, there were five themes identified. The first theme was, 'inescapable difficulties,' this was the most common theme which meant that the youths believed that young people suicide due to negative experiences in their lives and the feelings of

not being able to escape them. The second theme identified was 'constant pressure' from school, jobs, prospects, and families. In particular, Māori and Pacific participants expressed more pressure from their families than other groups. The third theme identified was 'emotional distress,' this theme identified that youth that suicide is experiencing such unbearable pain that the only way the youth feel to stop it, is suicide. The fourth theme is 'mental illness,' many participants outlined the link between diagnosed mental illness and suicide. Lastly, the fifth theme is 'a cry for help' the participants expressed that they believe that youth whom suicide is trying to get attention- this theme became a controversial debate on whether posting suicidal ideation on social media platforms was a 'cry for help' with no options available or if it was a 'cry for attention.' This study was interesting as it had qualitative data being analysed, direct quotes were provided as well as observational data (Stubbings and Gibson, 2018).

When conducting research within New Zealand, it is important to take particular care in looking at Māori health outcomes. Williams et al. (2018) conducted research that looked at the correlation between youth mental health and cultural identity. Data was taken from the youth'12 surveys as part of the youth 2000-survey series. The youth'12 was a cross-sectional survey of 12-19-year-old secondary school students across New Zealand. Of the 8,500 students participating in the youth'12 surveys, 1,707 identified as Māori. Findings showed that youth with a strong Māori cultural identity had better overall well-being and showed fewer symptoms of depression. Discrimination in Māori students was associated with poorer overall well-being, more symptoms of depression, and an increased number of suicide attempts. It was also found that Māori youth were more likely to be living in low socioeconomic areas- with 80.2% of the Māori sample size showing to live in more deprived areas. A correlation was found between the students who lived in high-deprivation areas, younger participants of the cohort, and females who had a stronger sense of cultural identity but found that they received higher levels of discrimination (William et al., 2018).

The youth 2000 survey series is a staple within New Zealand for analysing youth health needs and Mariu et al. (2012) drew from the survey series to research whether secondary school students seek professional help when dealing with mental health

issues. The data from this study (Marui et al., 2012) was found by randomly selecting students from the dataset of 9,699 who partook in the youth 2000 health and wellbeing survey (ref for this). The data collected were analysed utilising univariate and regression analyses. This study only looked at if the students sought help from their general practitioner. It is unknown why they did not look at other avenues where mental health care could be sought. This research explores correlations between mental health issues and socio-demographic variables. The research found that students experiencing symptoms of anxiety, depression and suicidal ideation were likely to seek out help for their mental health. However, of the cohort, of students with significant mental health issues, 82% stated that they would not seek help from their general practitioner. Females were shown to be more likely to seek help, in the older ages of the cohort, while males were less likely. This study shows the dire issue of youth not seeking help for serious mental health issues, however, it is noted that the conclusions did not provide any information on whether the students were seeking mental health help from agencies, other than their general practitioner (Mariu et al., 2012).

For this current research, the collection of quantitative data is taken from an existing data set from YouthCHAT. Martel et al. (2019) conducted a 3-year and 3-phased mixed method study to evaluate the feasibility and appropriateness of utilising YouthCHAT within primary care and school settings. YouthCHAT is an electronic multi-question survey that screens youth mental health and possible emerging issues (Martel et al., 2019). The findings of this research were mostly positive. The report stated that YouthCHAT was appropriate and had the potential to be beneficial in detecting mental health issues among New Zealand youth. This research affirmed that YouthCHAT could be an accessible and culturally safe tool to use. The limitation that was identified was that accessibility to the internet and electronic tools to take the survey may be limited (Martel et al., 2019).

2.21 Gap in the literature

Upon analysis, the researcher identified that there was little literature, particularly in New Zealand that interviewed youth for their first-hand experiences. As well as this, the researcher could not identify substantial research about nurses and their perception of youth mental health. This was obvious especially when looking for New Zealand

based articles, there was difficulty finding research of nurses' general perception of youth mental health within New Zealand. Both of these avenues are important to explore further.

2.22 Summary

There is a multitude of research that shows that youth mental health is a serious issue within New Zealand. This literature review focuses on the mental health of youth in New Zealand, drawing from a variety of research articles. The youth19 Rangatahi smart survey's findings report was used to identify mental health issues in New Zealand's youth, with a steady increase of mental health inequity in Māori compared to other ethnic groups. Stubbing and Gibson's (2018) study identified themes surrounding why young people commit suicide. Williams et al. (2018) research found that Māori youth who had a stronger sense of cultural identity had better overall well-being and fewer symptoms of depression. Mariu et al. (2012) study identified correlations between mental health issues and socio-demographic variables. Lastly, research was presented on the feasibility of YouthCHAT. A gap in the literature was identified, where there were no research articles pertaining specifically to youth mental health in the Waikato region.

Chapter III: Methodology

3.1 Introduction

Research is formalised curiosity. It is poking and prying with a purpose.

Zora Neale Hurston, 1903 – 1996

In accordance with the definition provided by Chneider and Whitehead (2013), methodology can be defined as a framework that utilises both theory and logic to determine appropriate decision-making. This chapter offers a discussion and deliberation of the methodology employed in this study. The topic of qualitative and quantitative research will be discussed. A discussion of the definitions of data collection, interviews, and focus groups will be conducted, as well as their advantages and disadvantages. Credibility and trustworthiness will be highlighted, and my role in this research will also be highlighted.

3.2 Qualitative and quantitative research

Mixed methods research combines both qualitative and quantitative data collection. This research method is commonly used within health research as it provides a variety of data, which helps with better understanding. Mix methods also aids in deterring some bias or inconsistencies. This can help improve better validity and transparency of the findings (Doyle et al., 2009).

Researchers who conduct qualitative research learn from people's own experiences. According to Silverman (2017), there are three key factors when it comes to qualitative research. The first is to be able to understand one's thought process and own experiences. Secondly, using the data gathered is a privileged insight into the human mind. Lastly, the person conducting the survey must have compassion and communication skills to carry out this type of study well. Qualitative data collection is predominately collected by questioning people. This is commonly done through semi-structured and structured interviews. As well as this, qualitative data can also be collected through observation of behaviours, interactions, or even deciphering artefacts from multiple situations (Silverman, 2017). A limitation of qualitative research

is that the data collected can be so in-depth that it may be difficult to generalise the data on analysis. Another limitation is that qualitative data is subjective so there may be bias from the participant as well as the researcher (Watkins and Gioia, 2015).

Quantitative data research's primary goal is to collect and capture statistical data (Ingham-Broomfield, 2014). Quantitative data can be collected through surveys and questionnaires. (Harvey & Land, 2017). Analysing qualitative and quantitative data is rather similar, both types of data collection methods can be analysed by finding relationships in the characteristics of the data. For instance, qualitative data could be analysed to uncover patterns and correlations in themes found during the interview, while quantitative data would be analysed to reveal numerical correlations (Jansen, 2010). Quantitative research may be limited as it does not allow the researcher to obtain in-depth answers from the participants. As well as this, as quantitative research is predominately a numerical form of data collection, it limits the possibility of testing for theories or hypothetical questions (Watkins & Gioia, 2015).

3.3 Research methods

Research methods are the tools and processes in which data are obtained for research (Walliman, 2010). According to Paradis et al. (2016) surveys are used to obtain qualitative data and quantitative data. For capturing qualitative data, the surveys are usually utilising open-ended questions. Surveys are beneficial in capturing individuals' perceptions and attitudes within. Quantitative surveys are close-ended questions and usually would have a numerical value to the answer. This type of data collection can then be analysed through an array of techniques.

Interviews are used to gather data through face-to-face meetings with the researcher and participant. Structured interviews can be conducted through a set of pre-determined questions. Interviews can have a broad range of questions that invites the participants to interpret and freely speak how they wish (Paradis et al., 2016).

Focus groups are utilised to gather data in a group setting. Stewart and Shamdasani (2014) state that this method of data collection is commonly used in research, as a tool for the collection of qualitative data. Examples of how focus groups work could be, by utilising interviews, observing participants, and utilising projective methods. Focus

groups can be conducted either by already having a pre-determined set of questions or by having a moderator who prompts the group to determine the group conversation. This data collection method targets the understanding of social phenomena, where someone's perceptions are not always shared (Paradis et al., 2016).

3.4 Credibility and trustworthiness

The credibility of the data is owing to the research being conducted truthfully and the participant in the research feels that their views have been portrayed accurately (Polit & Beck, 2012). To ensure that qualitative data is collected and credible, there are many types of strategies that could be implemented. Triangulation is used where conclusions are drawn from multiple sources. Triangulation in practice is the researchers using different types of methods that convey a comprehensive view of the research question (Polit & Beck, 2012). Triangulation may be used with both qualitative and quantitative data; this may help to fortify the findings of the research (Thurmond. 2001).

The trustworthiness of data is reliant on the data collected being wide-ranging and analysed utilising appropriate methods (Elo et al., 2014). Pilot & Beck (2014) define trustworthiness as the degree of confidence in the understanding and methods used to assure that the results are accurate. Elo et al. (2014) further explain that to convey trustworthy data, preparation must begin before the research commences. A note is given that the researcher must have or acquire skills that would help in gathering, analysing, discussing, and presenting the data.

3.5 Researcher background

During my time at Waikato Institute of Technology, I completed a Bachelor of Nursing degree. Upon graduation, I was accepted into the University of Auckland's New Entrance to Specialty Practice programme (NESP) and completed a postgraduate certificate in health sciences, with a focus on mental health nursing. During this time, I worked at the Henry Rongomau Bennett centre for half a year. I then worked in the community drugs and alcohol team, as my second rotation of my NESP placement. Currently, I work 0.8 FTE in community mental health in the North Waikato region. I recognise my background being entirely in a district health board setting and I

acknowledged my reflexivity as the researcher in this project. As part of the Bachelor of Nursing Honours program at the University of Waikato, this research project is in the process of being completed.

3.6 Summary

In conclusion, methodology is a framework that guides how research is conducted. Merits were outlined about mixed methods research utilising qualitative and quantitative data collection, although have some limitations, and appear appropriate to use in this study. Research methods are the tools that aid in the collection of data. Tools discussed were surveys, interviews, and focus groups. On reflection, the conduction of interviews to collect qualitative data appeared to fit the needs of this study and surveys were chosen to collect the qualitative data. Credibility and trustworthiness were discussed, and definitions were given to both. Lastly, the researcher's merits and credibility to complete this research were outlined.

Chapter IV: Methods

Research is formalised curiosity. It is poking and prying with a purpose.

Zora Neale Hurston, 1903 – 1996

4.1 Introduction

Methods show the step-by-step approach used to collect, collate, and analyse the data for research. Methods show that the approach that was used for data collection, analysis, and other ethical considerations for data collection. This chapter shows the design of this research, the study setting, how the data was collected, how the data was analysed, the ethical issues the researcher considered and the timeline of the research.

4.2 Study design

It was determined that this study would be mixed-methods research (Morse, 2016), as both qualitative and quantitative data collection were considered to be the most appropriate for this study. It was decided that utilising interviews to collect qualitative data appeared to fit the needs of this study and surveys were chosen as the tool to collect the quantitative data. The research involved a mixed methods study, which was conducted in two stages. Stage 1 was an analysis of an anonymised dataset of existing YouthCHAT health data. Stage 2 involved semi-structured interviews conducted with nurses on their perceptions of youth mental health.

4.3 Quantitative data collection

The quantitative data collected from a dataset from the existing YouthCHAT survey from secondary schools in the Waikato and Coromandel areas was accessed and analysed to produce the quantitative findings.

4.3.1 YouthCHAT

YouthCHAT is a screening tool that assesses young people for mental health concerns and risky health behaviour (Goodyear-Smith et al., 2017). This provides the healthcare clinician with an immediate overview of the youth's current mental state and situation.

This screening offers an opportunity for streamlining interventions and early detection of concerning behaviours. The aim of this is to aid in improving overall health outcomes for youth

To gain a better understanding of YouthCHAT, a meeting was arranged with the clinical service manager for school-based services at Pinnacle. During this meeting, the processes, and functions of YouthCHAT were discussed. YouthCHAT is primarily completed by the school nurse in conjunction with the HEADSS (Home, Education, Activities, Drugs, Sex, Suicide) assessment. The YouthCHAT surveys ask a variety of questions relating to stress, eating disorders, self-harm, and sexual assault and others. YouthCHAT provides a snapshot view of the assessment of what the youth is experiencing at that time. The assessment is conducted through a survey via an iPad or laptop provided. Pinnacle provides these devices to schools that are in need. Consent is addressed by an email being sent to parents informing them of the YouthCHAT assessment. There is an option for the parent to opt their child out. YouthCHAT has also been granted authority under section 125 of the Health Act from the Ministry of Health, which allows a healthcare clinician to perform an assessment without the parents' consent. (Ministry of Health, 2023).

The issues that were identified for the collection of data were wireless fidelity (Wi-Fi) and connectivity issues, a lack of literacy skills, and the youth not being able to understand the question, therefore selecting the wrong option. For managing distress, there is a disclaimer at the beginning of the survey, resources for various supports are provided, and generally, the school nurse will be present during the time of assessment. If questions pertaining to self-harm, suicide, or sexual assault are answered with a yes, there is an automatic alert that is sent to the school nurse, and further action would be taken.

4.3.2 Quantitative data instruments

This researcher extracted data from a YouthCHAT report to form its own data set. The instruments used are the (GAD-7) a 7-item scale for measuring generalised anxiety disorder and patient health questionnaire (PHQ-9) which is a standardised screening instrument for depression. In the below sections, GAD-7 and PHQ-9 are outlined

along with the questions that are asked and the information on the reliability and validity of both instruments. These two main instruments are used to calculate the total scores and then compare them to other question sets from the entirety of the YouthCHAT questionnaire. (Please see Appendix 1 for the other questions asked.)

4.3.3 GAD-7

The GAD-7 instrument is based on the Diagnostic and Statistical Manual of Mental Disorders-IV (DSM-IV) criteria (Sapra et al., 2020). GAD-7 is used to identify the likelihood and/or severity of generalised anxiety disorders (GAD). The GAD-7 is a survey with seven questions and options ranging from 'not at all' to 'nearly every day.' GAD-7 is efficient and quick to administer; it can also aid in the diagnosis of many different levels of GAD (Sapra et al., 2020). A research article by Löwe et al. (2008), outlined that GAD-7 was an effective and valid tool for detecting generalised anxiety disorder and its severity. Table 4.1 shows the GAD-7 questionnaire and the scoring system.

Table 4.1 GAD-7 questionnaire

Over the last two weeks, how often have you been bothered by the following problems?	Not at all	Several days	More than half the days	Nearly every day
1. Feeling nervous, anxious, or on edge	0	1	2	3
2. Not being able to stop or control worrying	0	1	2	3
3. Worrying too much about different things	0	1	2	3
4. Trouble relaxing	0	1	2	3
5. Being so restless that is hard to sit still	0	1	2	3
6. Becoming easily annoyed or irritable	0	1	2	3
7. Feeling afraid, as if something awful might happen	0	1	2	3
Column totals	____ +	____+	____+	___
				Total score: _____

Retrieved from: chromeextension://efaidnbmnnnibpcajpcglclefindmkaj/https://adaa.org/sites/default/files/GAD-7_Anxiety-updated_0.pdf

4.3.4 GAD-7 interpretation

The GAD-7 score is calculated by assigning the scores of 0, 1, 2, and 3, to the respective categories of not at all, several days, more than half the days, and nearly every day. Once the scoring is completed, all scores for the questions need to be added together (Patient, n.d). The GAD-7 score is interpreted by assessing the total score against corresponding levels of anxiety severity. A score of 0-4 would indicate minimal anxiety, the score of 5-9 is mild anxiety, 10-14 is moderate anxiety and a score greater than 15 would indicate severe anxiety. For this screening tool, a cut off score of 8 is utilised as a probable indication for a generalised anxiety disorder (Spitzer et al., 2006).

4.3.5 PHQ-9

The PHQ-9 instrument is the depression module from the patient health questionnaire. This instrument measures levels of depression through nine diagnostic questions about symptoms of depression that may have been experienced in the last two weeks. This instrument is commonly used around the world for of diagnosing and ongoing assessment of depression (Williams, 2014). Sun et al. (2020), state that PHQ-9 showed positive rates of validity and reliability. The report further concluded that PHQ-9 is an effective and prompt tool to screen and evaluate levels of depression. Table 4.2 shows the nine questions that are asked in the PHQ-9 questionnaire and the scoring system.

Table 4.2 PHQ-9 questionnaire

PATIENT HEALTH QUESTIONNAIRE-9 (PHQ-9)

Over the last 2 weeks, how often have you been bothered by any of the following problems? *(Use "✔" to indicate your answer)*	**Not at all**	**Several days**	**More than half the days**	**Nearly every day**
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself — or that you are a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. 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	0	1	2	3
9. Thoughts that you would be better off dead or of hurting yourself in some way	0	1	2	3

FOR OFFICE CODING 0 + _____ + _____ + _____

=Total Score: _____

Table 4.2 shows the nine questions that are asked in the PHQ-9 questionnaire and the scoring system. Retrieved from: chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.apa.org/depression-guideline/patient-health-questionnaire.pdf

4.3.6 PHQ-9 interpretation

The PHQ-9 scores are interpreted by assigning the scores of 0, 1, 2 and 3 to the perspective answers of not at all, several days, more than half the days and nearly every day (Kronke, 2001). Each column gets added together and then a final add to get the total score. The total scores indicates levels of depression severity. 0-4 means none-minimal, 5-9 indicates mild, 10-14 indicates moderate, 15-19 indicates moderately severe and 20-27 indicates severe depression severity (Kronke, 2001).

4.3.7 Quantitative analysis

Quantitative data was analysed using the SPSS software package (IBM Corp, 2020). For the data analysis, the PHQ-9 and GAD-7 scores for each participant were calculated and then compared for any statistical significance with other questions asked in the YouthCHAT questionnaire. A two-stage analysis of ANCOVA (analysis of covariance) was used to analyse this data, using a parsimonious model.

4.3.8 Analysis of covariance (ANCOVA)

Analysis of covariance (ANCOVA) identifies relationships between two separate dependent variables allowing for a different level of a third categorical variable (Peter, 2017). The process of ANCOVA is to calculate the effect that is had on a dependent variable so that the effect that an independent variable has on the dependent variable can be quantified (Peter, 2017). ANCOVA's main functions are to improve statistical analysis as it reduces the error of variance as well as identifying statistical associations between groups of data (Owen & Froman, 1998)

4.3.9 Parsimonious model

A parsimonious model is one that uses the smallest number of variables or factors to explain the research question (Daganzo et al., 2012). Tenenbaum (2016) states that various scholars adhere to the idea that frameworks in research should be kept simple. This is because simpler frameworks are easier to interpret than overly intricate frameworks (Tenebaum, 2016).

4.4 Qualitative data collection

Qualitative data was collected through one-on-one individual interviews with nurses about their perceptions of youth mental health. The reasoning behind interviewing nurses is that they have a unique insight into youth mental health, as nurses are informed on this subject, and it is probable that they have had first-hand experience working with youth and their whānau. An invitation to participate (see appendices 2) was sent out to a set email list of registered nurses in the Waikato region. The interviews were conducted via a video conference. The interviews were semi-structured, with set questions and prompts available to the researcher. These interviews took a maximum of sixty minutes to complete. See appendices 3 for the full interview schedule and prompts used.

4.4.1 Qualitative data consent

The voluntary nature of the research was outlined in the participant information forms and participant consent forms. Before commencing interviews, the researcher discussed the participant information form (See appendices 4) and consent form (Please see appendices 5) with participants, emphasising the voluntary nature of the research, and the process of withdrawing from the research. Participants were asked to sign the participant consent form before or at their interview. Prior to the interview the researcher ensured that consent forms were signed, and the participant had no question. Once this process was completed, the interview commenced. Figure 4.1 on the following page outlines the full interview process.

Figure 4.1 Interview process

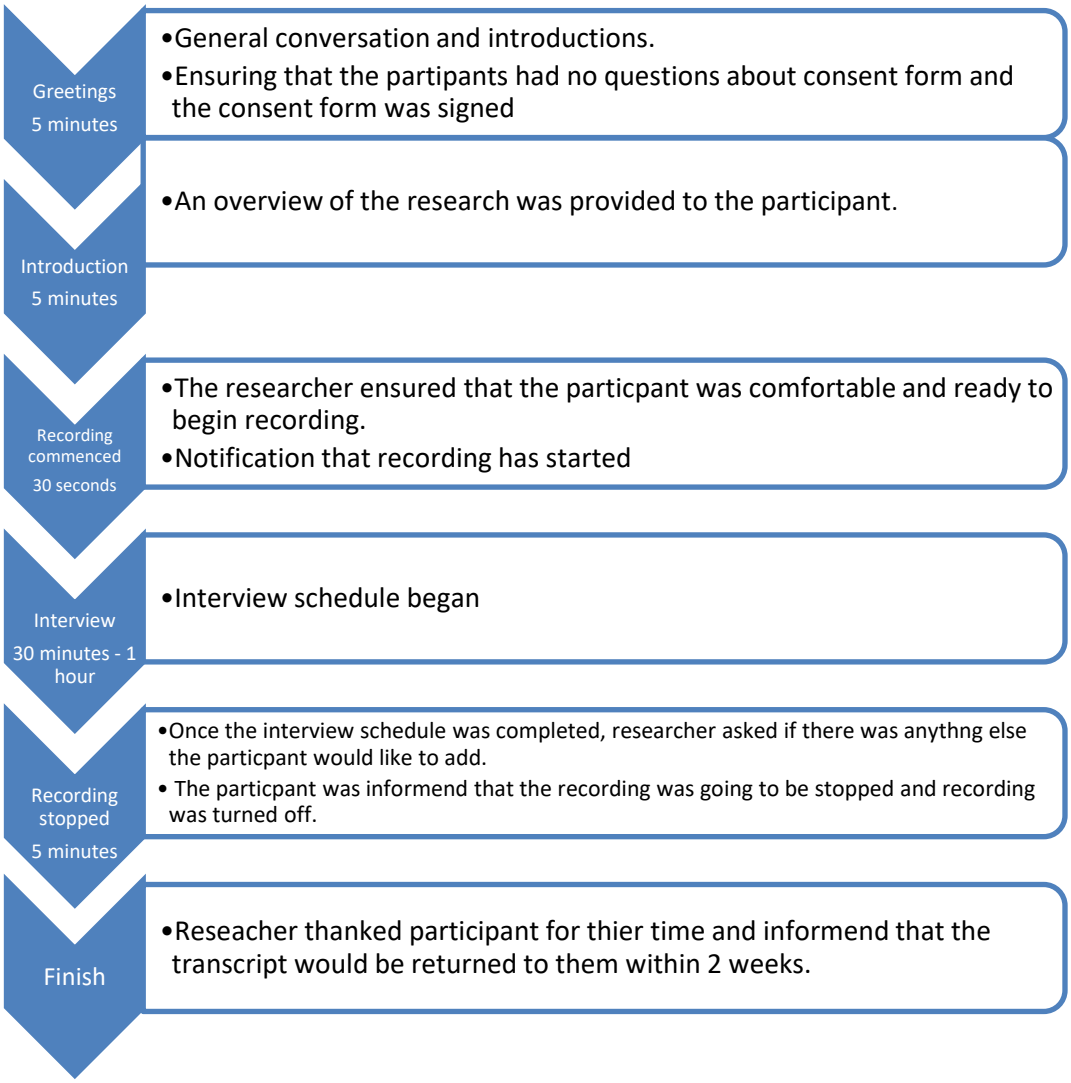

Figure 4.1 Provides an outline of the step-by-step process on how the interviews were conducted.

4.4.2 Qualitative analysis

Qualitative data from the participant's interviews were analysed using a general inductive approach. This approach involves identifying repetitive or obvious themes within the qualitative data (Thomas, 2006). This approach allows the researcher to follow a simple process for analysing qualitative data that produces reliable findings (Thomas, 2006). The figure below outlines the steps taken to analyse the qualitative data utilising the general inductive approach.

Figure 4.2 Qualitative data analysis

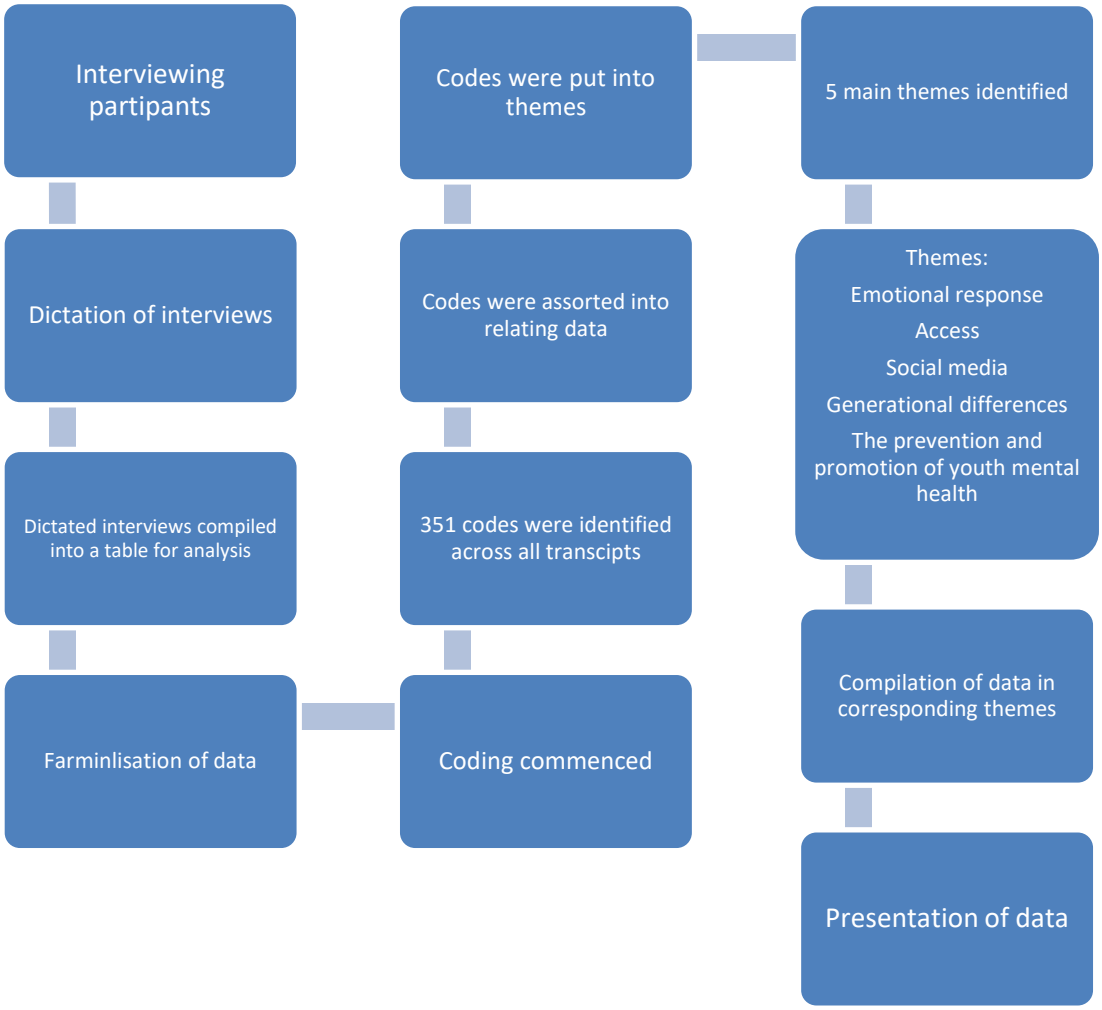

Figure 4.2 Shows a comprehensive process of how the qualitative data collected from the interviews were analysed using an inductive approach.

4.5 Ethical concerns

The project received initial ethical consent from the University of Waikato ethics committee (Ref: 2022#44) on December 12th, 2022. As this project was aimed at participants under the age of 18, particular care was given to addressing many ethical concerns arising from the vulnerability of this population. When the study setting changed for the process of collecting qualitative data, a new ethics form needed to be made and submitted, reflecting the new changes. Before submission of the updated ethics application, approval was sought and was given by Cheryl Atherfold, Head of Nursing, University of Waikato, (see appendices 6). On April 21st, 2023, the ethics committee approved the new ethics application (Please see Appendix 7).

4.6 Confidentiality and privacy

The data collected from YouthCHAT were already anonymised before being provided to the researcher. For the qualitative data, no identifying demographics were obtained or reported. Interviews were conducted in a private room via video link. On completion of the interview, participant consent forms were stored in a secure location at the University of Waikato. As well as this, a code was noted on each transcript to enable transcripts to be identified when being sent to participants. Codes and participant identities were recorded in separate documents and stored in a password-protected file in a secure location.

4.7 Cultural safety

As a registered nurse, myself, as the researcher has met the Nursing Council of New Zealand competencies for culturally safe practice, which involves working safely with people from diverse ethnic and other cultures, including Māori and others. The researcher was educationally prepared to work clinically with consumers across the lifespan and so was able to generalise this knowledge to diverse research participants.

The researcher approached two Māori cultural advisors, who agreed to help support this research if any issues were raised. Recommendations were given and implemented for working with Māori. For the interviews, they were conducted professionally and respectfully, drawing on the advice and my experience as a health professional,

including education in cultural safety and assessment of my cultural safety in clinical practice.

4.8 Timeline

The process of this research demonstrated many obstacles. This was to be expected when researching youth. Below are the steps that the team and I went through in order to complete this study. The below list shows a generalised step-by-step process of what the sequence of events was while completing this study. Of course, there was a multitude of work that happened in between and in the background of each milestone. Please see appendices 8 for full timeline list.

4.9 Summary

This chapter outlined the approach taken to collect, analyse, and compile data. The quantitative data was obtained from the existing YouthCHAT survey, a screening tool that assesses young people for mental health concerns and risky behaviour. The survey includes modules of questions covering various topics such as stress, eating disorders, self-harm, and sexual assault. The data was analysed using ANCOVA and parsimonious modelling.

Qualitative data was collected through one-on-one interviews with nurses to gather their perceptions of youth mental health. The interviews were conducted via video link and lasted up to sixty minutes. The qualitative data analysis followed a general inductive approach to identify common themes within the data.

Ethical concerns were addressed, including confidentiality and privacy of data, risk of harm, cultural safety, and consent. The research received ethical consent from the University of Waikato ethics committee. Measures were taken to ensure participant confidentiality and privacy, such as anonymising the data and securely storing consent forms. Cultural safety was considered, with the researcher being educated and prepared to work with diverse cultures, including Māori. Two Māori cultural advisors were consulted for support and recommendations.

Chapter V: Findings

Research is formalised curiosity. It is poking and prying with a purpose.

Zora Neale Hurston, 1903 – 1996

5.1 Introduction

This chapter presents the findings from the analysis of quantitative and qualitative data for this research. Part one displays the findings from the of quantitative data from the YouthCHAT data set. Part two shows findings from the analysis of qualitative data from the eight semi-structured interviews with nurses on their perception of youth mental health.

5.2 Part One: Quantitative findings

The quantitative data for this research was collected through an existing data set from the YouthCHAT survey instrument administered to 778 school students in the Waikato/Coromandel regions. YouthCHAT utilises the instruments GAD-7 and PHQ-9 for questions regarding anxiety and depression, and additional questions for other mental health issues. For purposes of this study the GAD-7 and PHQ-9 data sets were extracted for analysis.

Data analysis was conducted utilising parsimonious modelling. A parsimonious model uses the smallest number of variables or factors to explain the research question (Daganzo et al., 2012). This framework keeps data analysis simple and therefore easier to interpret (Tenebaum, 2016). ANCOVA was used to identify the most significant findings from the YouthCHAT data set (Peter, 2017).

Part 2: Demographics

The below table (5.1) show the gender of that participants that took part in the YouthCHAT surveys. Gender showed an even split of female (46.3%) and male (51.8%). A small percentage, 1.03% identified as gender diverse and 0.90% identified as other.

Table 5.1 Gender

Gender	Frequency	Percent %
Female	360	46.3
Male	403	51.8
Gender diverse	8	1.0
Other	7	0.9
Total	778	

The next table (5.2) shows the YouthCHAT participants' ethnicity. The majority of participants identified as New Zealand European, this being 451 (60.0%) participants. 241 (31.0%) identified as Māori and the rest of the participants identifying as Middle eastern/ Latino, Asian, Pacifica or other.

Table 5.2 Ethnicity

Ethnicity	Frequency	Percent %
NZ European	451	60.0
Māori	241	31.0
Middle eastern/Latino	8	1.0
Asian	25	3.2
Pacifica	20	2.6
Other	33	4.2
Total	778	

Table 5.3 Age

Table 5.3 shows the age range of the participants. The majority at (n=420) of the participants were in the age range of 13 and under (54.0%). 333 (42.8%) were 14, 14 (1.8%) were 15, 5 (0.6% were 16, 2(0.3%) were 17 and 4(0.5%) were 18 and older.

Age	Frequency	Percent %
13 and under	420	54.0
14	333	42.8
15	14	1.8
16	5	0.6
17	2	0.3
18 and over	4	0.5
Total	778	

Table 5.4 shows the findings from the PHQ-9 question set. The mean scores of all participants were taken for analysis.

Table 5.4 PHQ-9

	Several days n (%)	Nearly every day n (%)	More than half the days n (%)	Not at all n (%)	Total
Over the last 7 days how often have you been bothered by feeling down and depressed?	160 (20.6)	60 (7.7)	56(7.2)	490(59.3)	776
Over the last 7 days how often have you been bothered by trouble falling asleep?	22(13.3)	73(44.2)	31(18.8)	39(23.6)	165
Over the last 7 days how often have you been bothered by little interest or pleasure in doing things?	137(17.9)	53(6.9)	44(5.7)	531(69.4)	765
Over the last 7 days how often have you been bothered by poor appetite or overeating?	30(18.1)	36(21.8)	29(17.5)	70(42.4)	165
Over the last 7 days how often have you been bothered by feeling tired or having little energy?	41(24.8)	58(35.1)	39(23.6)	27(16.4)	165
Over the last 7 days how often have you been bothered by feeling bad about yourself – or that you are a failure or have let yourself or your family down?	33(20.1)	48(29.3)	40(24.4)	43(26.2)	164
Over the last 7 days how often have you been bothered by trouble concentrating on things, such as reading the newspaper or watching television?	35(21.3)	44(26.8)	48(29.3)	37(22.6)	164
Over the last 7 days how often have you been bothered by 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?	37(22.6)	38(23.2)	28(17.1)	61(37.2)	164
Over the last 7 days how often have you been bothered by thoughts that you would be better off dead or hurting yourself in some way?	33(20.1)	35(21.3)	22(13.4)	74(45.1)	164

Table 5.5 shows the participants results from the GAD-7 question set. The mean score of all GAD-7 assessments were taken to use for further analysis.

Table 5.5 GAD-7

	Several days n(%)	Nearly every day n(%)	More than half the days n(%)	Not at all n(%)	Total of participants that answered
Over the last 2 weeks how often have you been bothered by not being able to stop or control worrying?	78(30.6)	47(18.4)	38(14.9)	92(36.1)	255
Over the last 2 weeks how often have you been bothered by feeling nervous or anxious?	119(46.7)	63(24.7)	37(14.5)	36(14.1)	255
Over the last 2 weeks how often have you been bothered by trouble relaxing?	70(27.5)	35(13.7)	37(14.5)	113(44.3)	255
Over the last 2 weeks how often have you been bothered about worrying too much about different things?	107(42.0)	48(18.8)	48(18.8)	52(20.4)	255
Over the last 2 weeks how often have you been bothered by being so restless that it's hard to sit still?	76(29.8)	39(15.3)	32(12.5)	108(42.4)	255
Over the last 2 weeks how often have you been bothered by becoming easily annoyed or irritable?	97(38.0)	53(20.8)	48(18.8)	57(22.4)	255
Over the last 2 weeks how often have you been bothered by feeling afraid as if something awful might happen?	84(32.9)	41(16.1)	38(14.9)	92(36.1)	255

The following table(5.6) shows the total number, mean, minimum, maximum mean and standard deviation of the PHQ-9 and GAD-7 total mean scores.

Table 5.6 PHQ-9 and GAD-7

	N	Minimum	Maximum	Mean	Std. Deviation
PHQ9_Total	164	.00	27.00	13.9756	7.05974
GAD7_Total	255	.00	21.00	8.4902	5.69698

Table 5.7 shows the statistical significance between PHQ9 total score and gender.

Table 5.7 PHQ-9 score and gender.

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1884.712[a]	12	157.059	3.801	<.001
Intercept	3133.971	1	3133.971	75.848	<.001
What is your ethnicity?	245.429	5	49.086	1.188	.318
What is your gender?	608.487	3	202.829	4.909	.003*
Error	6239.190	151	41.319		
Total	40156.000	164			
Corrected Total	8123.902	163			

**p=<0.05*

The next table (5.8) shows the mean PHQ-9 score compared to gender. Table 5.8 shows that female (n=112, PHQ-9=15.7) and gender diverse (n=5, PHQ-9=15.6) have a higher PHQ-9 total score in comparison with males (n=45, PHQ-9=9.2).

Table 5.8 Gender and mean score

Gender	PHQ-9 Mean	Std. Deviation	N
Female	15.7321	6.70751	112
Gender diverse	15.6000	4.03733	5
Male	9.2000	5.99090	45
Other	19.0000	7.07107	2
Total	13.9756	7.05974	164*

**p=<0.05*

Table 5.9 shows the correlation between total PHQ-9 score and feeling unhappy or worried after a session of gambling or gaming.

Table 5.9 Gambling and gaming

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	250.057[a]	3	83.352	2.858	.091
Intercept	.000	0	.	.	.
Do you gamble or play computer games bet or game?	.000	0	.	.	.
Do you sometimes feel unhappy or worried after a session of gambling or gaming?	235.200	1	235.200	8.064	.018
Does gambling or gaming sometimes cause you problems?	129.018	1	129.018	4.424	.062
Do you want help with gambling or gaming?	2.700	1	2.700	.093	.767
Error	291.657	10	29.166		
Total	2192.000	14			
Corrected Total	541.714	13			

Table 5.10 expands on the findings that PHQ-9 and mean score has statistical significance as it shows the participants answer to if they sometimes feel unhappy or worried after a session of gambling or gaming. (Yes= 8, No=37).

Table 5.10 Gaming and PHQ-9

Do you sometimes feel unhappy or worried after a session of gambling or gaming?	PHQ9 Mean	Std. Deviation	N
No	11.0541	6.57836	37
Yes	13.3750	6.98851	8
Total	11.4667	6.63188	45*

**p=<0.05*

Table 5.11 shows the connection between total PHQ-9 score and the question, are you happy with your body shape or weight? Also highlighted in red is a statistical significance between the total mean score and the question, 'Have you ever made yourself throw up on purpose in an attempt to control your weight?'

Table 5.11 eating disorders and PHQ-9

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1677.341[a]	6	279.557	8.670	<.001
Intercept	6077.279	1	6077.279	188.488	<.001
Are you happy with your body shape or your weight?	192.592	1	192.592	5.973	.016
Have there been any recent changes in your weight?	9.021	1	9.021	.280	.598

Are any of your family members or friends worried about your weight?	22.524	1	22.524	.699	.405
Have you ever made yourself throw up on purpose in an attempt to control your weight?	859.684	1	859.684	26.663	<.001
Do you want help with this?	93.592	1	93.592	2.903	.091
Error	3998.048	124	32.242		
Total	36332.000	131			
Corrected Total	5675.389	130			

Table 5.12 expands on the findings that the mean PHQ-9 score has correlation with questions from the eating disorders data set. Table 5.12 shows significance between PHQ-9 mean and the question 'have you ever made yourself throw up on purpose in an attempt to control your weight?' Table 5.12 also shows highlighted in red the correlation between PHQ-9 mean and the question, 'are you happy with your body shape or your weight?'

Table 5.12 PHQ-9 and eating disorder questions.

Are you happy with your body shape or your weight?	Have you ever made yourself throw up on purpose to control your weight?	PHQ-9 Mean	Std. Deviation	N
No	No	14.2727	6.21042	77
	Yes	21.2692	3.81112	26*
	Total	16.0388	6.45182	103
Yes	No	10.8500	6.12394	20*
	Yes	16.8750	5.91457	8
	Total	12.5714	6.56832	28
Total	No	13.5670	6.31616	97
	Yes	20.2353	4.69080	34
	Total	15.2977	6.60733	131

**p=<0.05*

Table 5.13 shows the associations between multiple answers from the YouthCHAT behaviour question set and total mean PHQ-9 score.

Table 5.13 YouthCHAT and behaviour question set

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1579.472[a]	4	394.868	11.724	<.001
Intercept	16.884	1	16.884	.501	.480
Do you have trouble with any of the following: paying attention at school or work?	381.416	1	381.416	11.325	.001
Do you often break rules or refuse to do as you're told?	690.573	1	690.573	20.504	<.001*
Are you easily distracted do you find it hard to follow instructions or do you	213.174	1	213.174	6.329	.013*
Do you find it hard to stay quiet or sit still when asked to do so?	166.553	1	166.553	4.945	.028*
Error	4075.329	121	33.680		
Total	34155.000	126			
Corrected Total	5654.802	125			

**p=<0.05*

Table 5.14 shows the answers to the question do you find it hard to stay quiet or sit still when asked to do so? (Yes=79. No=470). Highlighted in red shows the correlation of answering yes to this question and the PHQ-9 mean (n=16.2785). Table 5.15 expands on the PHQ-9 and behaviour questions set

Table 5.14 PHQ-9 and behaviour question set

Do you find it hard to stay quiet or sit still when asked to do so?	PHQ-9 Mean	Std. Deviation	N
No	12.9574	7.53242	47
Yes	16.2785	5.90510	79
Total	15.0397	6.72595	126*

**p=<0.05*

Table 5.15 shows the answers to the question are you easily distracted, do you find it hard to follow instructions or do you lose things? (Yes=111, No=15). Highlighted in red shows the correlation of answering yes to this question and the PHQ-9 mean (n=6.45785).

Table 5.15 PHQ-9 and behaviour question set

Are you easily distracted, do you find it hard to follow instructions or do you often lose things?	PHQ-9 Mean	Std. Deviation	N
No	9.8667	6.61024	15
Yes	15.7387	6.45785	111
Total	15.0397	6.72595	126*

**p=<0.05*

Table 5.16 shows the answers to the question do you often break rules or refuse to do as you're told? (Yes= 60, No= 102). Highlighted in red shows the correlation of

answering yes to this question and the PHQ-9 mean (n=17.5333). Table 5.17 expands on the PHQ-9 and behaviour questions set.

Table 5.16 PHQ-9 and behaviour questions set

Do you often break rules or refuse to do as you're told?	PHQ-9 Mean	Std. Deviation	N
No	11.8333	6.81594	102
Yes	17.5333	5.89014	60
Total	13.9444	7.03430	162*

**p=<0.05*

Table 5.17 shows the answers to the question, do you have any trouble with any of the following: paying attention at school or work, remembering where you put things or waiting your turn? (Yes= 115, No=47). Highlighted in red shows the correlation of answering yes to this question and the PHQ-9 mean (n=15.4174).

Table 5.17 PHQ-9 and behaviour question set

Do you have trouble with any of the following: paying attention at school or work, remembering where you put things or waiting your turn?	PHQ-9 Mean	Std. Deviation	N
No	10.3404	6.70586	47
Yes	15.4174	6.64776	115
Total	13.9444	7.03430	162*

**p=<0.05*

The below table (5.18) demonstrates the statistical relationship between the total mean PHQ-9 score and anger. A high mean score on the PHQ was associated with need for help in controlling anger.

Table 5.18 PHQ-9 and anger

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	304.273[a]	1	304.273	8.475	.004
Intercept	13080.958	1	13080.958	364.360	<.001
Do you want help with controlling your anger?	304.273	1	304.273	8.475	.004
Error	3482.414	97	35.901		
Total	30657.000	99			
Corrected Total	3786.687	98			

**p=<0.05*

Table 5.19 shows the correlation between PHQ total score and if the participant wants help controlling their anger?

Table 5.19 PHQ-9 and anger questions set

Do you want help with controlling your anger?	PHQ-9 Mean	Std. Deviation	N
No	14.6981	5.67920	53
Yes but not today	18.4333	6.37172	30*
Yes	18.6875	6.17218	16*
Total	16.4747	6.21608	99

**p=<0.05*

Table 5.20 shows the link between GAD-7 total score and the question what is your gender?

Table 5.20 GAD-7 and gender

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1086.149[a]	13	83.550	2.813	<.001
Intercept	1642.161	1	1642.161	55.293	<.001
What is your gender	321.416	3	107.139	3.607	.014*
What is your ethnicity?	111.709	5	22.342	.752	.585
What is your gender?	124.190	5	24.838	.836	.525
What is your ethnicity?					
Error	7157.576	241	29.699		
Total	26625.000	255			
Corrected Total	8243.725	254			

**p=<0.05*

Table 5.21 shows the demographic of gender (Female= 176, Male=70). It indicates that females have a higher GAD-7 score than males. The below table shows the correlation between GAD-7 and behaviour.

Table 5.21 Gender

What is your gender?	Mean	Std. Deviation	N
Female	9.4659	5.95497	176*
Gender diverse	10.6667	4.92612	6
Male	5.7143	4.05092	70
Other	11.6667	3.05505	3
Total	8.4902	5.69698	255

**p=<0.05*

Table 5.22 shows the correlation between total GAD-7 score and questions from the behaviour data set. Questions from the behaviour question set are analysed against each other.

Table 5.22 GAD-7 and behaviour

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	914.086[a]	7	130.584	4.735	<.001
Intercept	2609.712	1	2609.712	94.621	<.001
Do you have trouble with any of the following: paying attention at school or work?	153.488	1	153.488	5.565	.019
Do you find it hard to stay quiet or sit still when asked to do so?	76.510	1	76.510	2.774	.098
Do you often argue with authority figures such as parents and teachers?	17.599	1	17.599	.638	.426
Do you have trouble with any of the following paying attention at school or work? Do you often argue with authority figures such as parents and teachers?	31.586	1	31.586	1.145	.286
Do you find it hard to stay quiet or sit still when asked to do so? Do you often argue with authority figures such as parents and teachers?	10.666	1	10.666	.387	.535
Do you have trouble with any of the following: paying attention at school or work? Do you find it hard to stay quiet or sit still when asked to do so? Do you often argue with authority figures such as parents and teachers?	16.636	1	16.636	.603	.438
Error	4716.316	171	27.581		
Total	22177.000	179			
Corrected Total	5630.402	178			

The next table 5.23 shows statistical evidence of the mean GAD-7 score and answering 'yes' to questions from the behaviour data set.

Table 5.23 Behaviour question set

Do you have trouble with any of the following: paying attention at school or work, remembering where you put things or waiting your turn?	Do you find it hard to stay quiet or sit still when asked to do so?	Do you often argue with authority figures such as parents and teachers?	Mean	Std. Deviation	N
No	No	No	3.2000	2.38747	5
		Yes	5.0000	5.19615	3
		Total	3.8750	3.44083	8
	Yes	No	9.0000	2.82843	2
		Yes	6.3333	5.68624	3
		Total	7.4000	4.50555	5
	Total	No	4.8571	3.62531	7
		Yes	5.6667	4.92612	6
		Total	5.2308	4.10597	13
Yes	No	No	7.4054	4.23254	37*
		Yes	10.1429	6.51372	21
		Total	8.3966	5.28799	58
	Yes	No	8.9111	4.86089	45*
		Yes	12.1429	5.72729	63*
		Total	10.7963	5.59332	108
	Total	No	8.2317	4.62227	82
		Yes	11.6429	5.95696	84
		Total	9.9578	5.59150	166
Total	No	No	6.9048	4.26448	42
		Yes	9.5000	6.50084	24
		Total	7.8485	5.29221	66
	Yes	No	8.9149	4.77234	47
		Yes	11.8788	5.81117	66
		Total	10.6460	5.57725	113
	Total	No	7.9663	4.62564	89
		Yes	11.2444	6.05835	90
		Total	9.6145	5.62419	179

**p=<0.05*

Table 5.24 shows the correlation between the total GAD-7 score and the question, do you want help with getting more exercise? The below table shows the GAD-7 mean and that participants answer to a question from the exercise questions set.

Table 5.24 GAD-7 and exercise

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	171.700[a]	1	171.700	5.555	.020
Intercept	5350.194	1	5350.194	173.106	<.001
Do you normally do more than 30 minutes of moderate or vigorous exercise?	.000	0	.	.	.
Do you want help with getting more exercise?	171.700	1	171.700	5.555	.020
Error	2936.176	95	30.907		
Total	12412.000	97			
Corrected Total	3107.876	96			

Table 5.25 shows the answers to the question do you want help with getting exercise? (Yes= 7, No= 64 and yes but not today=26).

Table 5.25 GAD-7 and exercise question set

Do you want help with getting more exercise?	GAD-7 Mean	Std. Deviation	N
No	9.1406	5.21861	64*
Yes but not today	9.9231	5.93244	26*
Yes	15.2857	6.75066	7*
Total	9.7938	5.68979	97

**p=<0.05*

Table 5.26 shows the statistical correlation between GAD-7 total mean score and questions from the anger questions set.

Table 5.26 GAD-7 and anger

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	395.026[a]	1	395.026	13.148	<.001
Intercept	.000	0	.	.	.
Is controlling your anger sometimes a problem for you?	.000	0	.	.	.
Do you want help with controlling your anger?	395.026	1	395.026	13.148	<.001
Error	4206.157	140	30.044		
Total	19204.000	142			
Corrected Total	4601.183	141			

Table 5.27 shows the GAD-7 mean score and the participants answers to the question, 'do you want help controlling your anger?' This table displays the answers to the question, do you want help with controlling your anger? (Yes=19, No= 81 and yes but not today= 42).

Table 5.27 GAD-7 and anger question set

Do you want help with controlling your anger?	GAD-7 Mean	Std. Deviation	N
No	8.6296	5.00111	81
Yes but not today	11.9286	6.03806	42*
Yes	12.6316	6.09381	19*
Total	10.1408	5.71249	142

**p=<0.05*

Table 5.28 shows the statistical significance between GAD-7 total mean score and abuse. Table 5.28 also shows the link between the GAD-7 total score the question is there anyone in your life whom you are afraid of or who hurts you in any way?

Table 5.28 GAD-7 and abuse

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	312.148[a]	3	104.049	3.465	.021
Intercept	505.196	1	505.196	16.825	<.001
Is there anyone in your life of whom you are afraid or who hurts you in anyway?	217.294	1	217.294	7.237	.009
Is there anyone in your life who controls you and prevents you doing what you want?	11.957	1	11.957	.398	.530
Do you want help with any abuse or violence that you are experiencing?	4.819	1	4.819	.160	.690
Error	1861.670	62	30.027		
Total	11968.000	66			
Corrected Total	2173.818	65			

Table 5.29 shows answers to the question from the abuse question set in correlation to the GAD-7 mean. Table 5.29 shows the participants answer to the question is there anyone in your life whom you are afraid of or who hurts you in any way? (Yes=41, No=208).

Table 5.29 GAD-7 and abuse question set

Is there anyone in your life of whom you are afraid or who hurts you in any way?	GAD-7 Mean	Std. Deviation	N
No	7.4279	5.17002	208
Yes	13.8293	4.97947	41*
Total	8.4819	5.65406	249

**p=<0.05*

Table 5.30 shows the significance of GAD-7 total score and questions about eating disorders. Statistical significance was found between the mean GAD-7 score and the questions 'do you believe yourself to be overweight or too big even if others tell you that you that you aren't?' and 'have you ever made yourself throw up on purpose in an attempt to control your weight?'

Table 5.30 GAD-7 and eating disorders

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	1208.109[a]	7	172.587	5.932	<.001
Intercept	2051.828	1	2051.828	70.529	<.001
Are you happy with your body shape or your weight?	60.261	1	60.261	2.071	.152
Have there been any recent changes in your weight?	16.609	1	16.609	.571	.451
Do you try things to control your weight such as extreme restriction of what you eat?	24.520	1	24.520	.843	.360
Are any of your family members or friends worried about your weight or your attitude towards your body and/or food?	1.789	1	1.789	.061	.804
Do you believe yourself to be overweight or too big even if others tell you that you that you aren't?	122.783	1	122.783	4.221	.042
Have you ever made yourself throw up on purpose in an attempt to control your weight?	407.936	1	407.936	14.022	<.001*
Do you want help with this?	17.024	1	17.024	.585	.445
Error	4829.247	166	29.092		
Total	22764.000	174			
Corrected Total	6037.356	173			

**p=<0.05*

The below table shows then answer to an eating disorder question in comparison to GAD-7 mean score. Table 5.31 shows the participants answers to the question, have you ever made yourself throw up on purpose in an attempt to control your weight? (Yes=38, No=136).

Table 5.31 GAD-7 and eating disorder

Do you believe yourself to be overweight or too big even if others tell you that you aren't?	GAD-7 Mean	Std. Deviation	N
No	8.0000	5.02903	80*
Yes	11.3404	6.18453	94*
Total	9.8046	5.90745	174

**p=<0.05*

Table 5.32 shows answers to a question from the eating disorders question set, which showed statistical significance in, compared to the GAD-7 mean. Table 5.32 shows the answers to 'do you believe yourself to be overweight or too big even if others tell you that you aren't?' (Yes=94, No=80).

Table 5.32 eating disorder question set

Have you ever made yourself throw up on purpose in an attempt to control your weight?	GAD-7 Mean	Std. Deviation	N
No	8.7500	5.55211	136*
Yes	13.5789	5.65509	38*
Total	9.8046	5.90745	174

**p=<0.05*

5.3 Summary

This section shows findings from the analysis of data extracted from the YouthCHAT data set. There were multiple statistical significances found between the mean of the PHQ-9 and GAD-7 score and other questions from the YouthCHAT question set. The findings with the most statistical significance were from the question sets relating to; gender, anger, gambling and gaming, exercise, behaviour, abuse and eating disorders. The findings of the quantitative data will be discussed further in the discussion chapter, part one.

6.1 Part Two: Qualitative findings

This section presents the findings obtained from eight semi-structured interviews with nurses on their perception of youth mental health. The participants who took part in the interviews will have no identifying or defining demographics presented. However, all participants have varying expertise within youth mental health, which provided a rich variety of different perceptions. The interviews were semi-structured and based on a set line of questioning. The interviews were transcribed and analysed utilising a general inductive approach (Thomas, 2006), resulting in the identification of five main themes. These are the emotional response, access, social media, generational differences, and lastly, the prevention and promotion of youth mental health.

The themes gathered from the interview data covered a range of insights pertaining to youth mental health. The theme of emotional response shows the human side of the participants and their raw reaction while being interviewed. In particular, a strong response was shown to a question about youth suicide rates within in New Zealand. Access as a theme is also presented, this was about accessing services and the nature of the support being provided to youth. The generational differences are explored, conveying what the participants think are the differences of youth mental health now compared to previous generations. The theme of prevention and promotion shows the participants' thoughts and suggestions as to how youth mental health care could be improved within New Zealand. In the following section the themes are presented in quotes that were extracted from the transcribed interviews, along with supporting commentary.

6.1.2 Emotional response

Throughout all the interviews there was one resounding theme that was repeated throughout- there were strong negative emotional responses when the participants were talking about youth mental health within New Zealand. A particular response was evoked following question number two, where the researcher asked, 'how does the statement that New Zealand has one of the highest youth suicide rates in the developed world make you feel?'

Participant 4 reaction to this question was:

"*It makes me feel really sad. Life is just so precious. And the fact that our young people at such a young age think that life isn't worth living, or life would be better without them.*"

Similar sentiments were expressed by participant 8 who stated:

"P*retty sad and nothing to be proud of, really.*"

Frustration and anger were other emotional responses described by participants. Participant 1 expressed frustration at youth suicide rates.

"Frustration, but that doesn't quite convey it. Angry is a bit self-indulgent, but yeah, frustrated."

Participant 7 explained their emotional reaction of sadness and provided insight on why youth suicide rates possibly could be this high.

"I think it's sad. I think that it reflects the current climate that New Zealand is in and the stresses in terms of financially, in terms of probably what's going on in the home, within whanau, the lack of social support that's happening, as well as system support and a reflection of the lack of services and education perhaps."

The emotional response of sadness was linked to a sense of urgency in addressing youth mental health. Participant 2 highlighted the need for New Zealand to address this issue.

"It's just very sad. We need to attend to it. So I feel that and I guess some urgency to attend to it."

6.1.3 Access

Access was a common theme that appeared throughout the interviews. Some examples within this theme pertained to accessing services, the threshold of access to services, disconnected services, schools, and other avenues where mental health care can be provided to youth.

Participant 5 explained their thoughts that within New Zealand there is a significant lack of services. This was related to workforce issues and rurality.

"I think that there is a huge lack of services in general. I know specifically in the Waikato, it's more like those rural services are very hard. A lot of it is to do with staffing, with not enough health care providers in general, of course, it's going to extend to all services within health, especially in those rural communities and those harder to staff areas like mental health can be. I'm sure that is reflected across New Zealand as well. And especially in those rural communities."

Demand for services was identified as another factor impacting on access. Participant 6 indicated that *"the systems are slammed"* further explaining that with services trying to provide mental health care there are *"all sorts of constraints, like there's a nursing shortage, so no one wants to work. They're struggling inpatients, outpatients."*

When speaking about an experience with youth accessing mental health services, participant 8 described that they had identified

"one of the biggest challenges I think is we are under resourced. We would have people that experience mental health, but they're on the waiting list of six months or years. Seems just crazy."

Also relating to wait times, participant 5 stated,

"They have to wait for such a long time, and that creates stress on its own. Also not knowing where to turn for help."

Participant 3 was asked about experiences while dealing with the mental health care system. They stated that a whānau member had a positive experience while accessing:

"a number of mental health online and telephone-based services and were generally impressed, actually. With some very listening, pragmatic support."

By contrast, another whānau member of this participant had a negative experience from a District Health Board service stating that mental health care was

"Quite difficult to access. Weren't keen in being involved until the fourth suicide attempt."

A commonality within the theme of access was that the participants felt that people accessing mental health services met a barrier of disconnected services. Participant 8 stated that

"*There's disconnect in services. Then it just creates an uncertainty for service users and frustration as well."*

Participant 8 further explained that services could be difficult to access: When answering this question participant 4 stated

"*Also not knowing where to turn for help. I feel like there's a lot of resources online and things, but one of the key frustration, I think, for mental health users and service users is that you feel like you're being kicked around."*

Knowing about available services was also identified as a barrier to access. Participant 5 stated that

"I think there are a lot of support services out there, but they don't know that they exist. Obviously they know that they exist, but they don't know what other services exist. And it's all about creating a big network and connecting the dots."

When speaking about the visibility of an advertisement for services participant 4 made a statement that they

"*don't really remember seeing anything if you need help. It's almost like it's hidden."*

This participant also outlined that they do not recall seeing any advertisement for mental health support and services.

Referring to disconnected services, participant 5 stated that:

"We are, unfortunately, very much siloed in our own programmes. If you ask a health care worker who works for refugees who would have no idea what other support that person is experienced."

Participant 5 was referring to how non cohesive, health agencies are with one and other.

Access was seen as part of an ideal mental health service by participant 1. When participant 1 was asked 'what does an ideal mental health and addiction system look like to you?' they answered,

"I *think some of the things that would really help is easier access. I think embedded in youth hubs, schools, and there are pockets of that happening. But I think it needs to be in a much more fundamental way that schools end up being a barometer of a community's health and well-being, I suspect."*

For participant 6, access could be addressed by focusing on schools.

"You can't always rely on family support because people have all different family dynamics. So, they're not always going to get that support from their family. I think school is almost like a job to them. It's where they go 8 to 3 or whatnot every day or every five days a week, it's definitely your opportunity to capitalise on that."

This point was reinforced by participant 1 who mentioned that

"*If we're serious about childhood youth wellbeing in this country, we need to start paying early childhood teachers more than you get for being a barista."*

6.1.4 Media

Social and news media was a prominent theme throughout all of the interviews. Both the positive role of media and its adverse effects were mentioned by all the participants. Media was addressed in the way of social media platforms, the news, and the internet in general.

Participant 7 spoke about how social media can be used positively to promote youth mental health.

"I know people say that things like social media and technology have influenced mental health and youth, but I don't think that that's the biggest influence personally. And I think rather than trying to fight that side of things, we just have to move with it because it can be a really useful tool at the same time."

Participant 6 spoke about how social media can be positive as it can play a role in normalising talking about mental health. They stated that:

"*on TikTok, everyone just talks about how they've struggled."*

This participant referred to the idea that, as many youths are on TikTok, they are exposed to people openly talking about their mental health struggles and journeys, thus creating a culture of normalisation and acceptance.

Mental health benefits of social media were also mentioned by participant 3 who outlined the merit of utilising social media to promote youth mental health and the improvement of accessing mental health supports.

"It would include a technology platform as well, a platform just to improve the access and just to better target that specific population as well."

Alongside its potential benefits participants identified possible negative effects. Participant 1 reflected that social media may have a negative impact on youth mental health.

"I think that social media... It's been a game changer for the world. So why wouldn't it be a game changer in terms of so impactful in terms of the way that it is? I'm sure you've heard this a million times about that the access... Young people have access to things that are more distressing, difficult to deal with 24/7 in a way that a lot of us didn't have back in my day."

Participant 2 spoke of how news media portray specific groups of people. They considered that the news media plays a major role on the narrative of how society views certain people and communities. They specified that news media tend to portray Māori in perhaps a negative light by focusing on the deficits, not on positives.

"I guess not enough celebrating of really positive messages around things that are happening for and by Māori. And I'd hold the media and the storytelling responsible for that."

Participant 8 also outlined the issue of risks from social media by stating

"social media should hold a sense of responsibility in terms of how they restrict the spread of non-healthy information."

Participant 3 similarly outlined the news media's role in providing messages to society. They provided a specific example about a time where the medias role in portraying negative messages.

"There were the incidents up in Northland a few years ago where there was the spate of young kids who were taking their own lives, and it was reported widely in the press. Then until that stopped and the media now actually learned what happens when they actually discuss it openly in the press. So this is obviously a balancing act."

Participant 8 spoke of the detrimental effects social media can have with cyber bullying within New Zealand and how it is not regulated. They spoke about there being

"no laws as such. It's not seen as a particular type of crime when you're bullying someone online. Whereas back in the days, if you were to assault someone, you'd be locked up. But I'd say the mental, detrimental effects of being bullied online, just as well as then people with the suicidal missions, they could kill someone. And that, in a way, to me, it's way more than just to assault someone on the street."

6.1.5 The generational differences

As part of the interviews, there was a question that asked the participant what they think are the main differences between this current generation's youth mental health compared to the mental health of older generations. This question generated many insightful answers and discussions. An interesting point to note, is that while there were no identifying demographics officially collected, there were clear observational differences between the different generations of participants throughout the entirety of the interview process. This meant that how they answered the questions differed from each participant depending on their own generations' perception. For this particular question, interestingly, the majority of the participants expressed that they think that there have been mostly positive changes within youth mental health over the years. The common aspects within this theme was less institutionalised services, less stigma and more understanding.

Participant 1 spoke about how services are probably *"less institutionalised overall*." They also addressed that when people are seeking mental health support participant 1 said, "*I think probably overall, there's probably less institutionalised responses when they can access help."*

A similar perception of improvement over generations, although with reservations, was expressed by participant 4 who explained:

"*I do think we have made some progress, and we don't just put people into asylums or whatever. We don't do that anymore. I think the systems that we do have are doing their best, but it's just over capacity with every health system, every service. In some regards, I would say that there has been progress and improvements, but we have a very long way to go."*

Participant 6 stated that they *"definitely think there is a difference*." They additionally explained that a generational difference they noted was that today's youth are better able to communicate about mental health struggles:

"for the youth that I know and comparing it to myself, they are so much more brave for saying, Yeah, I'm struggling right now."

Today's youth were seen as having a more sophisticated understanding of mental health:

"I think that previously, people saw things going on in a more superficial way, like the tip of the iceberg" participant 7 explained. *"Whereas now they understand now that there may be a deeper meaning of that bottom of the iceberg to what is actually going on, what people can actually see."*

Increased awareness about mental health was considered a factor in today's youth. Participant 2 spoke to how they wonder if *"when we start noticing something and giving it voice, we start seeing it."* . This participant further said that *"often with awareness comes knowing. People have suffered for a long time quietly and are still doing that."*

Reduction in stigma was noted by participant 7 who said:

"I think there has been a reduction in stigma. People are a bit more vocal and perhaps feel more comfortable to share as well."

Increased awareness was considered to contribute to higher reported rates of mental illness. Participant 3 explained that they

"struggle to see whether it has changed in fact. The actual incidents of mental illness and mental health concerns amongst youth has actually increased. But the reported rates, I suspect, have increased because we're more aware of it."

A further perspective of generational change was voiced by participant 4 who spoke of how mental health has been more normalised. They stated:

"I think if you look back over history, the trend of not talking about mental health, not understanding mental health is the same, or is consistent, at least. I think we've got a lot more... There's more understanding now than there used to be, and maybe more acceptance of it, and maybe normalising it a little bit more than in the past, if you think back to the 50s or the early 1900s."

6.1.6 Prevention and promotion

The theme of prevention and promotion of youth mental health problems was noticeable throughout all participants interviews. Prevention seemed to be commonly mentioned as being the obvious way of improving mental health care to youth. Empowerment was also mentioned often and enforcing a positive and safe society for youth.

Participant 7 explained that *"I think New Zealand health care system in general as well as in mental health specifically, they've always had a very reactive approach rather than a proactive approach. And that can often be the downfall. I think a lot of investment should be made in promotion rather than that tertiary secondary care. And then at the end of the day, that promotion is going to reduce the needs of that secondary and tertiary care. So just being more proactive rather than reactive."*

Participant 4 spoke about prevention in the way of providing education to youth. They stated that:

"In an ideal world, there'd just be... Would we start at a younger age? Would it be more throughout schools? Would it be more preventative in building knowledge and building resilience early rather than waiting until people are on the brink of having a mental crisis."

Participant 6 also spoke of having open discussions with youth and providing education about mental health and mental health issues.

"*... Almost like you'd have a safe sex conversation, have a mental health matters conversation where you're like, these things do exist. And if you feel like this, then please say something."*

Another perspective on promotion of mental health was offered by participant 3 with the suggestion of how positive mental health can be promoted:

"…obviously exercise, its friends, it's social connectedness, obviously pressure and how to actually resolve it is important. Talking about feelings and events and so on."

Also offering suggestions on prevention participant 7 explained that they think,

"At the end of the day, it's just increased education, increased awareness, and trying to take away that, I guess, tapu or feeling that you can't discuss these things, or people can't feel these ways."

Participant 4 also offered a suggestion surrounding prevention and wellbeing, *"start young, build resilience, and have more visibility."*

Maintaining a strengths-based approach when speaking of youth mental health was identified as important by participant 5. They stated that a strengths based approach:

"Empowers a person in a community. It's all around a strength based approach, like, hey, being aware that there's inequity and health outcomes, those are the strengths, and that's where we invest."

Prevention extended beyond the individual to the social sphere. Participant 2 talked to the importance of maintaining,

"A stronger recognition and knowing that the community actually really cares about you as a young person, that you actually are important to us and important to our society, and that you matter."

Participant 4 talked about reinforcing the idea to youth that "*It's okay to not be okay."*

6.2 Summary

To summarise the findings from the semi-structured interviews, the researcher interviewed eight nurses about their perception of youth mental health in New Zealand. The participants expressed strong negative emotions, especially when discussing New Zealand's high youth suicide rates. The participants also highlighted issues with accessing mental health services, such as long waiting times and a lack of

resources, especially in rural areas was noted. The role of media, particularly social media, and how it influences youth mental health was also discussed. Some participants stated they believed that social media could be a positive platform to promote mental health awareness, while others expressed concerns about its negative impact and cyberbullying. Generational differences were also discussed, where participants believed that there have been positive changes over the years. Prevention and promotion of youth mental health were considered essential, with suggestions for prevention strategies, prevention in schools and empowerment for youth. The findings of this data will be discussed further in the discussion chapter, part two.

Chapter VI: Discussion

Research is formalised curiosity. It is poking and prying with a purpose.

Zora Neale Hurston, 1903 – 1996

7.1 Introduction

This study is the first mixed methods study to use quantifiable data about youth experiences of their mental health alongside the perceptions of health professionals alongside the mental health experiences of youth. This research aimed to look at youth mental health and the perception that nurses have on youth mental health within New Zealand. This research was a mixed method study, which captured quantitative and qualitative date. The quantitative data was collected through an existing dataset from the established YouthCHAT survey. The data collected was questions that asked youth participants about their mental health. The questions asked included the GAD-7 and PHQ-9, and ranged from anxiety, depression, eating disorders, substance use and many more. The qualitative section of this research was conducted by interviewing eight registered nurses about their perception of youth mental health. The aim of this research was to answer the following questions.

1. What are the common mental health issues youth experience?

2. What are nurses perception of youth mental health?

This chapter will provide a discussion on the findings of this research project. Firstly, the research questions will be answered. In this section, the information will be presented in two parts. The first section will discuss the first research question, 'what are the common mental health issues that youth experience?' This question was answered utilising the collection of quantitative data from YouthCHAT, therefore the qualitative data is utilised to answer the second part of this section. The second part of this section shows discussion of the question 'what are nurses' perception of youth mental health?'

The following section of this chapter will highlight the importance of prioritising at youth mental health and what this research means for future practice. The last section of this chapter will show the limitations, implications, and conclusions of this research.

Part 1: Research questions

7.2 Youth mental health within New Zealand

This section of the chapter is shown in two parts. The first part will answer question number one and the second part will demonstrate question number two. Question one *(what are the common mental health issues youth experience?)* will be shown through headings of each finding of the quantitative data. Question two *(What are the perceptions that nurses have on youth mental health?)* will be shown under different headings showing the themes identified during the qualitative data analysis. Literature from a secondary literature review will be weaved throughout the answers as supporting evidence.

7.3 What are the common mental health issues youth experience?

This question was answered by extracted data from an existing data set from the survey YouthCHAT. The chapter provides a discussion of the relevant and notable findings. The PHQ-9 questionnaire asked 9 questions that aid in the assessment of depression (Williams, 2014). Each answer is given its numerical value, which when added together, shows the total score, and goes in respective categories for different levels of depression (Kronke, 2001). GAD-7 is a screening tool that asked questions for the assessment of anxiety disorders (Sapra et al., 2020). The answers to this assessment are assigned a number value, depending on what answers are selected, the numbers are added together to produce a total score (Spitzer et al., 2006). This section will discuss the findings from the total PHQ-9 and GAD-7 scores compared to other question sets from the YouthCHAT data. The findings with the statistical significance are collated into groups of gender, eating disorders, gambling and gaming, behaviour, abuse, and help-seeking.

7.3.1 Gender

It was shown that females have a higher GAD-7 total score than males. There is a multitude of research that finds that women are more susceptible to anxiety disorders.

A study by Abdallah and Gabr (2014) states that females are more likely to be anxious than males. Another longitudinal study also found that females reported much higher rates of anxiety (Gao et al., 2020). A prominent note is that females were also found to have the highest PHQ-9 median score. The results showed that females had a higher PHQ-9 score when in comparison to males. This finding is consistent with previous research by Shevlin et al. (2022) who found that females scored significantly higher PHQ-9 scores than males in their research. Liu et al. (2020) also reported that within their research it was found that females were twice as likely than men to develop depressive symptoms. A consideration is that perhaps the female participants were more likely to fill out the questionnaire openly about their mental health. Females may be more likely to be vocal and seek support for mental health issues (Piccinelli & Wilkinson, 2000). A suggestion is given that females report higher depression rates due to interpersonal traits, such as fluctuating levels of self-esteem (Cambron et al., 2009).

7.3.2 Eating disorders

The YouthCHAT data revealed that a high mean PHQ-9 score was correlated with the eating disorders question set, in particular, answering yes to the question 'are you happy with your body shape or your weight?' It also showed a statistical correlation between the PHQ-9 score and the question, 'have you ever made yourself throw up on purpose in an attempt to control your weight?' This finding is consistent with previous research. In a study examining the correlation between eating disorders and high PHQ-9 scores, it was found that the participants who had a current eating disorder, commonly had a PHQ-9 score of 15 or higher (Wisting et al., 2021). Depression and depressive symptoms have also been found to correlate with disordered eating as a coping behaviour (Sander et al, 2021). Poor body image and self-perception tie into both disordered eating and depression (Sander et al, 2021). There were two notable correlations between the total GAD-7 score and questions from the eating disorders question set. The first question is, have you ever made yourself throw up on purpose in an attempt to control your weight? The second question is, do you believe yourself to be overweight or too big even if others tell you that you are not? Sander et al, (2021) state that the development of an eating disorder may be linked to a person trying to find control over their own emotions. The eating disorder question set had both PHQ-9 and GAD-7 correlations. Particularly, the question, 'have you ever made yourself

throw up on purpose in an attempt to control your weight?' had statistical significance for both assessments.

7.3.3 Gambling and Gaming

The research also found a correlation between the total PHQ-9 score and feeling unhappy or worried after a session of gambling or gaming. Depression is commonly linked to gaming and online addictive behaviours (Wei., 2012). People may use gaming as a way to forget about their lives and immerse themselves in a different world (Burleigh et al., 2018). Burleigh et al. (2018) state that people may use avatars or characters to project an idealised version of themselves, thus creating a disparity between their online self and their own in reality. Addressing gambling in youth is important because of the emergence of new forms of gambling addiction such as gaming, and the minimal use of standardised instruments in the assessment of gambling in New Zealand (Park et al., 2023).

7.3.4 Behaviour

This data showed multiple correlations between the PHQ-9 score and behavioural issues. There was statistical significance between the mean total score and the questions, 'Do you find it hard to stay quiet or sit still when asked to do so'? 'Are you easily distracted, do you find it hard to follow instructions or do you often lose things? 'Do you often break rules or refuse to do as you're told?' And 'do you have paying attention at school or work, remembering where you put things or waiting your turn?' Screening and identifying for potentially risky behaviours is important as doing so, preventative measures can be put in place and the behavioural issue can be addressed (Goodyear-Smith et al., 2017).

If left unaddressed, behavioural issues may become permanent and also severely impact the quality of education and experience the youth has at school, which impacts the outcomes of their future (Goodyear-Smith et al., 2017). There was only one question from the behaviour question set that showed a statistical correlation with the GAD-7 total score, as opposed to the total score of PHQ-9. Significance was found between the GAD-7 total score and the behaviour data set. The particular, a question asked if the participants have trouble paying attention at school.

7.3.5 Abuse

There was a statistical correlation between the GAD-7 total score and the abuse, in particular, the question that asked participants if they have anyone in their life whom they are afraid of or who hurts them in any way. A study by Rodriguez (2003) completed in New Zealand determined that when a child is abused in their own home they are more prone to high anxiety and emotional deregulation. Gardner et al. (2019) also state that experiencing abuse, whether it is verbal, physical, or sexual, the child is at a much higher risk of developing an anxiety disorder. These findings are also supported by the original ACES study (Felitti et al. 1998) that identified relationships between adverse experiences in childhood and later mental illness.

7.3.6 Help seeking

There were two significant findings within the GAD-7 results that participants were seeking help for their health and well-being. The first correlation was between the total GAD-7 score and the question of whether the participants wanted help with doing exercise. The second correlation between total score and anger, in particular a question asking the participant if they wanted help to control their anger. There was also a clear association between the PHQ-9 score and if the participant wanted help to control their anger. Goodyear- Smith et al. (2017) speak to the benefits of e-screen tools such as YouthCHAT, as they found a positive movement of youth feeling more comfortable to be able to speak about their mental health through this tool. It is reflected that it is an extremely positive outcome that help-seeking was an outcome of the YouthCHAT data as youth is primarily a demographic that usually does not ask for help when needed, especially for mental health (Rickwood, 2007).

7.4 Conclusion

Overall, the quantitative data collected from YouthCHAT showed the important associations between depression, anxiety, and various factors such as gender, eating disorders, behaviours, abuse, and help-seeking behaviours among youth. These findings are consistent with international research and have the potential to inform different types interventions that could be utilised to provide support for youth.

7.5 What are the perceptions that nurses have on youth mental health?

This question was answered by interviewing eight nurses about their perception of youth mental health within New Zealand. The participants ranged from new nurses to practice to nurses with many years in practice. All participants interviewed were from different nursing backgrounds, which aided in a rich difference of insights. A generational difference was also noted throughout the participants, which could certainly affect different perceptions that were voiced. The sections below provide a discussion of the themes that were identified within the qualitative data. These themes were, the emotional response, access, social media, the generation difference and the prevention and promotion of youth mental health.

7.5.1 Emotional response

The most resounding theme throughout the data collected was the human emotional response that was invoked from all participants when speaking about the youth mental health within New Zealand. The particular question about when asking their thoughts of youth suicide rates showed the strongest response. It was clear that the consensus of thoughts pertaining to youth mental health within New Zealand was no doubt, negative. The compassion and empathy showed also turned into a clear expression of the participants' sense of urgency for youth mental health in New Zealand needs to be addressed. The perceptions of nurses around youth suicide are important because the key role played by nurses in responding to youth suicidality (Holland et al., 2021).

7.5.2 Access

The theme of access to youth mental health services was brought up by all participants. Many participants spoke of the numerous barriers that stop people from accessing mental health services. In particular, it was spoken about the lack of staffing within healthcare services. An example of this, a statement made by the New Zealand Nurses' Organisation (2023) stated that it is estimated that New Zealand is short by 4800 nurses. As well as this, health minister Ayesha Verall stated in an interview that New Zealand is short a appreciate of 8000 health professional, including nurses and doctors, with an estimate that these numbers will continue to rise (As it happened, 2023). Threshold to accessing services was a prominent topic brought up. This was also

shown in the *He Ara Oranga* report, in which people described that accessing mental health supports was a major issue. The report states that people stated that the threshold was too high to access these services and people not receiving help early enough (Paterson et al., 2018).

Another prominent point brought up within this theme was that the participants felt that services that are available are often disconnected. It is also outlined in the *He Ara Oranga* report that people felt that mental health services were disconnected from other avenues such as education, police, Oranga Tamariki and housing services (Paterson et al., 2018).

7.5.3 Media

Social and news media were mentioned throughout the entirety of the interview questions. Some participants believed that social media had some positive merits while others believed that social media was detrimental to youth mental health. Abi-Jaoude et al. (2020) report that there is a multitude of studies that report that social media has a negative impact on youth mental health. The researchers explained that it has been found that social media increases likelihood of mental distress, suicidal ideation and self-harming behaviours. On the other hand, it was discussed in the findings that social media could be used as a positive platform for the promotion of youth mental health, a finding that is supported by Nesi (2020).

Cyber bullying was also mentioned in the context of social media. Bottino et al., (2015) state that cyber bullying is highly associated with anxiety, self-harm, suicidal ideation and suicide attempts. A study completed by Hinduja and Patchin (2010) found that people who experience cyber bullying were twice as likely to suicide compared to people that are not cyber bullied.

The participants also spoke of how the news media in general is an easy accessed platform that reports negative worldwide ongoing events, thus youth are exposed to distressing content at a young age (Helsen, 2023).

7.5.4 The generational difference

Interestingly, the majority of the participants stated that there has been mostly positive change in youth mental health over the years. Participants spoke of there being less stigmatising of mental health within New Zealand. This was interesting concept, as the majority of literature in the literature review spoke to how discrimination and stigmatism is a massive issue within New Zealand. However, nearly every participant stated they believe that the stigma of mental health as improved compared to other generations. Although this is a positive finding, mental health stigma continues to be an issue in New Zealand (Tan et al., 2021).

A point made was that people are more open to talk about mental health now days, compared to previous generations. It is considered that perhaps people are more open in speaking about mental health in general but clinically, people actually living with mental illness are still experiencing stigmatism.

Another idea identified within the interviews was that New Zealand's mental health services are less institutionalised overall. In the duration of 1960s to 1990s, there was a major restructuring of psychiatric hospitals within New Zealand, effectively getting rid of many psychiatric hospitals in order to deinstitutionalise the mental health care systems. Many NGOs were established, and mental health care being provided took a more community-based outlook (Brunton, 2022).

7.5.5 Prevention and promotion

This was a wide theme identified within the qualitative data. Discussion was had about ways that mental health care can be improved for youth. This theme was difficult to encompass all the suggestions given but the most obvious one that became apparent was prevention. It was commonly brought up that look at schools would be a prudent way of providing preventive measures to youth mental health. Wylie and McDonald (2020) stated that within schools in New Zealand, the support students received for mental health and wellbeing vary significantly from school- to- school, region- to region. Another study looked at public health nurses' perceptions of youth mental health, it was found that public nurses believe that the best way to provide mental health care to youth, was to partner up with teachers within schools (Granrud et al., 2019). Colizzi et al. (2020) stated that it is unfeasible for the prevention and portion of youth mental health to be left up to just healthcare professionals. They suggest that a wide range of multidisciplinary services need to be utilised to provided adequate mental health care to youth. Empowerment was also mentioned, empowering youth to be who they are and be able to feel empowered to seek help if needed. Adelman and Taylor (2006) state that the promotion of empowering youth, families and communities is necessary to achieve youth wellbeing. They also speak to how this needs to be done in a multidisciplinary effort, from many different avenues (Adelman & Taylor, 2006).

7.5.6 Conclusion

To summarise this finding section, the data collected from the eight semi-structured interviews highlighted the significance of addressing youth mental health issues, challenges in access to mental health services, the impact of social media, the evolving perceptions of youth mental health and suggestions were provided to aid in the prevention and promotion of youth mental health within New Zealand.

Part 2: Linking the parts.

8.1 PHQ-9 and GAD-7

In this section the data and discussion from part 1 and part 2 will be triangulated and presented. It was devised from the YouthCHAT data that females have a higher likelihood of having a higher mean of total PHQ-9 and GAD-7 score. Reported rates of depression and anxiety puts someone at a higher risk of self-harm and/ or suicidal ideation (Kalin, 2021). When interviewing the nurses on the perception of youth mental health, an emotional response, particular towards suicide was a prominent theme. The participants expressed remorse and sadness towards the youth suicide rates in New Zealand. However, during the interviews, it was more prominently mentioned about men's suicide rates and mental health issues within New Zealand, which contradicts, the data found within YouthCHAT.

Another point noted was that the data from YouthCHAT showed that participants expressed wanting help with things like getting exercise and controlling their anger.
An observation was that when nurses were talking about access and providing care, the ideas were more clinically focussed and coming from the view of specialised services. There was not much conversation surrounding providing care for youth that was in a holistic sense, it was more clinically based for diagnosable disorders.

Part 3: Conclusions

The last section of this thesis firstly highlights the limitations and strengths that were found while completing this study, a discussion of the findings, how this research may impact future clinical and research practice, and lastly, the conclusions reached.

9.1 Study limitations and strengths

Study limitations are defined as events that may happen during the research process that can negatively influence the outcome of the research (Ross and Bibler Zaidi, 2019). Throughout the conduction of this research, some obstacles may have limited the research process. Some limitations were extensive enough that the trajectory of the research needed to be adjusted. The most significant limitations experiences were the collection of qualitative data, the region where quantitative data was collected, and the YouthCHAT questioning process.

The major limitation of time constraints was due to having to change the research design in terms of how qualitative data was collected. Initially, the original plan of collecting quantitative data was unable to evolve. Initially, colleges in the Waikato had agreed to recruit students through the school nurse. Unfortunately, there was no response from students. This led to changing the method of collecting the data- through registered nurses. An email was sent out to a set list of registered nurses to gain 10 participants. This decision was made within a mere 3-4 months, to be able to recruit participants and collect and analyse data. This added increased pressure on the researcher to be able to finish authoring this thesis within the designated period. This was also a limitation as we could not interview youth about their perceptions as planned and were unable to triangulate the data collected from YouthCHAT. Despite this limitation the views of nurses are important as they comprise a large professional group who will encounter youth with mental health issues in their practice.

Another limitation identified was that the data collected from YouthCHAT pertained to only the Waikato and Coromandel regions. It would have been interesting to obtain YouthCHAT data from across the country. This means that some of the results are limited, as they may not reflect youth from throughout New Zealand.

The last limitation identified was that the YouthCHAT question process limited the number of participants that answered the questions from the GAD-7 and PHQ-9 data sets. For example, YouthCHAT is set up in a way that the participants did not need to answer all the questions, which changed how many of the total participants answered the GAD-7 and PHQ-9 question sets. Despite this limitation the final sample size of 778 was very satisfactory for this study.

A strength identified was being able to be granted access to the existing data set from YouthCHAT. The collection of quantitative data for this study through YouthCHAT gave the data reliability and validity as it was a pre-existing and established dataset. Another strength identified was in the YouthCHAT data set there was a high percentage of Māori (31.0%). This meant that a solid representation was given to Māori.

9.2 Implications for education practice

This research has proven the importance of integrating mental health education in other healthcare avenues- not just specifically mental health. The results are shown how youth should be able to receive mental health care from other avenues such as general medicine and secondary places such as schools.

Another implication found was that, historically, there is a reputation for nurses having preconceived ideas about youth mental health. The nurses that were interviewed were all from different backgrounds of nursing, however, all had a sound understanding of youth mental health. The collection of qualitative data proved that nurses have a wide range of knowledge about mental health.

9.3 Future research

This study was broad in context, with the research questions being shaped as the research evolved. For future research, it would be interesting to hone into specific details that emerged during this study. In particular, it was noted the generational differences while interviewing the participants and their perception of youth mental

health. This is not to be confused with the identified theme of generational differences identified in the qualitative data, instead, comment on differing perceptions throughout the interviews. This area was also noted during the literature review, where research suggested the need to recognise generational differences when accessing the need for a youth's mental health care. It would be interesting to further this topic as it became very clear how different perceptions can change depending on which generation the participant was from.

Another possible avenue of further research considered, is why females reported higher rates of anxiety and depression. It would be interesting to look at the science, environmental factors, and other influences that contribute to this. In addition, if people with high depression and anxiety are more likely to have suicidal ideation, then why do men have the highest suicide rates when women are more likely to have depression and/or anxiety?

9.4 Reflection

The last 18 months have been a roller coaster for me. In the space of these months, I began this research, got engaged, got married, travelled overseas, got a puppy, maintained friendships, maintained family life, life highs, and life lows, moved areas, and many nights studying while working nearly full time. Of course, considering the evolving nation and worldwide issues, including a major economic crisis, it has been quite a busy few months! I reflect here that being that undertaking this research, has made me more resilient and resourceful as a person.

Another reflection identified was the ongoing learning curve while completing this thesis. I found that while I was completing a certain step, for example- completing the literature review I would then simultaneously need to be gaining knowledge on how to complete the next step of the research process. At times, I found this difficult 'juggling' many things at once, which differed from the linear way I usually would approach assignments and study in previous education ventures. This way of completing this thesis honed in on crafting my critical thinking skills and being able to see 'the big picture' while also being extremely detailed focussed. This learning curve will aid me in any future studies I do.

9.5 Conclusions

The conclusions reached and the concepts considered in this thesis support the overall conclusion from a wider body of research that there needs to be more focus placed on the evolving needs and dynamics of today's youth. This research combined findings, from both the quantitative data collected from YouthCHAT and the semi-structured interviews, aimed to provide a fully comprehensive understanding of youth mental health in New Zealand.

The quantitative data from YouthCHAT provided valuable understandings into the link between depression, anxiety, and various factors such as gender, eating disorders, behaviours, abuse, and help-seeking behaviours among youth. The findings from this part of the research aid in informing what youth mental health issues are prominent within New Zealand.

The interviews with nurses, who work hard to remove barriers and who are frustrated by a fragmented system offering disjointed support and interventions provided the qualitative data for purposes of this research. These interviews revealed the emotional response, the barriers to accessing mental health services, the role of media, generational differences, and the prevention and promotion. This section of the research informed the perceptions nurses have of youth mental health in New Zealand, as well as it shows the critical roles nurses have in youth mental health.

Moving on from these conclusions is the inescapable fact that far more effort is required to develop an accessible, integrated, and meaningful mental health services for youth in need. A health service that is fit for purpose, reflecting current needs, and being flexible enough to anticipate and respond to future needs. In final conclusion, if we fail the youth of today in supporting their mental health needs we fail the New Zealand of tomorrow in terms of delivering a more equitable, productive, and inclusive society for the country that we can be proud to live in.

Appendices

The following section relates to the appendices below.

Appendix 1 YouthCHAT full question set.

Appendix 2 Invitation to participate in an interview

Appendix 3 Interview question set

Appendix 4 Participant information sheet

Appendix 5 Interview consent form

Appendix 6 Head of nursing approval of research

Appendix 7 Ethics approval

Appendix 8 Timeline

Appendix 1: YouthCHAT full questions set.

Demographics

- What is your age?
- What is your gender?
- What is your ethnicity?

SACs

- Have you ever used tobacco (eg cigarettes) or nicotine (e.g., vaping)? (ChatSmoke1)
- How many cigarettes or vapes do you smoke on average a day? (ChatSmoke2)
- Do you ever feel the need to cut down or stop your smoking? (ChatSmoke3)
- In the past three months, how often have you used tobacco and or nicotine (e.g., cigarettes, vaping, chewing tobacco, cigars, chop baccie, durries ciggies)? (AssistSmoke1)
- During the past three months, how often have you had a strong desire or urge to use tobacco and or nicotine? (AssistSmoke2)
- During the past three months, how often has your use of tobacco and or nicotine led to problems with health, friends or whanau, work, money, or the law? (AssistSmoke3)
- Have friends or whanau or anyone else ever been worried about your use of tobacco and or nicotine? (AssistSmoke4)
- Have you ever tried and failed to control, cut down or stop using tobacco and or nicotine? (AssistSmoke5)
- Do you want help with your smoking? (ChatSmokeHelp)
- How often did you use alcoholic drinks (e.g. beer, wine, spirits, premixes, RTDs) in the last month? (ChatSACSAalc)
- How often did you use cannabis (e.g. weed, marijuana, pot, dope, buds) in the last month? (ChatSACSAcan)
- How often did you use other drugs (e.g. stimulants, hallucinogens, inhalants, sedatives, synthetic cannabinoids, opiates) in the last month? (ChatSACSAoth)

- Over the last month; I've thought I might be hooked or addicted to alcohol or drugs (ChatSACSB2)
- Over the last month; Most of my free time has been spent getting hold of, taking, or recovering from alcohol or drugs (ChatSACSB3)
- Over the last month; I've wanted to cut down on the amount of alcohol and drugs that I am using (ChatSACSB4)
- Over the last month; My alcohol and drug use has stopped me getting important things done (ChatSACSB5)
- Over the last month; My alcohol or drug use has led to arguments with the people I live with (family, flatmates or caregivers etc.) (ChatSACSB6
-) Over the last month; I've had unsafe sex or an unwanted sexual experience when taking alcohol or drugs (ChatSACSB7)
- Over the last month; My performance or attendance at school (or at work) has been affected by my alcohol or drug use (ChatSACSB8)
- Over the last month; I did things that could have got me into serious trouble (stealing, vandalism, violence etc.) when using alcohol or drugs (ChatSACSB9)
  Over the last month; I've driven a car while under the influence of alcohol or drugs (or have been driven by someone under the influence) (ChatSACSB10)
- Do you want help with your alcohol or drug use? (ChatSACSHelp)

Gambling

- Do you gamble or play computer games (bet or game)? (ChatGamble1)
- Do you sometimes feel unhappy or worried after a session of gambling or gaming? (ChatGamble2)
- Does gambling or gaming sometimes cause you problems? (ChatGamble3)
- Do you want help with gambling or gaming? (ChatGambleHelp)

Eating disorders

- Are you happy with your body shape or your weight? (YouthChatEatingDisorderLevel1_1)
- Have there been any recent changes in your weight? (YouthChatEatingDisorderLevel1_2)
- Do you try things to control your weight such as extreme restriction of what or how much you eat, exercising excessively, taking diet pills etc.? (YouthChatEatingDisorderLevel2_1)
- Are any of your family members or friends worried about your weight or your attitude towards your body/food? (YouthChatEatingDisorderLevel2_2)
- Do you believe yourself to be overweight or too big even if others tell you that you aren't? (YouthChatEatingDisorderLevel2_3)
- Have you ever made yourself throw up on purpose in an attempt to control your weight? (YouthChatEatingDisorderLevel2_4)
- Do you want help with this? (YouthChatEatingDisorderHelp)

PHQ-9

- Over the last 7 days, how often have you been bothered by feeling down, depressed, irritable or hopeless? (YouthChatPHQA1)
- Over the last 7 days, how often have you been bothered by little interest or pleasure in doing things? (YouthChatPHQA2)
- Over the last 7 days, how often have you been bothered by trouble falling asleep, staying asleep, or sleeping too much? (YouthChatPHQA3)
- Over the last 7 days, how often have you been bothered by poor appetite, weight loss or overeating? (YouthChatPHQA4)
- Over the last 7 days, how often have you been bothered by feeling tired or having little energy? (YouthChatPHQA5)
- Over the last 7 days, how often have you been bothered by feeling bad about yourself - or that you are a failure or have let yourself or your family down? (YouthChatPHQA6)
- Over the last 7 days, how often have you been bothered by trouble concentrating on things, such as school work, reading or watching television? (YouthChatPHQA7)
- Over the last 7 days, how often have you been bothered by 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? (YouthChatPHQA8)
- Over the last 7 days, how often have you been bothered by thoughts that you would be better off dead or of hurting yourself in some way? (YouthChatPHQA9)
    - Do you want help with your mood? (YouthChatPHQAHelp)

GAD-7

- During the past month have you been worrying a lot about everyday problems? (ChatAnxiety1)
- Over the last 2 weeks, how often have you been bothered by feeling nervous, anxious, or on edge? (GAD7-1)
- Over the last 2 weeks, how often have you been bothered by not being able to stop or control worrying? (GAD7-2)
- Over the last 2 weeks, how often have you been bothered by worrying too much about different things?GAD7-3)
- Over the last 2 weeks, how often have you been bothered by trouble relaxing?
- (GAD7-4) Over the last 2 weeks, how often have you been bothered by being so restless that it is hard to sit still? (GAD7-5)
- Over the last 2 weeks, how often have you been bothered by becoming easily annoyed or irritable? (GAD7-6)
- Over the last 2 weeks, how often have you been bothered by feeling afraid as if something awful might happen? (GAD7-7)
- Do you want help with your anxiety or worrying? (ChatAnxietyHelp)

Stress

Do any of the following cause you stress or problems? (YouthChatStress1_0)

Do any of the following cause you stress or problems? (YouthChatStress1_1)

Do any of the following cause you stress or problems? (YouthChatStress1_2)

Do any of the following cause you stress or problems? (YouthChatStress1_3)

Do any of the following cause you stress or problems? (YouthChatStress1_4)

Do any of the following cause you stress or problems? (YouthChatStress1_5)

Do any of the following cause you stress or problems? (YouthChatStress1_6)

Do any of the following cause you stress or problems? (YouthChatStress1_7)

Do any of the following cause you stress or problems? (YouthChatStress1_8)

Do you want any help with any of these stresses or problems? (YouthChatStressHelp)

Do you have trouble with any of the following: paying attention at school or work, remembering where you put things or waiting your turn? (YouthBehaviourLevel1_1)

Do you often break rules or refuse to do as you're told? (YouthBehaviourLevel1_2)

Are you easily distracted, do you find it hard to follow instructions or do you often lose things? (YouthBehaviourLevel2_1)

Do you find it hard to stay quiet or sit still when asked to do so? (YouthBehaviourLevel2_2)

Do you have difficulty waiting your turn or do you often interrupt others when they are talking? (YouthBehaviourLevel2_3)

Do you often argue with authority figures such as parents and teachers?

(YouthBehaviourLevel2_4) Have you ever stolen anything valuable?

(YouthBehaviourLevel2_5) Have you ever hurt a person or an animal?

(YouthBehaviourLevel2_6) Have you deliberately damaged someone else's property?

(YouthBehaviourLevel2_7)

Do you often take risks that put you or others in danger such as risky driving? (YouthBehaviourLevel2_8)

Have you ever been in serious trouble at school or with the police? (YouthBehaviourLevel2_9)

Do you want help with this? (YouthBehaviourHelp)

Do you have any worries or problems about who you are sexually attracted to or your sexual identity? (ChatSexualHealth1)

Would you like help with this? (ChatSexualHealth1Help)

Are you or have you ever been sexually active? (This includes sex involving your mouth, vagina, penis or bottom) (ChatSexualHealth2)

Are you at any risk of catching a sexually transmitted infection (STI)? (If you do not use condoms and you or your partner have had more than one partner there is a big risk of this) (ChatSexualHealth3)

Would you like help with this? (ChatSexualHealth3Help)

Are you at any risk of getting pregnant or getting your partner pregnant? (If you are not using any protection there is a big risk of getting pregnant or getting your partner pregnant) (ChatSexualHealth4)

Would you like help with this? (ChatSexualHealth4Help)

Has anyone tried to touch you sexually or push sex on you when you have not wanted it? (ChatSexualHealth5)

Would you like help with this?

(ChatSexualHealth5Help)

Is there anyone in your life of whom you are afraid or who hurts you in any way? (ChatAbuse1)

Is there anyone in your life who controls you and prevents you doing what you want? (ChatAbuse2)

Appendix 2: Invitation to participate in an interview

Invitation to participate in a research study.

Project Title: An insight into youth mental health (13-19 years) in Waikato.

Kia ora, Kathryn Lingley-Tremewan is a BN (Hons) student who is researching youth mental health in the Waikato region. As part of her thesis research Kathryn would like to interview 8-12 Registered Nurses about their perceptions of youth mental health.

It is not necessary to be practising in a mental health setting to contribute to this research. Your perceptions as registered nurses are what is sought.

Participation will involve an individual interview, either face to face or online. Interviews will take 3o – 60 minutes.

A Participant Information Sheet with full details of the research study is attached to this email, and includes information about how to contact Kathryn (Kathryn.lingley@waikatodhb.health.nz**).**

Please consider participation as this will assist Kathryn complete her research.

This research is approved by the University of Waikato Human Ethics Committee (approval number 2022#44)

Appendix 3: Interview question set

In general, what are your thoughts on youth mental health in New Zealand?	Nil needed- personal statement.
How does the statement that New Zealand has one of the highest suicide rates in the developed world make you feel?	Can you elaborate? What is your emotional response? Why do you think that is?
What are your thoughts on the current mental health supports for youth that are in place?	This could be Waikato, New Zealand, or worldwide.
What does an ideal mental health and addiction system for youth look like to you?	Can you elaborate?
Have issues with youth mental health personally affected you or someone you know?	This can be in your personal life or professional practice.
What do you think are some influences that contribute to the rising rates of youth mental health issues?	Why do you think that is? Can you elaborate?
What are your thoughts on the needs of Māori youth's mental health compared to non-Māori youth?	Why do you think that is? Any experiences you can draw on?
Have you noticed changes in youth mental health over the years?	What are the differences that you've noticed between now and previous generations youth mental health? Any experiences you can draw on?
What are your thoughts about factors that would promote positive wellbeing and mental health in youth?	Any other suggestions? Can you elaborate?

Appendix 4: Participant information sheet

Project Title: An insight into youth mental health (13-19 years) in Waikato.

Participant Information Sheet (Interview)

Kia ora, my name is Kathryn and I am currently working for Te Whatu Ora (formerly Waikato DHB). I work in the North Waikato area as a registered community mental health nurse. I am currently completing a research thesis in partnership with Te Whatu Ora and the University of Waikato.

I would like to invite you to participate in a study that explores the mental health issues experienced by the youth population (13-19 years) and the perceptions that nurses have of youth mental health. This study will be conducted by Kathryn Lingley-Tremewan and supervised by Dr. Anthony O'Brien (University of Waikato) and Emilia Hlatywayo (Te Whatu Ora).

Why are we doing this study?

We are doing this study to gain an understanding of what are the common mental health issues that the youth are experiencing. We would also like to see what the current perceptions that nurses have of youth mental health.

What your participation will include:

This interview will be conducted in a place of the participants choosing or via videolink. These interviews will be a private and safe place for the participant. Participants wishing to be interviewed by videolink are encouraged to set up a private space for the interview. It will take approximately 30 minutes to one hour to complete the interview, which will be recorded, audio only, for transcription purposes.

During the interview, participants can freely withdraw or stop the interview at any point. You do not have to answer all the questions. You do not have to give a reason to withdraw. If the participant becomes uncomfortable with the interview, the researcher can either terminate the interview or you can withdraw from the research.

The participant can choose not to answer any questions without giving a reason. They have the right to listen to any digital recording, read any written transcript, and make changes. A copy of the transcript will be provided to participant. After receiving the transcript, it is important to note that the participant will be given two weeks to withdraw from the study from the date that the transcript is given.

What will happen at the end of the study?
The information from the interview will be analysed with information from other participants, and common themes will be identified. This will be written up as a research thesis and submitted to the University of Waikato. This information may also be disseminated to colleagues in the field of healthcare by presentations at conferences or in journal articles.

Confidentiality:
Neither your name nor any identifying information will be used in any documents associated with the research, such as the research report or subsequent publications. All transcripts and digital recordings will have names removed, and will be stored by my supervisor in a secure location at the University of Waikato for five years and then destroyed.

Whom should you contact if you have further questions and/or concerns:

If you have any questions please do not hesitate to contact the researcher whose contact details are shown below.
If you have any concerns regarding the research/researcher, please contact the researcher's supervisor, Anthony O'brien at anthony.obrien@waikato.ac.nz
If you have any ethical concerns regarding the research, please contact the Waikato Human Research Ethics Committee at humanethics@waikato.ac.nz.

Summary of research:
Thank you for taking the time to read the above information about my research and for considering participating in my project. I appreciate your time.

Ngā mihi,
Kathryn

My email is: Kathryn.lingley@waikatodhb.health.nz
My phone number is: 027 64 14 435

This research is approved by the University of Waikato Human Ethics Committee (approval number 2022#44)

Appendix 5: Interview consent form

THE UNIVERSITY OF
WAIKATO
Te Whare Wānanga o Waikato

An insight into youth mental health (13-19 years) in North Waikato.

Consent form (interview)

This consent form will be held for 5 years.

Researcher: Kathryn Lingley-Tremewan University of Waikato.

- I have read the Information Sheet and the project has been explained to me. My questions have been answered to my satisfaction. I understand that I can ask further questions at any time.
- I agree to partake in this research.

I understand that:

- I may withdraw from this study at any point and any information that I have provided will be returned to me or destroyed.
- This consent form will be held for five years and then destroyed.
- I understand that the findings may be used for an academic publication.
- I understand that the recordings and any information I provide will be kept confidential to the researcher and the supervisor.
- Your name will not be used in reports and utmost care will be taken not to disclose any information that would identify me.

Signature of participant: _____

Name of the participant: _____

Date: _____

Appendix 6: Head of nursing approval of research

THE UNIVERSITY OF WAIKATO
Te Whare Wānanga o Waikato

Project Title: An insight into youth mental health (13-19 years) in Waikato.

This research is approved by the University of Waikato Human Ethics Committee

(approval number 2022#44)

I have read the Ethics application and associated documents for this project and approve the process of recruitment of Registered Nurse participants through the Nursing programme.

Cheryl Atherfold

Head of Nursing

University of Waikato

Appendix 7: Ethics approval

The University of Waikato
Private Bag 3105
Gate 1, Knighton Road
Hamilton, New Zealand

Human Research Ethics Committee
Roger Moltzen
Telephone: +64021658119
Email:humanethics@waikato.ac.nz

THE UNIVERSITY OF WAIKATO
Te Whare Wānanga o Waikato

20 April 2023

Kathryn Lingley-Tremewan
HECS
By email: kathrynlingley@yahoo.co.nz

Dear Kathryn

HREC(Health)2022#44 : An insight into youth mental health (13-19 years) in North Waikato

Thank you for providing the new participant information sheet and new consent form in support of the amendment request to collect qualitative data without the need to change any of the quantitative data already collected through youthCHAT.

We understand the new proposal is to interview healthcare professionals- mainly nurses about their perception of youth mental health. You propose to seek participants from amongst nurses employed in the University of Waikato Nursing programmes.

We are pleased to provide formal approval for this amendment.

Please contact the Committee by email (humanethics@waikato.ac.nz) if you wish to make any further changes to your project as it unfolds, quoting your application number with your future correspondence. Any minor changes or additions to the approved research activities can be handled outside the monthly application cycle.

We wish you all the best with your research.

Regards,

Emeritus Professor Roger Moltzen MNZM
Chairperson
University of Waikato Human Research Ethics Committee

Appendix 8: Timeline

1. The first step of this research was to decide what the topic would be. With myself and two academic supervisors we decided to look and youth mental health within North Waikato area.
2. In order to expand on the decided topic, the introduction of the research began to be written.
3. To ensure this researcher was conducting culturally competent research, I met with a Māori cultural supervisor to discuss appropriately conducting research with Māori participants.
4. The literature review was commenced.
5. The following weeks were a discussion on the best ways to capture youth mental health. It was decided to focus on students attending secondary schools within the North Waikato region.
6. An email was dictated and a general call-out was sent to Ngaruwhaia College, Te Kauwhata College and Huntly College. The intention of this was a general call out on the provision that this research received approval from the ethics committee.
7. During this time period, the ethics application was being worked on over a period of a few months, this was then submitted on the 23rd of September 2022.
8. While waiting to hear back from the ethics committee, the literature review was worked on extensively.
9. On the 3rd of November 2022 were notified that the ethics application was declined.
10. In the following weeks, conversation and analysis was had on how the ethics application could be improved.
11. Te Kauwhata college had contacted me and agreed to take part in this research. A meeting was arranged with the deputy principle, school counsellor and me. We discussed the research and were happy for students to participate pending ethics approval.
12. A meeting was arranged with a PhD student who was working alongside pinnacle and school nurses, advice was sought about conducting research on youth.
13. It was suggested that the quantitative data would now be collected from an existing data set from the survey series youthCHAT.
14. A call-out flyer was made as well amended consent and participant sheet that reflected needing signed consent from both the participant and their parent to take part in the interview.
15. Te Kauwhata college was updated about the change of plan.
16. On the 9th of December 2022, an amended ethics application was sent in, with the proposed idea of recruiting qualitative data, through Te Kauwhata

College, with the aim of conducting interviews on up to 10 participants. The quantitative data was aiming to be taken from youthCHAT.

17. My academic supervisor reached out to the appropriate avenues and we able to gain access to a youthCHAT data set that covered the majority of secondary schools in the Waikato area.
18. I had a meeting with the clinical director of Pinnacle who provided information on youthCHAT and the processes for collecting this data.
19. On the 12th of December 2022, we received notification that the ethics committee had approved the research.
20. After approval was received, there was difficulty in getting in contact with Te Kauwhata College due to it being end of the school year.
21. In the new year, in February 2023 I reached out to Te Kauwhata again to inform that we were wishing to commence the qualitative participant recruitment process.
22. Contact was made with the school nurse from Te Kauwhata and we arranged a time to meet via zoom. The school nurse agreed to have the form in her office and advertised them to students that would come in.
23. I visited Te Kauwhata college and dropped off the call out flyers, consent and participant information sheet.
24. While waiting for participants to the literature review was completed as well as the methods section.
25. For the quantitative data, it was decided to extract data that were taken from the instruments GAD-7 and PHQ-9.
26. The quantitative data was imported to SPSS and analysis began.
27. At the beginning of April, concern was raised as I still had not received any participants for the interview part of this research.
28. Within the research team, an alternative plan was made that would pivot of the existing work that had already been done for this research. The new plan was to send a call out to nurses about their perception of youth mental health.
29. An notification of amendment was sent to the ethics committee.
30. A week later, unfortunately the ethics committee declined the request of amendment and suggested that there needs to be a fully amended ethics form sent in.
31. A meeting as on with a data analysis from the Waikato university who provided advice on how to utilise SPSS to analyses the data.
32. On the 14th of April an amended ethic form was then completed and sent in.
33. While waiting to hear back from the committee, I worked on the literature review, methods, methodology, and the analysis of qualitative data in SPSS.
34. We received ethics approval April the 21st for the changed method of collecting qualitative data.
35. Following this, the interviews of nurses commenced.
36. Analysis began of youthCHAT data.

37. Transcripts were dictated and sent to participants for approval
38. Once approval was received, analysis of the interviews began.
39. Discussion of codes with supervisor
40. Findings chapter started to written up.
41. Discussion chapter for qualitative and quantitative
42. Conclusions
43. Final chapter
44. Editing thesis
45. Completion

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