Parental Perspective on Children's Mental Health – an Investigation into Aotearoa New Zealand Parental Figures Mental Health Literacy

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Abstract

Prevalence of child mental distress is continuing to rise in Aotearoa New Zealand. Despite this, there appears to be a significant gap between child mental distress prevalence and service use in Aotearoa New Zealand, with research indicating mental distress in a large number of children remains unrecognised and untreated. Parental figures play a crucial role in children accessing services for mental distress, due to parental figures being a main identifier for their child's mental distress, and also because accessing services is difficult for a minor to achieve on their own. Overseas research has highlighted the concerning inability of parental figures to firstly, recognise child mental distress, and secondly, how to appropriately access help for their children, highlighting the urgent need for improved parental figure mental health literacy. However, very limited research is available on Aotearoa New Zealand data regarding this issue. Given this, this study aims to addresses the current gap in research, thus investigating Aotearoa New Zealand parental figure's knowledge of mental health literacy through gaining an understanding on their ability to recognise and seek help for mental distress in children and adolescents, while also exploring factors which influence distress recognition and help-seeking intentions.

To investigate parental figure's mental health literacy, an online survey was developed based on six vignettes describing 8-year-old and 14-year-old ADHD, depression with comorbid anxiety, and a control case without clinically significant distress. In total, 243 parental figure responses were analysed using SPSS software and content analysis.

This study found Aotearoa New Zealand parental figures possessed excellent knowledge surrounding mental health literacy, finding an average of 93.2% of parental figures accurately recognised distress within the four vignettes presenting with distress, and an average of 91.6% of parental figures indicated positive help-seeking intentions for the four vignettes presenting with distress. Additionally, content analysis identified waitlist delays, stigma, and cost were predominant barriers hindering parental figure help-seeking for child and adolescent mental distress. These findings suggest the gap between child mental distress prevalence and service use in Aotearoa New Zealand may be a consequence of parental figure perceived barriers, as opposed to low mental health literacy knowledge.

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Chapter One: Introduction and Literature Review

This chapter opens with a brief introduction discussing the global prevalence of child and adolescent mental distress, followed by a discussion of child and adolescent mental distress prevalence in Aotearoa New Zealand. Etiology and the types of child and adolescent mental distress which are the focus of this current research are discussed. Following this, the impacts of mental distress on children and adolescents are discussed, highlighting the importance of early intervention for mental distress. Evidence of a gap between child mental distress prevalence and service use in Aotearoa New Zealand is then presented, followed by a discussion regarding the importance of parental figure assistance in the process of help-seeking and service utilisation for children and adolescents. Next, parental figure mental health literacy and its importance in relation to recognition and help-seeking for child and adolescent mental distress is discussed. The chapter concludes with a discussion surrounding the theoretical approach for this current research.

Global Prevalence of Child and Adolescent Mental Distress

Positive psychological well-being and mental health are undoubtedly important (particularly within the child and adolescent population) contributing to healthy social, emotional, physical, educational, and cognitive development (Shastri, 2009). It is estimated around half of all lifetime forms of mental distress have an onset in childhood and adolescence, emphasising these as critical developmental periods in which to promote mental health (Kessler et al., 2005). Concerningly, the global prevalence of child and adolescent mental distress has been persistently increasing (García-Carrión et al., 2019). Globally, it is estimated around one in seven individuals (14%) between the ages of 10-19 years of age experience mental distress (United Nations Children's Fund, 2021; World Health Organization, 2021). Though effective evidence-based treatment interventions are available, a large proportion of mental distress in the child and adolescent population remains undiagnosed and untreated, further exacerbating what has been considered to be a child and adolescent mental health crisis (O'Brien et al., 2016; World Health Organization, 2021). Failing to appropriately address child and adolescent mental distress can lead to significant negative long-term impacts on physical, social, and mental well-being, consequently limiting the opportunity to live fulfilling lives as adults (Martel et al., 2019; World Health Organization, 2021).

It is acknowledged that what constitutes the period of childhood is historically, socially and culturally situated (Norozi & Moen, 2016). For the purpose of this study, the concept of childhood is defined as the developmental period of children aged up to around 12 years of age. The theoretical construct of adolescence is traditionally defined as a critical developmental period marking the transition from childhood to adulthood, approximately corresponding with the onset of puberty and through to the establishment of social and guardian independence (Jaworska & MacQueen, 2015). In regard to a numerical definition of adolescence, this is historically accepted to be spanning from the age of 12 through to 18 years of age (Jaworska & MacQueen, 2015).

Additionally, while mental distress within literature is frequently referred to using several different terminologies, including mental 'disorders', 'illness', 'issues', and 'problems', there has also been debate regarding the use of specific terminology due to the stigma associated with specific terms (Kvalsvig, 2018). Further, it is also important to acknowledge that sometimes children and adolescent mental distress does not always fit into a specific category of mental 'illness' (Horwitz, 2007). Therefore, for the remainder of this study, the term mental distress will be used in order to both capture mental distress which has reached the threshold of requiring professional intervention and help, and also to mitigate the stigma associated with other frequently used terminology.

Further, throughout this study, the terminology 'parental figures' will be used as a substitute for mainstream terminology of 'parents', referring to a child's biological mother and father, a largely westernised concept of the nuclear family. In Aotearoa New Zealand, the concept of whānau[1] is important, whereby, decision making is often informed by various individuals born into the family, or who have close familial or reciprocal relationships (Kumar et al., 2012). Thus, the term parental figures has been selected, recognising that individuals who are not biologically related or immediate relatives can assume the role as 'parents' and be involved in the decision making process of a child.

Prevalence of Child and Adolescent Mental Distress in Aotearoa New Zealand

Experiences of mental distress for children and adolescents is a particularly significant issue in Aotearoa New Zealand, with mental distress in Aotearoa New Zealand children and adolescents becoming increasingly prevalent (Government Inquiry into Mental Health and Addiction, 2018). Importantly, the development of mental distress has been found to have an

[1] Traditional Māori terminology of whānau describes one's familial group, including extended family.

early onset, with a New Zealand[2] survey finding half of all individuals who will develop any form of mental distress will have onset prior to the age of 18 years old (Browne et al., 2006). Despite this, available information on child and adolescent mental health data remains limited, not easily accessible, and is often outdated (Cunningham et al., 2018).

Findings from the New Zealand Health Survey 2020/21, based on parental reports of doctors' diagnosis of their child, estimate the prevalence of diagnosed emotional and/or behavioural distress (depression, anxiety, and/or attention-deficit-hyperactivity-disorder) in New Zealand children and adolescents aged between 2-14 years of age to be around 5.7% (48,000 individuals); comprised of 7.2% of the male child population, and 4.1% of the female child population aged between 2-14 years (Ministry of Health, 2021). In relation to ethnicity, this data estimates prevalence rates for distress of 5.6% of Māori children, 3.8% of Pacific children, 1.8% of Asian children, and 6.8% of European/other children aged between 2-14 years in New Zealand (Ministry of Health, 2021).

These recent prevalence rates are of significant concern due to an almost twofold increase within the last decade, with the New Zealand Health Survey 2011/12 reporting estimated prevalence rates of 3.2% within the child population aged between 2-14 years (Ministry of Health, 2012). However, these findings are considerably below other sources of estimated child and adolescent mental health prevalence, where it is estimated around 21% of New Zealand children aged between 10-19 years of age live with mental distress (United Nations Children's Fund, 2021). This discrepancy in prevalence is likely due to many prevalence estimates being dependent on whether there is a formal diagnosis or self-report data. Consequently, sources are likely to underestimate the true prevalence of child mental distress due to a lack of recognition and diagnosis (Cunningham et al., 2018; Ministry of Health, 2021).

Nonetheless, the concerning twofold increase identified in the New Zealand Health Survey is consistent with findings from the Youth2000 survey series, documenting secondary school students' (year 9-13) self-reported emotional and mental health in New Zealand throughout four cross-sectional studies between 2001-2019 (Fleming et al., 2020). Of the total youth participants in 2019, 22.7% (16.5% male and 29% female) report experiencing significant depressive symptoms, with this figure almost doubling since 2012, where 13% of participants reported significant depressive symptoms (Fleming et al., 2020).

[2] New Zealand will be used without Aotearoa to correspond with the terminology the author(s) or organisation used.

Further, rangatahi[3] Māori mental health rates are also of concern within Aotearoa New Zealand. The recent 'He Ara Oranga Report of the Government Inquiry into Mental Health and Addiction' estimated the prevalence of mental distress to be around 50% higher within the Māori population in comparison to non-Māori (Government Inquiry into Mental Health and Addiction, 2018). The Youth2000 survey series 2019 data highlights this disproportionately high mental health prevalence, finding 27.9% of rangatahi Māori reported experiencing significant depressive symptoms in comparison to 19.6% of NZ/European youth; with rangatahi Māori reported rates of depressive symptom data having more than doubled since those reported in 2012 (Flemming et al., 2020). These findings are consistent with other recent tamariki[4] and rangatahi Māori mental health data, which has identified that the rates of rangatahi Māori mental distress is both increasing and disproportionately high (Fleming et al., 2020; Martel et al., 2019; Russell, 2018). Overall, from available data, it is evident child and adolescent mental distress in Aotearoa New Zealand is a significant concern**,** with prevalence rates continuing to increase rapidly.

Etiology of Child and Adolescent Mental Distress

Mental distress in children and adolescents is influenced by a range of interacting factors; the more risk factors a child or adolescent is exposed to, the higher the potential impact on their mental health (World Health Organization, 2021). Some of these risk factors include: biological factors (e.g. genetic vulnerability); familial factors (e.g. conflict, parental divorce, and rejection); sociodemographic factors (e.g. residency and age); psychosocial stressors (e.g. discrimination and violence); and social factors (e.g. peer groups, social pressures, and social media) (Government Inquiry into Mental Health and Addiction, 2018; Malhotra & Sahoo, 2018; United Nations Children's Fund, 2021; World Health Organization, 2021). Unsurprisingly, the Covid19 pandemic has also been a significant recent contribution to the mental health crisis in Aotearoa New Zealand and globally, with studies finding rates of mental distress within children and adolescents have notably increased since the Covid19 pandemic in comparison to baseline measures (Loades et al., 2020; Meherali et al., 2021; United Nations Children's Fund, 2021).

It is well documented that children and adolescents appear to be at higher vulnerability of experiencing mental distress due to transitioning through a critical period of physical and

[3] Rangatahi Māori refers specifically to Māori teenagers and young adults.
[4] Tamariki Māori refers specifically to Māori children.

psychological development (Malla et al., 2018). With the addition of lockdowns and restrictions as a result of the Covid19 pandemic, research suggests children and adolescents may be disproportionately affected with regard to decreased wellbeing and increased mental distress due to experiencing prolonged isolation from important social connections, restricted freedom, decreased social activities, and closure of schools and support services (Cohen et al., 2021; Larsen et al., 2021; Meherali et al., 2021; United Nations Children's Fund, 2021).

Importantly, social relations are valuable to mental health and psychological wellbeing in children and adolescents, and act as a key source of support and coping resource in order to mitigate adverse effects in times of stress (Liu et al., 2021; Matthews et al., 2015). Social relationships are of particular importance during childhood and adolescence when identity is developing and long-term trajectories of emotional and behavioural distress are forming; the absence of social relationships during this important developmental period potentially has a negative effect on an individual's wellbeing (Matthews et al., 2015). Of concern are studies that have found children and adolescents have increased feelings of loneliness since the Covid19 pandemic as a result of being isolated from important social supports during the pandemic (Larsen et al., 2021; Vaillancourt et al., 2021). This is significant as in a recent systematic review conducted by Loades et al. (2020) examining the impact of social isolation and loneliness, a consistent and clear association was found between loneliness and mental distress within children and adolescents, particularly the development of depression and anxiety. The association between loneliness and mental distress among children and adolescents has also been established in other research (Hards et al., 2021; Heinrich & Gullone, 2006; Wang et al., 2017).

Additionally, for adolescents in particular, social relations are often fulfilled through social media and networking sights. Research has found social media can be beneficial in enabling individuals to receive social support, as well as enabling self-expression though expressing their feelings and thoughts (Cipolletta et al., 2020). However, the use of technology and social media sites can also negatively impact on an individual's mental health, particularly within the adolescent population, with literature demonstrating a compelling link between social media use and mental distress (Keles et al., 2019; McCrae et al., 2017).

Social media sites provide adolescents with an opportunity for social comparison through comparing themselves with others on a variety of attributes, such as appearance, popularity, and success; these comparisons cause individuals to make both positive and negative self-judgements and appraisals (Feinstein et al., 2013). As a result, Feinstein et al. (2013) found negative social comparisons with peers on Facebook can cause rumination,

increasing the risk of psychological distress, particularly depression. Moreover, children and adolescents desire social approval, particularly regarding their appearance (Izydorczyk & Sitnik-Warchulska, 2018). Social media heavily influences sociocultural ideals of appearance, with these ideals often being unrealistic (Izydorczyk & Sitnik-Warchulska, 2018). Thus, social comparisons of appearance can be particularly problematic within the context of social media, often leading to appearance and body-image concerns, and in turn, increases the risk of psychological distress, especially regarding dysfunctional eating behaviours (McCrae et al., 2017; Sidani et al., 2016), believed to be mediated by internalisation of appearance ideals (Sidani et al., 2016).

Closely connected with social relations are familial relations, with quality of parenting styles and characteristics, as well as overall parenting structure, also influencing a child's mental health and wellbeing. Favourable parenting styles and characteristics can make a positive difference to a child's mental health; however, literature suggests a range of particular parenting styles and characteristics can also negatively contribute to children and adolescents' mental health and distress (McLeod, 2007a, 2007b; Yap et al., 2014). For example, the following parenting characteristics have all been associated as risk factors for the development of depression and/or anxiety: overinvolvement, entailing parental interference with their child's age-normative emotional independence and autonomy; aversiveness, involving parental hostility toward their child; and withdrawal, relating to a lack of parental involvement, interest, or support in their child's life (Yap et al., 2014; McLeod, 2007a; McLeod, 2007b).

Further, over the years in Aotearoa New Zealand, there has been an evident change in family structure, exhibited in the increased proportion of children and adolescents living in a single-parent household (McAnally, 2021). Findings show children growing up in single-parent households have worse mental health outcomes than those living in two-parent households (Lut et al., 2021; Patalay & Fitzsimons, 2016; Weitoft et al., 2003). For example, Patalay and Fitzsimons (2016) found a significant association between children and adolescents living in single-parent households and an increase in child and adolescent symptoms of mental distress, particularly depression. Possible explanations for this involve children growing up in single-parent families being at a higher risk of experiencing particular disadvantages, for example, living in poverty compared with children growing up in two-parent households; there is also the suggestion that children may experience limited parental engagement due to time limitations within single-parent households (Lut et al., 2021).

Additionally, tamariki and rangatahi Māori experiences of mental distress have been found to be disproportionately high (Government Inquiry into Mental Health and Addiction,

2018), with various studies identifying common themes concerning socioeconomic disadvantage, oppression, and childhood adversity as contributing factors towards tamariki and rangatahi Māori poor mental health (Bécares et al., 2013; Marie et al., 2008; Williams et al., 2018). Literature suggests Māori are more likely to be exposed to various hardships and disadvantages within society, which include experiencing institutional racism, discrimination, historical oppression, and unequal access to treatment services (Bécares et al., 2013; Marie et al., 2008; Williams et al., 2018).

Further, Durie (1997) believes a secure Māori cultural identity is advantageous in protection against poor mental health. In line with this, Williams et al. (2018), found having a strong sense of Māori cultural identity is associated with increased wellbeing and improved mental health outcomes amongst Māori secondary school students. However, important cultural values, beliefs, practices, and pride in relation to cultural identity have been undermined and devalued by dominant New Zealand/European cultural perspectives within Aotearoa New Zealand as a result of colonisation and rapid urbanisation, leading to acculturation stress, cultural assimilation, and loss of cultural identity**,** with these factors significantly contributing to tamariki and rangatahi Māori mental distress (Lawson-Te Aho, 1998; Williams et al., 2018).

Overall, it is evident there are a number of factors which can contribute to children and adolescents' vulnerability to poor mental health and experiencing mental distress, including individual, societal, psychosocial, familial, and parenting challenges. This highlights the importance of protecting children and adolescents from adversity and mental distress through promoting psychological well-being and ensuring access to professional mental health services and treatment.

Types of Child and Adolescent Mental Distress

Externalising Mental Distress

Mental distress during childhood and adolescence can manifest in many different ways, and are commonly conceptualised as either externalising or internalising distress. Externalising distress within children and adolescents refers to forms of distress involving symptoms with outward presentation exhibited in a child or adolescent's maladaptive behaviour directed toward the environment, such as hyperactivity, aggression, and delinquency (Liu, 2004). Externalising mental distress has been found to have relatively high prevalence rates within children and adolescents, with attention-deficit/hyperactivity-disorder (ADHD) being among

the most common externalising mental distress (Huberty, 2004; United Nations Children's Fund, 2021). Further, there is well-documented evidence of prevalence differences between genders for forms of externalising distress, with numerous studies consistently finding males have higher prevalence rates of externalising distress in comparison to females (Merikangas et al., 2009; Ministry of Health, 2021; Willcutt, 2012). ADHD will remain the focus of externalising distress throughout this study, due to ADHD being among the most prevalent externalising forms of distress within children and adolescents.

Within the Diagnostic and Statistical Manual of Mental Disorders – Fifth Edition (DSM-5), ADHD is classified as a neurodevelopmental disorder, and is prevalent in around 2.6% to 4.5% of children worldwide (Polanczyk et al., 2015). Within Aotearoa New Zealand, data from the New Zealand Health Survey 2020/2021 estimates the prevalence of diagnosed ADHD in New Zealand children aged between 2-14 years to be around 2.6% (22,000 children) in 2020/2021 (Ministry of Health, 2021). In line with externalising distress having higher prevalence amongst males, primarily, ADHD affects more males than females; results from Willcutt's (2012) meta-analysis study reported a male to female ratio for 6-12 year-olds of around 2.3:1, and 2.4:1 for 13-18 year-olds. These findings show consistency with those reported within the DSM-5, with the male to female ratio being approximately 2:1 in children (American Psychiatric Association, 2013). In the New Zealand Health Survey 2020/2021, findings indicate the male to female ratio for 2-14 year-olds to be around 5.7:1 (Ministry of Health, 2021).

Overall, ADHD is characterised by a continual pattern of difficulties with inattention, hyperactivity, and impulsivity (American Psychiatric Association, 2013). ADHD can present in different ways, with either combined presentation, involving symptoms of both inattention and hyperactivity-impulsivity; predominantly inattentive presentation; or predominantly hyperactivity-impulsivity presentation (American Psychiatric Association, 2013).

Importantly, ADHD can manifest and be exhibited differently in regard to symptom trajectories throughout childhood and adolescence. For example, it has been found that 'restlessness' is a primary presenting problem reported during childhood, yet is seldom reported during adolescence (Willoughby, 2003). Further, during childhood, symptoms of hyperactivity may be evidenced by running and climbing; however, as an individual reaches adolescence, symptoms of hyperactivity become less obvious with increasing age, and are often confined to symptoms such as fidgeting or internal feelings of restlessness (American Psychiatric Association, 2013; Willoughby, 2003).

Professional management and support for child and adolescent ADHD are important as, if ADHD is left untreated, many functional consequences can arise. For example, ADHD has been found to be associated with reduced academic achievement and overall school performance (Frazier et al., 2007); peer rejection (Hoza et al., 2005; Mrug et al., 2012); and increased likelihood of developing conduct disorder during adolescence, which heightens the risk of developing antisocial personality disorder and substance use disorders during adulthood (Klein et al., 2012).

Internalising Mental Distress

In contrast to externalising distress, internalising distress reflects a child or adolescent's emotional or psychological state manifests as mood alterations rather than behaviour; internalising symptoms are directed inwards through maladaptive cognitions and emotions, such as anxiousness and sadness, ultimately affecting a child or adolescent's internal psychological environment (Liu et al., 2011). Internalising distress represent one of the most common forms of child and adolescent mental distress, with depressive and anxiety disorders being among those highest in prevalence within children and adolescents (Gutman & McMaster, 2020; Huberty, 2004; Merikangas et al., 2010; United Nations Children's Fund, 2021). In comparison to externalising distress, internalising distress typically has higher prevalence within female children and adolescents (Browne et al., 2006). As anxiety and depression are among the most prevalent internalising forms of distress within children and adolescents, they will remain the focus of internalising distress throughout this study.

Regarding depression, a recent meta-analysis conducted by Polanczyk et al. (2015) found an estimated worldwide-pooled prevalence of depressive disorders within children and adolescents aged 6-18 years-old to be around 1.7% to 3.9%. In the context of Aotearoa New Zealand, findings from the New Zealand Health Survey 2020/2021 indicate around 0.7% of children aged between 2-14 were diagnosed with a depressive disorder (Ministry of Health, 2021). However, these results vary substantially in comparison to the 22.7% of the total youth participants reporting the experience of significant depressive symptoms in the Youth19 survey; this variation may be due to confirmed diagnosis versus self-report (Fleming et al., 2020).

Major depressive disorder (MDD) in children and adolescents is characterised by the experience of either depressed, irritable mood, or decreased pleasure in almost all activities (American Psychiatric Association, 2013). Symptomology and expressions of depressed mood regarding MDD can manifest differently depending on the individual's age (Mehler-Wex & Kölch, 2008; Sadock et al., 2015). MDD in children is often manifested through somatic

complaints, mood-congruent hallucinations, and psychomotor agitation (Sadock et al., 2015). Additionally, children often experience symptoms of: sadness; lethargy; appear apathetic, evidenced often in regard to play and schoolwork; are irritable; and begin to withdraw from socialisation (Baptista et al., 2017; Mehler-Wex & Kölch, 2008; Sadock et al., 2015). Younger children may also express suicidal ideation verbally, through expressing a desire to leave or disappear (Baptista et al., 2017). However, in adolescents, the main expressions of symptomology include experiences of guilt, hopelessness, fear of the future, loss of pleasure, social withdrawal, irritability, decreased academic performance, increased rebellion, psychomotor retardation, and experiences of delusions (Baptista et al., 2017; Mehler-Wex & Kölch, 2008; Sadock et al., 2015). Adolescents are also likely to show heightened sensitivity to rejection from peers and relationships (Sadock et al., 2015).

Presentations of MDD can also differ in regard to culture (Widiana et al., 2018), with comprehensive understanding of cultural differences in symptom expression being important to understand to draw accurate conclusions from assessment, particularly regarding diagnosis (Durie, 2017). For example, Māori presentation may involve more physical and spiritual expressions of distress (Todd, 2010). Research has also found that relative to western culture, in other cultures (such as Chinese and Iranian) individuals are more likely to report somatic symptoms of depression rather than psychological symptoms (Chang et al., 2016; Ryder et al., 2008; Widiana et al., 2018).

Importantly, professional management and support for children and adolescents with MDD is important as, if MDD is left untreated, impairment within important areas of functioning can arise, such as school or social contexts; the level of impairment can range from mild to significant, sometimes causing complete incapacity (American Psychiatric Association, 2013). Further, MDD also heightens the risk of the child or adolescent engaging in suicidal behaviour, with the possibility of suicidal behaviour existing continually throughout a major depressive episode (American Psychiatric Association, 2013).

Anxiety disorders are highly comorbid with depressive disorders, either co-occurring concurrently or sequentially, with the presence of one often increasing vulnerability to the other over a period of time (Garber & Weersing, 2010). Interestingly, research has identified comorbidity to be divergent in children and adolescents. Research suggests youth more frequently experience comorbid anxiety with a primary diagnosis of a depressive disorder, whereas, in children and adolescents with a primary diagnosis of an anxiety disorder, rates of a comorbid depressive disorder appear to be lower (Axelson & Birmaher, 2001; Cummings et al., 2014; Garber & Weersing, 2010).

This occurrence of comorbidity is believed to be associated with the personality trait 'neuroticism'; with neuroticism creating a disposition to experiencing negative effects, such as anxiety, irritability, and emotional instability (Kalin, 2020). Individuals with heightened levels of neuroticism often have poorer responses to environmental stressors, perceive normal situations as threatening, can be overwhelmed by minor frustrations, and often feel dissatisfaction (Widiger & Oltmanns, 2017). Evidence suggests anxiety and depressive disorders share genetic and environmental risk factors, with neuroticism also being associated with these shared genetic and environmental risk factors, therefore assisting to explain high rates of comorbidity among depression and anxiety (Hettema et al., 2006).

Anxiety disorders are believed to be one of the most common, and functionally impairing, forms of distress within the child and adolescent population (Merikangas et al., 2010; Rockhill et al., 2010). Prevalence is higher among females in comparison to males, with a ratio of around 2:1 (American Psychiatric Association, 2013). Estimates of prevalence vary significantly between studies, likely due to varied sources of information and methods (e.g. self-report versus clinical diagnosis) (Rockhill et al., 2010). Using data sourced from systematic reviews conducted for the Global Burden of Disease Study 2010 and 2013, Erskine et al. (2017) found a mean global prevalence of 3.2% among children and adolescents aged between 5-17 years living with an anxiety disorder.

These results align closely with those found in the New Zealand Health Survey 2020/2021, indicating around 3.7% of children aged between 2-14 have a diagnosis of an anxiety disorder in New Zealand (Ministry of Health, 2021). Conversely, Merikangas et al.'s (2010) study involving 10,123 adolescents aged between 13-18 years-old in the United States found 31.9% of the sample met criteria for an anxiety disorder; other studies discuss anxiety disorders effect around 10% to 20% of children and adolescents (Sadock et al., 2015). Nonetheless, while there is substantial variation across studies, it is evident anxiety disorders affect a significant number of children and adolescents globally.

Specifically, generalised anxiety disorder in children and adolescents has one of the highest prevalence rates within the various anxiety disorders in the DSM-5 (Merikangas et al., 2009). Generalised anxiety disorder in children and adolescents is characterised by excessive and difficult to control worry and anxiety regarding activities and events within daily life, with this worry and anxiety often concerning their competence. Ultimately, excessive worry hinders a child or adolescent's ability to do daily activities in a timely and efficient manner; thus, untreated generalised anxiety disorder causes interference with daily activities and leads to

experiences of significant distress and impairment within important areas of functioning, such as school and social settings (American Psychiatric Association, 2013).

Symptom expression of generalised anxiety disorder often remains relatively consistent across the lifespan, including in children and adolescents (American Psychiatric Association, 2013). However, studies have found the expression of generalised anxiety disorder can vary across cultures, with manifestation of somatic symptoms being predominant amongst individuals from non-western societies (Lewis-Fernández et al., 2010). Importantly, generalised anxiety disorder is distinguished from nonpathological, developmentally normative anxiety, through the frequency, intensity, and duration of excessive worry and anxiety persisting for a minimum of six months, and being disproportionate in relation to the situation and probability of feared anticipated events actually occurring (American Psychiatric Association, 2013).

Impacts of Mental Distress on Children and Adolescents

For children and adolescents, mental distress often leads to disadvantage and suffering which can become progressively worse if left untreated, or if treatment is delayed (Malla et al., 2018). Delayed intervention for distress, including mild distress, poses the risk of mental distress progressing more severely and becoming more complex through increasing the likelihood of comorbidity, and increasing impairment within important life domains (Malla et al., 2018), including social, academic, familial, psychological, and overall quality of life (Celebre et al., 2021). Tully et al. (2019) has emphasised the need for early intervention in the early child and adolescent years as critical to preventing chronic trajectories of poor mental health and distress. As discussed above, the adverse consequences associated with child and adolescent mental distress have been well researched. Notably, individuals with mental distress often experience significantly lower quality of life in comparison to the general population (Celebre et al., 2021; Olatunji et al., 2007; Wells et al., 1989).

Quality of life is a latent construct which is unable to be directly observable or measurable (Jonsson et al., 2017). Therefore, within the literature, the concept of quality of life has been conceptualised in numerous different ways, though there is general agreement that quality of life constitutes a multi-dimensional construct which integrates various different domains, including social, emotional, and physical well-being (Celebre et al., 2021). Unfortunately, literature regarding quality of life in child and adolescent mental distress is less robust compared to adults (Celebre et al., 2021; Jonsson et al., 2017). However, of the

available literature, it is evident children and adolescents with mental distress experience a notably reduced quality of life in comparison to control groups.

Jonsson et al. (2017) investigated the impact on quality of life of children and adolescents formally diagnosed with mental distress (both mental and behavioural). Results indicated those with mental distress experienced lower quality of life compared to healthy control groups regarding both self-reported and parent-reported quality of life. Jonsson et al. (2017) also discussed that within the literature, research lacks comparisons between various forms of mental distress and quality of life, with the primary focus usually on a specific type of mental distress. Celebre et al. (2021) attempted to address this gap in literature by investigating the association between the severity level of various mental health indicators and domain-specific quality of life within the children and adolescent population; indicators included depressive symptoms, anhedonia, anxiety, hyperactivity/distractibility, and positive symptoms. Overall, results indicated depressive symptoms were significantly associated with the largest number of quality of life sub-domains in comparison to other mental health indicators.

More specifically, it was found depressive symptoms made the most significant contribution to quality of life, indicating children and adolescents with depressive symptoms experience lower satisfaction with their general health and autonomy (Celebre et al., 2021). Further, higher levels of anhedonia and depressive symptoms, both forms of internalising distress, made the most significant contribution to lower social quality of life; suggesting children and adolescents with higher anhedonia and depressive symptoms have lower satisfaction in their social relationships and extra-curricular activities. These findings are consistent with those in the Weitkamp et al.'s (2013) study, finding internalising symptoms predicted overall lower self-reported quality of life when compared with externalising symptoms.

Importantly, mental distress during childhood and adolescents can also cause future long-term impacts on an individual's quality of life. Chen et al. (2006) conducted a longitudinal study investigating the impact of adolescent mental distress in comparison to physical illness. Quality of life was assessed within five domains consisting of physical health, social relationships, psychological well-being, role function, and environmental context. Results found mental distress in adolescents was strongly associated with considerable impairment and lessened quality of life during adulthood. In particular, when compared with physical illness, individuals with mental distress reported significantly more impact within the following domains: social relationships, lower psychological well-being, and adversity in their environmental context (Chen et al., 2006).

While it is evident mental distress significantly negatively effects overall quality of life, in order to gain a comprehensive understanding of the severity of impacts mental distress can cause on daily life, it is important to consider other domains in a child and adolescent's life which can be impacted by mental distress. Throughout an individual's life, including childhood and adolescence, success and failures within developmental domains can cause a significant impact on development within other domains, with this referred to as developmental cascades (Panayiotou & Humphrey, 2017). School is an important context for children and adolescents' academic development, with academic performance having a significant influence on an individual's long-term outcomes, both favourable and adverse (Van der Ende et al., 2016). In line with this, poor academic performance and achievement has been found to be associated with adverse social and economic outcomes extending into adulthood, including unemployment, lower income, and poor health and mortality (Riglin et al., 2014; Van der Ende et al., 2016). For example, Caspi et al. (1998) conducted a longitudinal study investigating predictors of youth unemployment in the transition into adulthood in a sample of Aotearoa New Zealand individuals. Results found factors including lack of high school credentials, poor readings skills, and disengagement in school, significantly increased the risk of unemployment (Caspi et al., 1998). Consequently, the experience of mental distress during schooling years can significantly impact a child and adolescent's academic development and performance (van der Ende et al., 2016).

It is believed there is a bidirectional pathway between academic performance and mental distress, whereby, poor academic performance contributes to mental distress; and internalising and externalising distress results in later adverse outcomes within academic performance, with the latter also referred to as the adjustment erosion hypothesis (Moilanen et al., 2010; Van der Ende et al., 2016). For example, in a study conducted by Panayiotou & Humphrey (2017) exploring the relationship between academic performance distress in middle childhood, support for the adjustment erosion hypothesis was found for externalising distress predicting later negative academic performance. However, this was only found exclusively in males, likely attributable to the tendency for males to experience externalising distress more frequently than females (Merikangas et al., 2009; Ministry of Health, 2021; Willcutt, 2012).

Nonetheless, this finding is consistent with Van der Ende et al.'s (2016) study, finding clear evidence supporting pathways from externalising distress to later academic performance throughout their study involving children and adolescents aged between 4-18 years of age; however, results in relation to gender were not specified. Deighton et al. (2018) also found support for the adjustment erosion hypothesis for both internalising and externalising distress

in secondary school children. Specifically, results showed higher levels of internalising and externalising symptoms within children resulted in subsequent reductions in academic performance; however, the relationship between externalising distress and subsequent reductions in academic performance was found to be stronger in comparison to internalising distress (Deighton et al., 2018). Overall, within the literature, there is robust evidence providing support for the adjustment erosion hypothesis in regard to externalising distress impairing later academic performance.

Conversely, the adjustment erosion hypothesis regarding internalising distress is evidently less developed, though an increasing number of studies find support for internalising distress also impairing academic performance, particularly regarding depression being the most prominent form of internalising distress to impair academic performance in children and adolescents (Riglin et al., 2014; Roeser et al., 2000; Verboom et al., 2014). These findings can possibly be explained by the behaviours commonly associated with externalising and internalising distress (Moilanen et al., 2010). For example, externalising distress is often manifested by behavioural symptoms such as impulsivity, inattention, or aggression - consequently limiting learning opportunities in an academic environment, thereby directly impeding academic performance (Moilanen et al., 2010). Further, children and adolescents with externalising behaviours can also experience disapproval from their teachers and peers, creating an adverse learning environment, which then negatively impacts academic performance (Van der Ende et al., 2016). Conversely, internalising distress may compromise academic performance by impairing cognitive functioning in relation to learning (Maughan et al., 2003). Further, internalising distress constitutes symptoms such as being passive or withdrawn, with associated symptoms potentially hindering important learning activities involving participation in the classroom; this may prevent students asking for help with curriculum, and result in lower self-efficacy and performance (Moilanen et al., 2010).

Deficits within the social functioning domain have also been found to be associated with child and adolescent externalising and internalising mental distress (Long et al., 2020; Verboom et al., 2014). Children and adolescents with mental distress frequently experience difficulty with peer relationships, often in the form of peer rejection, struggling to form friendships, and facing peer conflict (Long et al., 2020; Mrug et al., 2012). Further, peer difficulties in the younger population often remain stable, whereby, experience with peer difficulties during childhood often persists into adolescence (Mrug et al., 2012). Regarding externalising distress, children with ADHD often experience rejection by peers, and also lack reciprocal friends (Mrug et al., 2012). Hoza et al. (2005) found 52% of children with ADHD

experience rejection by their peers, in comparison to a low 14% within their randomly selected classmates. The experience of social difficulties for children and adolescents exhibiting externalising distress is likely attributable to externalising symptomology being seen as unfavourable and inappropriate by peers; therefore, these individuals are consequently rejected by their peers (Milledge et al., 2018). Literature also supports a relationship between internalising distress and social difficulties. Children and adolescents with internalising distress exhibit significant inhibition, communication difficulties, and difficulties in interacting with peers, with this resulting in adverse consequences, including a lack of interpersonal relationships, poor social competence, and exclusion by their peers (Mulvey et al., 2017; Salavera et al., 2019).

Children and adolescents who are rejected and lack interpersonal relationships with peers have a higher likelihood of being further excluded from social activities with their peers (Mrug et al., 2012). In turn, this can impact on a child's social development and the ability to develop and refine their social skills, because they are unable to engage in important socialisation experiences (Mrug et al., 2012). Further, social difficulties as a result of mental distress can also hinder the ability to gain important sources of social support (Mrug et al., 2012). Over time, these individuals experience repeated social rejection by their peers, lack friendships, have limited social activities, and deficits in social skills, and so risk further exacerbating the experience of mental distress. As a consequence, this can lead to comorbid internalising distresses, particularly anxiety disorders, increase delinquency behaviours, resulting in further impairments across multiple domains (Mrug et al., 2012; Mulvey et al., 2017).

Social rejection during childhood and adolescence also has negative cascading effects in adulthood. Bagwell et al.'s (1998) 12-year follow-up study established a relationship between higher levels of peer rejection during preadolescence and poorer overall adjustment in adulthood, with overall adjustment referring to eight domains of functioning, including school and job performance, family interaction, social life, activity involvement, aspiration level, trouble with the law, and mental distress. Additionally, friendship is also a significant contributor to perceived general self-worth in adulthood, with peer rejected preadolescents viewing themselves less positively in adulthood (Bagwell et al., 1998).

Another significant consequence associated with untreated or delayed treatment for mental distress within the child and adolescent population is the risk of suicide. Young individuals and Māori have been identified as populations experiencing disproportionately high suicide rates in Aotearoa New Zealand, with the overall youth suicide rate being persistently

high; indeed, it has been described as a national shame (Government Inquiry into Mental Health and Addiction, 2018). Further, Aotearoa New Zealand's youth suicide rate is one of the highest among the OECD countries (Government Inquiry into Mental Health and Addiction, 2018). Findings from the Youth19 survey of 7,891 students aged between 13-19 years-of-age concerningly reveal 6.2% of the total youth participants (7.4% females and 5.1% of males), reported an attempt of suicide within the previous 12 months; with this being an increase of 2.3% since the previous 2012 survey (Fleming et al., 2020). Within the Youth19 survey, of the 1,528 rangatahi Māori respondents, 12.6% reported attempting suicide within the previous 12 months, with this being a concerning more than two-fold increase since the previous 6.2% reported in the 2012 survey (Fleming et al., 2020). Further, suicide rates are over twice as high for Māori youth than non-Māori, with rangatahi Māori suicide rates for adolescents aged 15-24 years old reported in 2018 to be 34.6 per 100,000, in comparison to 16.4 per 100,000 for non-Māori (Ministry of Health, 2021). These disproportionate suicide rates for rangatahi Māori are believed to largely reflect the disadvantages Māori face in the context of Aotearoa New Zealand society, including poor access to healthcare, exposure to discrimination, socioeconomic disadvantages, and mental health stigma (Williams et al., 2018).

Overall, the preceding discussion highlights the importance of early intervention through provision of professional treatment services to address the prospective impact of child and adolescent mental distress without delay, in order to mitigate the harmful impacts mental distress has on important domains in a child and adolescent's life, as well as the cascading effects into adulthood. However, while the need for mental distress treatment services for children and adolescents is evident, access to services for this population is often difficult and services are underutilised.

Access to Services

According to the 2021 Mental Health and Addiction Year in Review, 50,694 New Zealand children and adolescents aged between 0-19-years-old accessed specialist mental health services in 2020-2021 (Ministry of Health, 2021). These service use rates align closely with the estimated rate of around 48,000 children (5.7%) diagnosed with emotional and/or behavioural distress reported in the New Zealand Health Survey 2020/2021 (Ministry of Health, 2021). However, while current rates of service use for children and adolescents in Aotearoa New Zealand appear proportionate to those diagnosed with mental distress based on the Ministry of Health data, it is important to consider children and adolescents living with an undiagnosed mental distress. For example, Māori are 30% more likely to have their

experiences of mental distress undiagnosed in comparison with other ethnic groups (Government Inquiry into Mental Health and Addiction, 2018). Therefore, the rates of specialist mental health service use are significantly below the estimated 21% of New Zealand children who experience mental distress as reported by the United Nations Children's Fund (2021), as well as similar prevalence rates reported in the Youth2000 survey series (Fleming et al., 2020).

A large number of studies worldwide have found evidence of clear gaps between child mental health prevalence and service use, with only around 20-55% of children and adolescents who experience mental distress accessing service use for treatment (Ghafari et al., 2022; Paula et al., 2014; Sawyer et al., 2001; Simon et al., 2015; Merikangas et al., 2010). In the context of Aotearoa New Zealand, the 2018 He Ara Oranga: Report of the Government Inquiry into Mental Health and Addiction discusses that comprehensive information regarding unmet mental distress treatment needs is lacking in Aotearoa New Zealand; however, it is clear many individuals are not receiving treatment or support for their mental distress (Government Inquiry into Mental Health and Addiction, 2018). Aligned with this, Mariu et al. (2011) found a significant gap between mental health prevalence and service use in a sample of 9,366 New Zealand secondary school students, with over 80% of students experiencing mental distress not seeking help from a general practitioner. Unfortunately, this gap in service use is not just recent, with the Ministry of Health and the Mental Health Commission reporting nearly two decades ago, that of the six District Health Boards studied, five had evident under-delivery in child and young individual's mental health services (Ramage et al., 2005).

This highlights the common concerning theme of a long history of unmet needs for mental health services amongst the child and adolescent population worldwide. If global findings are applied to the rates of child and adolescent mental health service use data in Aotearoa New Zealand, we can expect the rates of children and adolescents requiring mental health services to be substantially higher than solely those who accessed specialist services in 2020/21 as reported in the Mental Health and Addiction Year in Review 2020/21. This global data, combined with the high estimated prevalence rates of child and adolescent mental health in Aotearoa New Zealand, provides reasonable confidence in concluding there is a significant gap between child and adolescent mental health prevalence, and service use in Aotearoa New Zealand. It is therefore unsurprising the prevalence of child and adolescent mental distress in Aotearoa New Zealand continues to increase. This poses the question as to why rates of child and adolescent diagnosis of mental distress and service use in Aotearoa New Zealand are disproportionately low in comparison to those living with mental distress?

How Do We Get Children and Adolescents into Services?

Involvement of trusted individuals, including family, friends, and teachers, play a crucial role in the decision process to seek help and access services for child and adolescent mental distress (Hassett et al., 2018). Worldwide literature has consistently demonstrated young individuals rarely seek help from formal mental health services for their distress without the involvement of others, in particular parental figures (Rickwood et al., 2015; Vogel et al., 2007; Wahlin & Deane, 2012). In a study investigating the influence of parents[5] and other individuals on adolescent (14-18-years-old) help-seeking decisions, 94% of youth respondents reported their decisions to seek help was influenced by others, with parents being significantly more influential than other sources (Wahlin & Deane, 2012). Further, 59% of youth respondents also indicated without the influence of others, they would not have accessed any form of help (Wahlin & Deane, 2012). Consistent with this, in an Australian study conducted by Rickwood et al. (2015), participants between the ages of 12-25-years-old rarely independently sought in-person help for their mental distress, but rather, they relied on family members as the predominant influence. Moreover, the younger the individual, the higher the influence a parental figure often has on initiating the help-seeking and service utilisation process, largely due to lower levels of autonomy (Boulter & Rickwood, 2013; Rickwood et al., 2015).

Adolescence is commonly known as a transitional developmental period towards growing autonomy and independence, with adolescents having more ability than younger children to access services on their own. Despite this, research also suggests adolescents often still rely on parental figure support to facilitate the process of help-seeking and service utilisation (Hassett et al., 2018; Murphy et al., 2022; Vogel et al., 2007; Wray-Lake et al., 2011). For example, Wray-Lake et al. (2011) conducted a longitudinal study involving European American families on middle childhood and adolescence (aged 9-20 years old) autonomy in regard to decision making within eight domains. Overall, low levels of autonomy was found during both middle childhood and adolescence for decisions involving the domain of adolescent health, in comparison to the other domains measured (Wray-Lake et al., 2011). Vogel et al.'s (2007) study further supports parental influence in facilitating help-seeking and service utilisation in adolescents, finding 52% of adolescent participants sought professional help due to encouragement by their parents, particularly their mothers.

[5] 'Parents' and 'parental figures' may be used interchangeably to correspond with the terminology the author(s) or organisation used.

One reason for parental figure involvement includes the issue of accessing formal mental health services being particularly difficult for a minor to achieve by themselves due to the many barriers children and adolescents face regarding accessing services for their mental distress. In the context of Aotearoa New Zealand, consent must be gained for mental health assessment and treatment. While consent on behalf of a child or adolescent under the age of 16 is routinely gained from their parental figures, difficulty occurs when children and adolescents under the age of 16-years-old are seeking assessment and treatment on their own. Thus, under the Mental Health Act 1992, mental health professionals are required to determine whether the young individual has the capacity to consent, taking into consideration the young individual's intellectual maturity, and whether their state of mental distress impedes their capacity to consent (Ministry of Health, 1998).

However, in order to reduce the level of distress for all individuals involved, and to take into account the role of families in the care of a young individual who experiences mental distress, it is generally advantageous to seek parental figure consent, with this emphasising the role of parental figures in the help-seeking process (Ministry of Health, 1998). While respecting child and adolescent rights, mental health professionals must consider the importance of family, whānau, and culture, all of which are significant in a child's life and developmental context, whereby ensuring that families, when possible, have active involvement throughout the assessment and treatment process (Ministry of Health, 1998).

Further, the 'He Ara Oranga: Report of the Government Inquiry into Mental Health and Addiction' outlines external factors acting as barriers for children and adolescents, including the cost of mental health services and the geographical location of services, with these barriers causing significant difficulty for Aotearoa New Zealand children and adolescents to access services independently (Government Inquiry into Mental Health and Addiction, 2018). Other reasons for parental figure involvement include lack of emotional competence in children and adolescence, absence of knowledge in regard to where to access help, failure to perceive their experience of distress as serious enough for intervention, or the young person being entirely unaware their experiences are mental health related (Government Inquiry into Mental Health and Addiction, 2018; Radez et al., 2021).

In addition, research has pointed to an overall reluctance of children and adolescents to seek professional help on their own (Murphy et al., 2022). For example, in a meta-analysis conducted by Gulliver et al. (2010), difficulty identifying symptoms of mental distress was a prominent barrier theme frequently emerging in the analysis of studies. In line with this, Biddle et al. (2007) highlight the concept of a cycle of avoidance, whereby, young individuals have a

tendency to view their experience of distress as 'ordinary' and unnecessary of intervention, with this view continuing even as distress increases and becomes less manageable, likely due to fear of acceptance. This concept concurs with Hassett et al. (2018) findings that young individuals have a tenancy to perceive their distress as less concerning in comparison to their parents' perceptions of their child's distress. This magnifies the importance of family assistance in the process of help-seeking and service utilisation for children and adolescents, and raises the issue of parental knowledge around mental distress as being a key factor in help-seeking and service use.

Mental Health Literacy

Parental knowledge, attitudes, and beliefs regarding mental distress in children and adolescents is commonly referred to as parental mental health literacy (Tully et al., 2019). Parental mental health literacy is a sizeable topic, encapsulating important knowledge and beliefs concerning risk factors contributing to mental distress; knowledge of mental health help-seeking, services, and treatment, as well as attitudes facilitating or inhibiting help-seeking; and the knowledge and ability for parental figures to recognise the development or existence of symptoms of mental distress (Hurley et al., 2020; Tully et al., 2019). Ultimately, parental mental health literacy is an essential factor for early recognition, help-seeking, and treatment of child and adolescent mental distress (Jorm et al., 2007). However, while literature suggests parental figures are essential gateway providers of help-seeking and professional mental health service access for children and adolescents, issues arise in the parental ability to do so when they possess low levels of knowledge regarding child and adolescent mental distress (Tully et al., 2019).

Concerning findings have emerged within recent literature consistently suggesting mental distress within childhood and adolescence are poorly understood and recognised within the general global population (Hurley et al., 2017; Tully et al., 2019). More specifically, overseas research suggests mental health literacy of parents regarding child and adolescent mental distress is limited, with parents having inadequate knowledge and preparedness to provide assistance to children and adolescents experiencing mental distress (Hurley et al., 2017). Parents themselves have expressed the need for better knowledge of mental health regarding the younger population (Hurley et al., 2017). Recent research found low levels of parent mental health literacy, with parents feeling uncertain and poorly equipped in how to

recognise and respond to mental distress in their child, and they expressed fear and concern for their child developing mental distress (Hurley et al., 2017).

In a survey about mental health providers perceptions of parental knowledge of children's mental health, 44.8% of mental health providers reported parents have very little knowledge of youth mental health disorders overall, and that they perceived parents had particularly limited, inaccurate, and inconsistent knowledge regarding prevention, help-seeking, and treatment (Frauenholtz et al., 2015). Further, the second Australian Child and Adolescent Survey of Mental Health and Wellbeing found the main barriers reported by parental figures to seeking or receiving help for children between four to 11-years-old with mental distress were barriers primarily related to knowledge of mental health literacy (43.6%) (Lawrence et al., 2015); with 40% of parents endorsing not knowing where to receive help as a major barrier to accessing mental health services for their children (Lawrence et al., 2015). This finding is consistent with Reardon et al. (2017) systematic review of the literature, finding parental knowledge and understanding of the process of seeking professional help was seen as a barrier in around 50% of studies reviewed. Further, among the qualitative studies included in Reardon et al.'s (2017) study, low help-seeking knowledge was corroborated as a barrier to help-seeking, with pooled findings between 14% to 75% of participating parents reporting having low knowledge regarding where to go to ask for help, and how to actually get help.

Low levels of parental mental health literacy is of significant concern, due to the adverse consequences for child and adolescent mental health discussed above, including missed identification and diagnosis of distress and delayed help-seeking and treatment, leading to worsened outcomes for child and adolescents experiencing mental distress (Hurley et al., 2017; Jorm, 2012). Consequently, there is a common consensus within the literature that parental figures' low levels of knowledge regarding child and adolescent mental distress is a critical factor contributing to the gap between prevalence of mental distress and service utilisation for the younger population (Jorm, 2012; Tully et al., 2019). It has been argued there is an urgent need to improve mental health literacy within the general adult population, particularly within parental figures, in order to improve knowledge, attitudes, and beliefs regarding child and adolescent mental distress (Hurley et al., 2020; Tully et al., 2019).

Overall, parental figure knowledge of mental health literacy is crucial for early recognition of mental distress, and early help-seeking and treatment for a child or adolescent, with this in turn reducing the gap between child and adolescent mental distress and service use, as well as reducing the overall prevalence of child and adolescent mental distress.

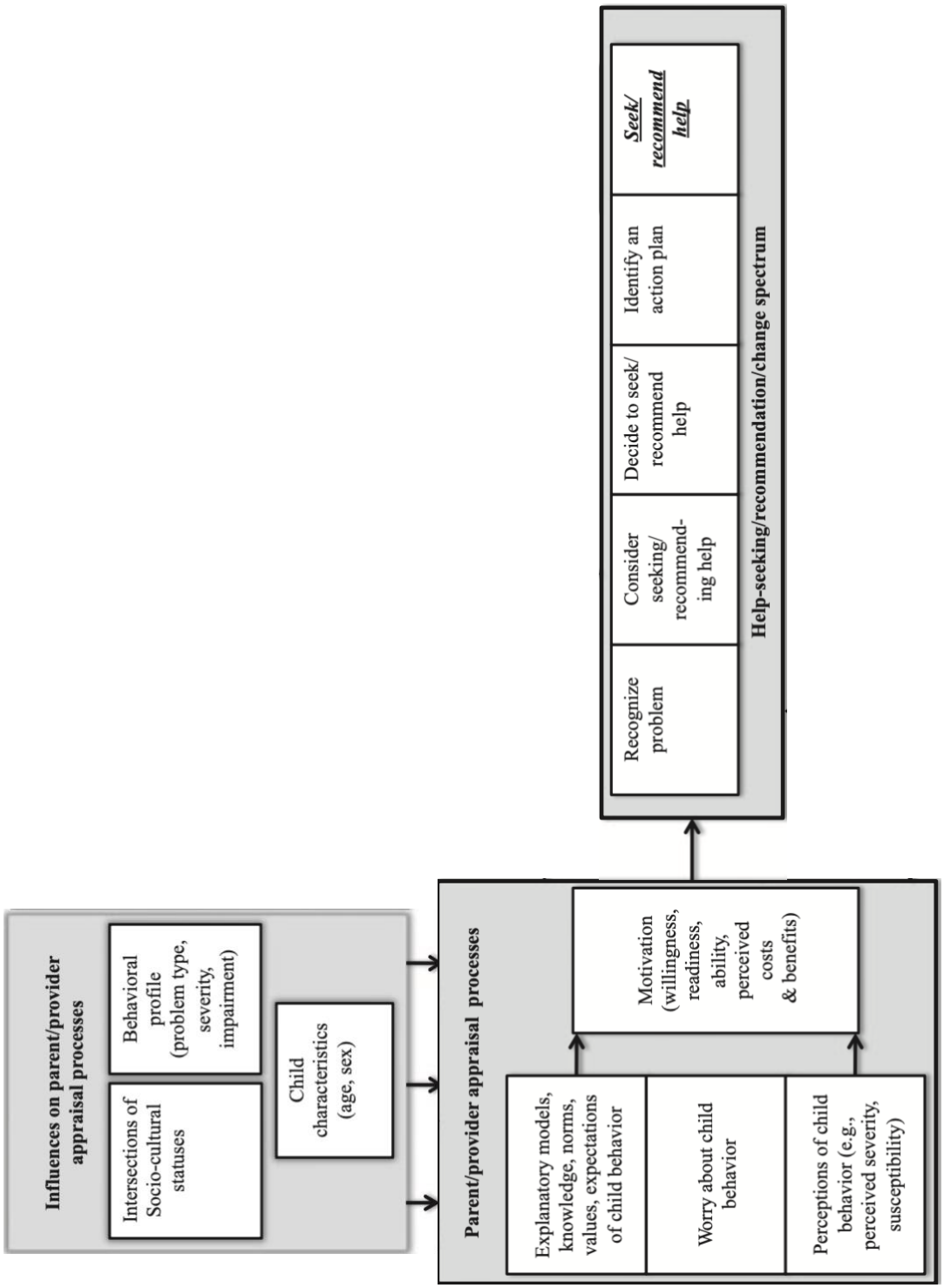
Theoretical Approach

Within the literature, there are several theoretical models for understanding the help-seeking process of mental distress, which can also be used to illustrate how children and adolescents' mental distress is recognised and addressed by parental figures (Godoy & Carter, 2013). Within these theoretical models, there is a general consensus which posits multiple significant stages in the help-seeking pathway, with this involving: parental recognition of mental distress through recognising and identifying problematic behaviour and other symptomology in their child; making a decision whether to seek help; and identifying and initiating an action plan of help-seeking and service utilisation (Cauce et al., 2002; Pavuluri et al., 1996; Srebnik et al., 1996). In line with these components of the help-seeking pathway, Godoy and Carter (2013) posit a comprehensive theoretical model for parental figure help-seeking behaviour, in an attempt to understand factors which influence parental figures' movement through the help-seeking process. It is important to acknowledge this model also extends to involve the role of paediatricians in the help-seeking process; however, for the purpose of this study, the focus will be on parental figures, as this is the focus group for this present study. Figure 1 (p. 24) depicts the parental figure component of this theoretical model.

Godoy and Carter (2013) theoretical model suggests that child symptomology of mental distress alone is not necessarily enough to motivate parental figure help-seeking and service utilisation. The model proposes parental figure recognition and appraisal of child mental distress, as well as their decision to help-seek for child mental distress, is determined by a variety of factors which can enable or inhibit advancement along the help-seeking pathway. These factors include characteristics and perceptions of the problem behaviours (e.g. type, severity, and susceptibility of mental distress), child characteristics (e.g. sex and age), sociocultural considerations, and motivation (worry about their child's behaviour, perceived costs versus benefits); all of which subsequently contribute to consideration and decisions of help-seeking (Godoy & Carter, 2013). The following sections will consider these factors in more detail.

Figure 1

Parental Figure Component of Godoy and Carter's (2013) Theoretical Model for Influences on Help-Seeking Process. Reproduced From (Godoy & Carter, 2013).



Problem recognition is a key part of mental health literacy and is fundamental to help-seeking and professional mental health service intervention for children and adolescents' mental distress; problem recognition is arguably the most essential step of the help-seeking process (Thurston et al., 2015). As previously discussed, parental figures are key identifiers of a child and adolescent's mental distress. A recent systematic review found parental problem perception was one of the strongest factors associated with child and adolescent service use for mental distress (Ryan et al., 2015). Parents also have a higher likelihood of seeking help for their child when they recognise mental distress (Thurston et al., 2015), highlighting the importance of parental knowledge of mental health literacy aiding recognition of mental distress in their children in order to improve access to treatment for children and adolescents.

Unfortunately, recognising mental distress is not always guaranteed. While research to date remains limited, particularly in Aotearoa New Zealand, overseas research has highlighted that mental distress in childhood and adolescence is poorly understood in the general population; with there being a concerning inability for many parental figures to recognise their child's mental distress. In Hurley et al.'s (2017) study, the majority of parent participants expressed concerns for their inability to recognise symptoms of mental distress in their own children; and of 2000 parents in a recent Australian survey conducted by The Royal Children's Hospital (2017), merely 35% claimed to be confident they could recognise signs of mental distress in their child.

However, parental figures' abilities to recognise mental distress in children and adolescents appears to fluctuate between studies, potentially due to sample size, study construction, forms of distress beings identified, and the use of vignettes versus real life cases. For example, in a study conducted by Pescosolido et al. (2008) investigating adults' abilities to recognise child mental distress using vignettes consisting of child depression and ADHD, respondents appeared to have reasonably high recognition ability of child mental distress. Of the 1,393 respondents, 58.8% were able to recognise child depression, and 41.9% recognised ADHD (Pescosolido et al., 2008). Interestingly, a sizeable percent of participants who recognised distress rejected the distress' label as a 'mental illness' (depression 12.8% and ADHD 19.1%). Shah et al. (2004) found even higher rates of distress recognition with a sample of 79 mothers, with 84% identifying mental distress from a seven-year-old anxiety vignette, and 91% from both a five-year-old ADHD and 16-year-old depression vignette.

In contrast, Oh and Bayer's (2015) study found lower rates of parental recognition. Of the 84 six-year-old children with mental distress, only 32% of parents recognised their child's behavioural difficulties, determining their child's behaviour to be of higher difficulty in

comparison to other children. Similarly, a study by Teagle (2002) investigated parents' ability to recognise mental distress in their children who had at least one form of mental distress; findings, demonstrated that only 39% of parents reported they perceived mental distress in their child. Of the appropriate diagnosis, ADHD was most frequently recognised by parents, followed by depressive disorders and oppositional defiant disorders (Teagle, 2002). Overall, research has typically identified that less than half of parental figures who have a child experiencing some form of mental distress actually recognise their child's distress (Johnston & Burke, 2020; Teagle, 2002; Thurston et al., 2015).

Parental figures also play a fundamental role in the facilitation of help-seeking and service utilisation for children and adolescents, due to factors previously discussed that impede children and adolescents' abilities to independently access services (Hassett et al., 2018). Therefore, once parental figures have recognised problematic behaviour and other symptoms of concern associated with mental distress in their child, help-seeking is the next step in the process towards service utilisation and treatment (Cauce et al., 2002).

However, facilitation of the help-seeking process by parental figures (after recognition of child and adolescent mental distress) is not always carried out or followed through (Tully et al., 2019); and despite high prevalence of mental distress during childhood and adolescence, some parental figures appear reluctant to help-seek and engage with mental health professionals (Tapp et al., 2018), although levels of help-seeking do appear to fluctuate within the literature. Teagle's (2002) study found of the 39% of parents who reported they perceived either internalising distress (anxiety, depression), externalising distress (conduct disorder, oppositional defiant disorder, ADHD), or substance dependence in their child, only 16.5% had accessed child speciality services. In contrast, in a sample of Australian parents, when asked to rank response strategies for youth mental distress, 65% reported they would seek professional help for a depression vignette, and 57% for a social phobia vignette, with general practitioners being endorsed as the preferred option to seek professional help and advice from, and psychologist and psychiatrists endorsed as the least likely pathways to seek professional help and advice from (Jorm et al., 2007). Further, 85% of parents reported highly positive help-seeking intentions in a study on parents' help-seeking for early childhood mental distress (Oh & Bayer, 2015). However, despite a high proportion of parents reporting highly positive help-seeking intentions, only 29% actually overcame barriers to help-seeking and accessed professional help for their child with mental distress. Interestingly, within parents who recognised their child's behaviour as problematic (32%), only 56% accessed professional help; in contrast, of parents who did not perceive their child to have particularly problematic

behaviour, 16% still accessed professional help (Oh & Bayer, 2015). While this appears contradictory to the importance of parental figure recognition of mental distress, a plausible explanation for this may be attributed to the role of school referrals, with teachers encouraging families to seek help for a child's concerning behaviour at school (Oh & Bayer, 2015).

In regard to factors which can enable or inhibit advancement along the help-seeking pathway, characteristics and parental figure perceptions of the problem behaviours associated with a child or adolescent's mental distress have been documented to influence both recognition of mental distress and help-seeking (Godoy et al., 2014; Godoy & Carter, 2013; Thurston et al., 2015). For example, regarding externalising versus internalising types of mental distress, Thurston et al.'s (2015) study identified a difference in parents' abilities to recognise externalising forms of distress (around two-thirds of parents) in comparison to internalising forms of distress in children (around half of parents). Findings from this study also revealed parents were more willing to seek help for externalising distress (Thurston et al., 2015). This may be due to externalising behaviours being more obvious to parental figures due to the outward presentation of behavioural symptoms and higher levels of impairment and interference on a child's daily life, as well as externalising behaviour often affecting parental figures and family functioning; thus, influencing parental figure perceptions of distress and overall perceived burden (Godoy et al., 2014; Godoy & Carter, 2013).

Underpinning perceptions of child or adolescent mental distress is knowledge of mental health literacy. As research has suggested, mental distress within childhood and adolescence is poorly understood and recognised within the general population globally (Hurley et al., 2017; Tully et al., 2019). Further, as mental distress in children and adolescents is complex, and can manifest in different ways compared to adult mental distress, this can also cause difficulty for parental figures to recognise mental distress if they possess low levels of knowledge in regard to mental health literacy (The Royal Children's Hospital, 2017). Poor knowledge may also impede a parental figure's ability to recognise internalising forms of distress due to the nature of internalising distress affecting a child's internal psychological environment, rather than being exhibited outwardly as seen in externalising distress (Liu et al., 2011). Consequently, the less obvious symptoms associated with internalising distress, combined with low levels of mental health literacy, may result in difficulty for parental figures to identify this type of distress.

Godoy and Carter (2013) have also proposed child characteristics and developmental considerations influence parental figure recognition of mental distress and help-seeking. For parental figures to recognise mental distress in their child, and the help-seeking process to be

initiated, they must perceive the symptomology and behaviours associated with their child's mental distress to be of concern (Johnston & Burke, 2020). Research has suggested child age is a factor which has an influence on parental figure recognition of mental distress and help-seeking, though recent research in this area remains limited (Bussing et al., 2003; Godoy and Carter, 2013; Teagle, 2002; Zwaanswijk et al., 2003). For example, Bussing et al. (2003) found parental figures are less likely to recognise and help-seek for ADHD in younger children; with under-recognition appearing to reduce as children advanced in age. A possible explanation for lower levels of recognition and help-seeking with younger children may be due to parental figures being unfamiliar with, or having doubts about mental distress in young children, believing their exhibited problem behaviours are developmentally normative difficulties, which a child is likely to grow out of (Bussing et al., 2003; Godoy and Carter, 2013; Pavuluri et al., 1996). For example, The Royal Children's Hospital (2017) found Australian parents had low levels of knowledge regarding symptomology of mental distress in children and adolescents, whereby, of 2000 Australian parents surveyed, 41% were unaware that persistent difficulties with aggression in primary-school-aged children was abnormal behaviour; and 33% of parents were unable to realise frequent crying and persistent sadness were abnormal in children.

Therefore, a distinction must be made between certain behaviours considered as developmentally normal in children and adolescence, and those considered as symptomology of mental distress. In a study conducted by Hurley et al. (2017), parents expressed their concern regarding difficulties they face in differentiating between 'normal' behaviour and symptoms of mental distress in their children. This is believed to be a major barrier affecting a parent's ability to recognise mental distress in children and adolescents, with parents often attributing distress-related behaviours and symptoms as normative (Johnston & Burke, 2020). The difficulty many parental figures face in judging the severity of their child's problem behaviour associated with mental distress (developmentally normative versus clinically concerning) may be a consequence of lacking appropriate knowledge of mental health literacy, with this impeding parental figure assessment and recognition of their child's mental distress, and their decisions of help-seeking (Godoy & Carter, 2013).

Research has also identified parental figures are more likely to help-seek for boys in comparison to girls after controlling for symptom severity, particularly in relation to externalising distress (Bussing et al., 2003; Johnston & Burke, 2020; Ohan & Visser, 2009; Zimmerman, 2005). While the reasoning for this is not entirely clear, limited research suggests parental figure disparities in help-seeking for boys versus girls may be due to differences in parental knowledge and beliefs about particular mental distress, whereby, parental figures may

be more inclined to associate externalising distress with boys, and are consequently not aware of the need for treatment for girls (Zimmerman, 2005). Further reasoning for this disparity also suggests parental figures may perceive boys to have higher benefit from treatment services than girls, particularly for externalising distress (Ohan & Visser, 2009).

Additionally, without appropriate knowledge of the importance of early help-seeking and treatment for child and adolescent mental distress (an important aspect of mental health literacy), even parental figures who recognise their young child's mental distress may choose to "wait and see" whether the problematic behaviour and mental distress improves over time, or they may determine their child to be 'too young' for treatment (Godoy & Carter, 2013). Consistent with this, Pavuluri et al. (1996) found 79.4% of parents who recognised problematic behaviour but chose to not seek-help for their child's mental distress believed their child's problematic behaviour would get better on its own. This highlights the importance of parental figure perceptions of mental distress severity, perceptions of the importance and need for treatment intervention, and associated parental figure worry as important factors influencing motivation for change through help-seeking.

Godoy and Carter (2013) also highlight the need to recognise important sociocultural considerations on parental figure recognition and help-seeking for child and adolescent mental distress, due to the influence sociocultural contexts have on knowledge, norms, values, and explanatory models parental figures use to determine and respond to mental distress. In particular, it is proposed ethnicity and culture may play a significant role in the help-seeking process due to important cultural values, beliefs, norms and practices influencing recognition of child and adolescent mental distress and help-seeking (Cauce et al., 2002; Godoy & Carter, 2013). It is believed perceptions of what behaviours are considered as problematic and a form of mental distress differs between ethnic and cultural groups, where behaviours perceived as mental distress in some cultures, may be perceived as ordinary in other cultures (Cauce et al., 2002). It is suggested culture also influences differing beliefs regarding appropriate help-seeking and treatment (Godoy & Carter, 2013), with some cultures viewing outside help and treatment as 'shameful' (Cauce et al., 2002). However, overseas research remains conflicted in regard to the influence ethnicity has on recognition and decisions to help-seek; while research has established disparities in the rates of help-seeking and service utilisation across ethnic groups (Bussing et al., 2003; Johnston & Burke, 2020), other research has found no significant differences (Thurston et al., 2015).

Additionally, motivation for help-seeking, particularly formal versus informal help-seeking, is also influenced by parental figures attitudes towards help-seeking (Tulley et al.,

2019), and consideration of the costs versus benefits of seeking help for their child's mental distress (Godoy & Carter, 2013). Formal help-seeking refers to seeking help from mental health professionals and treatment services; in contrast, informal help-seeking consists of friends, family, and parenting books (Tapp et al., 2018). Perceived costs of help-seeking and treatment utilisation include monetary costs, time, effort, stigma of labelling, and negative perceptions of help-seeking; while benefits involve the perceived importance of changing the current situation and mitigating the adverse consequences of mental distress (Godoy & Carter, 2013). For example, findings from both Lawrence et al. (2015) and Tapp et al. (2018) research indicated Australian parental figures had a preference for managing their child's mental distress by themselves or seeking informal help through advice from family and friends, rather than professional mental health treatment services.

The preference for informal help-seeking and support for child and adolescent mental distress may be influenced by negative parental attitudes and beliefs related to formal mental health services. Whereby, Reardon et al. (2017) identified trust, confidence, and dismissiveness in relation to mental health professionals as significant attitudinal barriers to parental figures help-seeking and accessing formal mental health treatment for their child or adolescent. Further, Hansen et al. (2021) found parental figures had hesitation to seek formal help from professionals due to fears of being judged, blamed, social stigma surrounding mental distress, and fears of not being listened to by professionals.

It is important to acknowledge, although the stages in the help-seeking pathway are often discussed in a sequential manner, Godoy and Carter (2013) highlight the sequential movement along these stages is not always guaranteed. For example, parental figure recognition of their child's mental distress does not necessarily lead to help-seeking or service utilisation, with many parental figures who have concerns regarding their child's behaviour and symptomology associated with mental distress refraining from engaging with professional services (Godoy & Carter, 2013). While acknowledging there are many reasons for parental figures refraining from help-seeking and treatment utilisation for their child's mental distress, one of the most significant contributors overall is low levels of knowledge regarding mental health literacy (Tully et al., 2019). Thus, parental figures may have little understanding of the benefits of mental health treatment, where to seek help, or misconceptions of their child's distress.

Overall, this highlights the importance of parental figures possessing mental health literacy knowledge, in order to recognise when children and adolescents are experiencing

mental distress, understand the importance of seeking-help, and accordingly, help facilitate access to help-seeking services.

Summary

In summary, Chapter One highlighted the concerning prevalence of child and adolescent mental distress in Aotearoa New Zealand, and outlined various individual, societal, psychosocial, familial and parenting factors which can contribute to children and adolescents' vulnerability to experiencing mental distress. Additionally, externalising and internalising manifestations of distress were discussed, and ADHD, MDD, and generalised anxiety disorder were outlined, with these three types of distress being the focus of this current research. Harmful impacts the experience of mental distress has on important domains in children and adolescents lives were discussed, highlighting the importance of early intervention through utilisation of professional treatment services. Evidence regarding unmet mental distress needs within Aotearoa New Zealand's child and adolescent population was presented, providing rationale in concluding there to be a significant gap between child and adolescent mental health prevalence, and service use in Aotearoa New Zealand. The fundamental role parental figures have in facilitating child and adolescent access to mental health services was discussed, highlighting the importance of parental mental health literacy as an essential factor for early recognition, help-seeking, and treatment of child and adolescent mental distress. Godoy and Carter's (2013) theoretical model was outlined, discussing characteristics and perceptions of problem behaviours, child characteristics, sociocultural considerations, and motivation, as key factors which influence parental figure recognition and appraisal of child and adolescent mental distress, and their decisions to help-seek.

Chapter Two: Overview of the Current Study

This chapter begins with a rationale for the current research project, followed by an outline of the Research Questions, hypotheses, and exploratory questions.

Research Rationale

Overall, as discussed in Chapter One, parental figure knowledge of mental health literacy is essential in order for children and adolescents to receive help and professional treatment intervention for their mental distress. Overseas research has highlighted low levels of parental knowledge of mental health literacy, consequently contributing to the concerning inability for many parental figures to recognise their child's mental distress, and how to appropriately access help for their children; however, limited research is available on Aotearoa New Zealand data regarding this issue. Additionally, as discussed in Chapter One, there appears to be a significant gap between child mental distress prevalence and service use in Aotearoa New Zealand, with research indicating mental distress in a large number of Aotearoa New Zealand children remains unrecognised and untreated. Therefore, to address the gap in Aotearoa New Zealand research on parental figure mental health literacy, and better understand the gap in child mental distress prevalence and service use in Aotearoa New Zealand, the intention of this current research is to investigate Aotearoa New Zealand parental figures' knowledge of mental health literacy. The research sought to gain an understanding as to their ability to recognise and appropriately seek help for mental distress in children and adolescents, while also investigating the impact of factors which have previously been found in overseas research, outlined in Chapter One, to influence parental figure recognition of child and adolescent distress and their help-seeking intentions. Specifically, these factors include a child's age, and type of mental distress.

Research Questions and Hypotheses

Based on previous overseas research discussed in Chapter One, along with Godoy and Carter (2013) theoretical model, the following research questions and hypotheses for this study are:

Research question one: – Does parental figure recognition of child and adolescent mental distress predict their help-seeking intentions?

Hypothesis one: Parental figure recognition of child and adolescent mental distress will lead to a higher likelihood of help-seeking.
Research question two – part a: Does a child's age influence parental figure ability to recognise child and adolescent mental distress?
Research question two – part b: Does a child's age influence parental figure help-seeking intentions for child and adolescent mental distress?
Hypothesis two (a): Parental figures will have higher recognition rates of mental distress for the 14-year-old adolescent vignette.
Hypothesis two (b): Parental figures will have greater willingness to seek help for the 14-year-old adolescent vignette.
Research question three – part a: Does the type of distress influence parental figure distress recognition?
Research question three – part b: Does the type of distress influence parental figure help-seeking intentions?
Hypothesis three (a): Externalising distress will lead to higher parental figure recognition of mental distress in comparison to the internalising distress vignette and the control vignette.
Hypothesis three (b): Externalising distress will lead to greater parental figure willingness to seek help in comparison to the internalising distress vignette and the control vignette.

Exploratory Questions

Exploratory question one: Can parental figures correctly recognise the mental distress diagnosis for each vignette?
Exploratory question two – part a: Do parental figures have a preference regarding informal versus formal help-seeking methods?
Exploratory question two – part b: Why do parental figures prefer informal versus formal help-seeking methods?
Exploratory question three: Are there common themes as to why parental figures choose to seek, or not seek, help for the internalising, externalising and control vignettes?
Exploratory question four: What are the common barriers parental figures perceive in regard to help-seeking?

Chapter Three: Methodology

Chapter Three presents the methodology of this research. Firstly, the number of parental figures who participated in the current research, along with a summary of their demographics are outlined. Following this, the materials used in the research are explained, providing descriptions of the vignettes utilised and the survey design. The procedure is then outlined, providing details regarding ethical approval, recruitment of parental figure participants, ethical principles in practice, and the removal process of bot responses. Next, the research design is discussed, with descriptions detailing the analytic strategy, conduction of power analysis, missing data, and coding of the survey data.

Participants

In total 312 participants residing in Aotearoa New Zealand accessed the online survey. Of these, 69 (22.1%) did not proceed further to participate in the main questions of the survey. This was comprised of 29 participants who accessed the survey information sheet but did not proceed to the initial demographic questions; 37 participants who completed some, or all, of the initial demographic questionnaire but did not proceed further to the main questions of the survey; and three participants who were unable to proceed due to not meeting the survey criteria. Therefore, for the purpose of accurate analysis, these 69 responses have been excluded from the survey analysis, and a total of 243 survey responses were included in the following analyses. The relatively high percentage of participants who did not proceed to the main survey questions may have been due to the length of the survey, with the information sheet proposing a time commitment of around 20 minutes to complete the survey, depending on individual reading speed and the amount of information participants wished to include on their open-ended responses. The survey took an average of around 16 minutes and 22 seconds (M=973.28 seconds) for participants to complete.

To ensure the appropriate demographic was utilised, participants were eligible to take part in the study if they met a range of criteria. Participants were required to: be over the age of 21, currently reside in Aotearoa New Zealand, and be a parental figure to a child between the age of five to eighteen-years-old, with a parental figure including any individual who is a biological parent, guardian, caregiver, or of equivalency.

This specific age range of the child(ren) in participants care was selected due to being a relevant proximity to the ages of the 8-year-old child and 14-year-old adolescent utilised in the

vignettes (further information regarding the vignettes can be found in the following sections). Additionally, adolescents over the age of 18 are able to make their own mental health decisions more independently without requiring parental figures consent when accessing mental health services (Ministry of Health, 1998), and are less likely to require parental figure support in accessing services (Logan & King, 2001); and children under the age of five are often difficult to identify and diagnose symptoms of mental distress due to the child still undergoing rapid developmental changes (Klitzing et al., 2015). Therefore, the criteria for participants to be a parental figure to a child between the age of five to eighteen-years-old represents relevant ages in regard to the vignettes utilised, as well as ages where participants will require and utilise knowledge of mental health literacy to help seek for their child.

Demographics

Parental figure participants answered an initial demographic questionnaire reporting on the gender they identify as, their age, ethnicity, residential location, the age of children currently in their care, how they found out about the survey. In order to remove any potential hesitations parental figures may have had in participating in the study, surveys were completed anonymously, with this also encouraging participants to answer honestly, assisting in minimising the likelihood of response bias. Further, during the initial demographic questions, if participants responded they were under 21 years old, or did not have a child in their care, they were unable to continue with the survey. These participants received a message explaining they did not meet the eligibility criteria, and were offered the opportunity to enter their email address in order to be provided with the results of the study at the completion of the analysis.

As seen in Table 1 to follow, parental figure participants ranged in age group from 21 to 70 years of age, with a mean age group of 40-50 years. It is important to acknowledge the age-groups used to ascertain parental figure's age accidentally had an overlap between numbers. However, as gaining knowledge of participant age-groups was merely for demographic insight, would not have effected any of the analyses. Two-hundred-and-nineteen participants identified as female (90.1%), twenty-two participants identified as male (9.1%), one participant identified as 'other' (0.4%), and one participant chose not to respond (0.4%). One-hundred-and-ninety-nine (81.9%) identified as New Zealand/European, twenty-two participants (9.1%) identified as New Zealand Māori, six participants identified as Asian (2.5%), four participants identified as Pacific Peoples (1.6%), one participant identified as Middle Eastern/Latin American/African (MELAA) (0.4%), ten participants (4.1%) identified as belonging to other cultural groups, and one participant chose not to respond (0.4%). The

majority of participants resided in the Manawatū-Whanganui region (53.9%), followed by the Auckland/Te Tai Tokerau region (13.2%).

In regard to the parental figure participants' own child in their care, the most frequently occurring age groups of children consisted of five-years-old (16.7%), 9-years-old (16.7%), 11-years-old (15.9%), and 16-years-old (16.3%). In total, out of the 243 participants, there were 466 children reported to be in their care, indicating many participants have multiple children in their care.

In total, 66.7% of participants found out about this study through social and/or online media platforms, 23.5% through friends and/or family, 9.1% through 'other' sources, and 0.8% chose not to respond.

Table 1

Demographic Information of Survey Participants

Variable	Level	%	*n*
Gender	Female	90.1	219
	Male	9.1	22
	Other	0.4	1
	Missing Data	0.4	1
Age	21-25	2.1	5
	25-30	5.3	13
	30-40	36.2	88
	40-50	43.2	105
	50-60	12.8	31
	60-70	0.4	1
Ethnicity	NZ/European	81.9	199
	Māori	9.1	22
	Asian	2.5	6
	Pacific Peoples	1.6	4
	MELAA	0.4	1
	Other	4.1	10
	Missing data	0.4	1

Current residential region	Northland/Te Tai Tokerau	0.8	2
	Auckland/Tamaki-makau-rau	13.2	32
	Bay of Plenty/Te Moana-a-Toi	2.9	7
	Waikato	4.5	11
	Taranaki	0.4	1
	Gisborne/Te Tai Rāwhiti	1.2	3
	Hawke's Bay/Te Matau-a-Māui	5.3	13
	Manawatū-Whanganui	53.9	131
	Wellington/Te Whanga-nui-a-Tara	7.0	17
	Marlborough/Te Tauihu-o-te-waka	1.6	4
	Canterbury/Waitaha	4.5	11
	Otago/Ōtākou	2.1	5
	Southland/Murihiku	1.2	3
	Missing data	1.2	3
Participant's child(rens) age	Five	16.7	41
	Six	12.7	31
	Seven	11.8	29
	Eight	13.5	33
	Nine	16.7	41
	Ten	14.7	36
	Eleven	15.9	39
	Twelve	13.1	32
	Thirteen	12.2	30
	Fourteen	13.1	32
	Fifteen	13.9	34
	Sixteen	16.3	40
	Seventeen	10.2	25
	Eighteen	9.4	23
Found study	Social and/or online media platform	66.7	162
	Friend and/or family	23.5	57
	Other	9.1	22
	Missing data	0.8	2

Participants Perceived Knowledge of Mental Health

Whilst completing the initial demographic questions of the survey, participants were also asked about their perceived knowledge of mental health through the question "how much do you feel you know about mental health?". This question was followed by an open-ended question asking participants "how have you come to have this knowledge?". These questions were important to gain an understanding of the level of knowledge parental figure participants had on the topic of mental health prior to participating in the study, and to also gain insight into common avenues participants have obtained their mental health knowledge.

Overall, the majority of participants (30.9%) reported themselves as having reasonable mental health knowledge; followed by 28.8% of participants reporting they possessed some mental health knowledge; and 25.1% of participants reported having good mental health knowledge. Participants commonly mentioned obtaining their mental health knowledge through avenues such as reading/internet/media/television (25.3%); lived personal experience of mental distress (24.1%); and through courses/seminars/academic study (22.0%).

Table 2

Participants' Knowledge of Mental Health

Variable	Level	%	*n*
Mental health knowledge	Minimal knowledge	5.3	13
	Some knowledge	28.8	70
	Reasonable knowledge	30.9	75
	Good knowledge	25.1	61
	Excellent knowledge	9.9	24
Obtained knowledge	Lived personal experience	24.1	59
	Child with mental distress	10.2	25
	Wider whānau/friend with mental distress	14.7	36
	General life experience and social interactions	17.1	42
	Interactions with mental health professionals	8.6	21

	Work(ed) in the child and/or mental health field	18.0	44
	General work experience	4.9	12
	Courses/seminars/academic study	22.0	54
	Reading/internet/media/television	25.3	62
	Other	4.5	11
	Missing data	7.4	18

Note. Some participants have been entered into more than one field in 'obtained knowledge'.

Materials

Vignettes

In total, six vignettes - based on criteria from the Diagnostic and Statistical Manual of Mental Disorders – Fifth Edition (American Psychiatric Association, 2013) - were utilised in this current research. Vignettes were used in this study as previous research has found vignettes are an effective method to ascertain people's mental health literacy and help-seeking choices (Aydin et al., 2020; Bonanno et al., 2021; Thurston et al., 2015). Specifically, the vignettes were comprised of two internalising vignettes describing ADHD, two externalising vignettes describing depression with comorbid anxiety, and two control cases vignettes without clinically significant distress, with each pair describing an 8-year-old and a 14-year-old, reflecting age relevant distress symptomology. The two different age groups for the vignettes were utilised in order to analyse the influence of the child's age on distress recognition and help-seeking intentions amongst parental figure participants. Two externalising vignettes and two internalising vignettes were used in order to determine whether the type of distress influenced parental figure's distress recognition and help-seeking intentions for the child vignettes. Further, the names of the children in the vignettes were kept gender neutral – Alex, Sam, and Jordan - and were referred to as he/she and his/her throughout each vignette, in order to remove gender as an extraneous variable which could influence participants' responses.

Characteristics described in the externalising/ADHD vignettes included distractibility, forgetfulness, difficulty paying attention, restlessness, worsening school grades, and difficulty regulating emotions; with these symptoms occurring in both schooling and home environments. Characteristics described in the internalising/depression comorbid anxiety vignettes include excessive and difficulty to control worry, difficulty concentrating, worsening school grades, irritability, depressed emotions, withdrawing from friends and family, and diminished interest in activities; with these symptoms occurring in both school and home

environments. Characteristics of the control vignettes include good school grades and friend group, occasionally getting angry, upset, the child has arguments with peers, shows remorse, and enjoys participating in extra-curricular activities, with these symptoms occurring in both school and home environments.

All the vignettes which were utilised were obtained and adapted from various previous studies. Full consent to use and adapt the previous studies' vignettes was obtained from the studies' authors and co-authors. Specifically, the two vignettes describing ADHD in an 8-year-old and 14-year-old, and the two control case vignettes describing an 8-year-old and 14-year-old without clinically significant distress were adapted from two vignettes created by and used in the Thurston et al. (2015) study; and the two vignettes describing depression with comorbid anxiety in an 8-year-old and 14-year-old were adapted from a vignette created by and used in Aydin et al. (2020). To gain consent to use and adapt their vignettes for this current study, the studies' authors were contacted through email, and were provided with background information regarding the current study, and a description of potential adaptions that may be made to the vignettes.

In order for the vignettes to be tailored to Aotearoa New Zealand's specific socio-culture, the vignettes were adapted slightly through changing names, terminology, and language. Further, layperson language was utilised to describe distress symptomology in the vignettes, to ensure parental figures could understand the symptomology without requiring specialised knowledge of distress symptomology/psychology. This was particularly important due to the depression with comorbid anxiety vignettes having been adapted from Aydin et al.'s (2020) study, which investigated general practitioners' recognition of anxiety disorders in children. Thus, the vignettes were adapted to avoid any use of medical terminology. For the full vignettes, see Appendix A.

Overall, the vignettes were identical for each participating parental figure; however, the child's age was evenly randomised amongst participants to gain an equal number of responses for each of the two different age groups. In total, 121 participants received the three 8-year-old vignettes to respond to, and 122 participants received the three 14-year-old vignettes to respond to. This enabled the influence of the child's age on distress recognition and help-seeking intentions to be analysed amongst parental figure participants without the participants being aware the child's age was a variable, in order to prevent response bias. Additionally, as the age of the vignettes described distress symptomology of either an 8-year-old child or 14-year-old adolescent, the vignettes wording differed slightly to accurately represent the age of the child and adolescent. However, symptomology and level of distress described in the

vignettes remained consistent for each type of distress. Participants were provided with three vignettes each to respond to, with these three vignettes consisting of either the three 8-year-old vignettes, or the three 14-year-old vignettes.

Additionally, the vignettes were intentionally kept short to avoid participants from becoming fatigued and experiencing boredom whilst completing the survey, while also ensuring enough information was included in the vignettes to achieve an accurate description of clinically significant distress symptomology criteria was met. Mitigating participant boredom whilst completing the survey was important in order to prevent loss of motivation and attention, which can negatively impact the quality of participant responses, or lead to participants leaving the survey (Ben-Nun, 2008).

As the vignettes utilised were obtained and adapted from previous studies, these vignettes had previously been reviewed by general practitioners (Aydin et al., 2020) and a panel of clinicians (Thurston et al., 2015) to ensure the vignettes described accurate symptomology and clinically significant levels of distress. However, to further ensure diagnostic accuracy, the vignettes were reviewed by a clinical psychologist to ensure the two ADHD and two depression with comorbid anxiety vignettes met criteria for displaying clinically significant level of distress, and that the two control vignettes did not meet any criteria for clinically significant level of distress.

Survey (Parent Perspective on Children's Emotional Well-being)

Based on the six vignettes, the online survey 'Parent Perspective on Children's Emotional Well-being' was designed specifically for this study, asking participants to answer a series of questions corresponding to each vignette (see Appendix B for the full survey). The survey was created on the online survey platform Qualtrics by Massey University's Computer Programmer/Analyst for the School of Psychology. The survey was identical for each participating parental figure, other than the two differing age groups used for the vignettes, which were equally randomised amongst participants. For each participant, the survey consisted of the nine initial demographic questions, three vignettes, and depending on each participants' responses, participants responded to total of three or four corresponding questions for each vignette. Three additional questions were also asked depending on participants' responses to the help-seeking questions.

The main survey questions consisted of a dichotomous question asking participants "do you think this child is experiencing any form of mental distress?", with participants answering either 'yes' or 'no'. For participants who selected 'yes' to the previous question, a follow up

question “what diagnosis do you think best fits this child?” was then asked in the format of a drop-down menu containing six different diagnosis (Attention-Deficit-Hyperactivity-Disorder, Depression, Anxiety, Depression AND Anxiety, Bipolar, Obsessive-Compulsive-Disorder) and an ‘other’ option allowing participants to provide a written answer if they felt none of the listed diagnoses fit the child described in the vignette. This question allowed for a more in-depth exploration of parental figure mental health knowledge through determining the percentage of participants who could accurately determine the type of mental distress depicted in each vignette.

All participants were then asked, “if you were responsible for this child, would you seek help for them?” with participants responding dichotomously, answering either ‘yes’ or ‘no’. A final open-ended question was then asked to all participants, “Please help us understand the reason for your answer”, thus providing participants with the ability to elaborate further on their help-seeking decisions for the child vignettes if they chose to do so. This question allowed for a more in-depth exploration of parental figure attitudes, beliefs, and knowledge towards help-seeking and their reasoning behind their decision to help seek or not. Further, for participants who selected ‘yes’ to help-seeking for at least one of the three vignettes, an additional three questions to further investigate their help-seeking intentions were asked. These questions consisted of “we are interested in knowing which of the following would be your preferred method of help-seeking?”, whereby, participants were provided with a drop-down menu containing seven formal and informal sources of help-seeking (general practitioner, counsellor, psychologist, friends, family, parenting books, online sources), along with an ‘other’ option allowing participants to provide a written answer if they felt none of the listed sources of help-seeking would be their preferred method. The purpose of this question was to identify whether parental figures had a preference for either informal or formal help-seeking sources. An open-ended follow up question “why would you prefer to seek this source of help?” was then asked, allowing for participants to elaborate further on their reasoning behind their preferred help-seeking source if they chose to do so. These questions were also important for a more in-depth exploration of parental figure attitudes, beliefs, and knowledge towards help-seeking sources. A final open-ended question was then asked, “we are also interested in, when people want to seek help, what, if any, would you personally perceive as barriers that may get in the way of seeking help for a child/adolescent experiencing distress?” The purpose of this question was to gain further insight in understanding specific parental figure perceived barriers which may hinder the help-seeking process for a child experiencing mental distress. Importantly, none of the questions in the survey were compulsory for

participants to respond to, to ensure that ethically, participants could decline to answer any questions (Massey University, 2017).

Procedure

Ethics Approval

This study was conducted in compliance with the Massey University Code of Ethical Conduct for Research, Teaching and Evaluations Involving Human Participants (Massey University, 2017); following peer review, this research was deemed to be of low risk, and a low risk notification application was submitted to the Massey University Human Ethics Committee online system (see Appendix C for ethical approval documentation). In addition to this, the Human Ethics low risk notification for this study was selected as part of a low risk notification audit by the Research Ethics Office to be reviewed by the Chairs of the Massey University Human Ethics Committees. As a result, the Chairs confirmed the Human Ethics application for this study was deemed as meeting low risk criteria.

Recruitment of Survey Participants

Participants were recruited from thirteen out of the sixteen regions in the North and South Islands of Aotearoa New Zealand (as displayed back in Table 1). To recruit participants and distribute the survey to parental figures throughout Aotearoa New Zealand, community parenting groups and organisations which were relevant to this study's specific participant demographics were contacted, provided with information regarding the research and survey, and asked for their consent and approval to post the survey on their relevant social networking platforms and websites. Parenting groups and organisations which were contacted and provided their consent to advertise the survey included Parenting Place, Kiwi Families, Tots to Teens, and Kidspot; however, the four parenting organisations which were contacted declined the request to post the survey on their relevant social networking platforms.

Further, efforts were made to ensure a representative community sample of Aotearoa New Zealand parental figures was achieved. Therefore, Massey University Communications and Public Affairs team were also contacted and consented to publishing a media release advertising the survey. The survey media release was published on Massey University's website, Facebook, and LinkedIn. Massey University's Facebook media release post circulated around Facebook, with the post shared 29 times, including to the 'Palmerston North Community' Facebook group and 'Massey@Distance' Facebook group. Overall, public access to the survey remained open for seven weeks, allowing for the recruitment of an appropriate

number of participants required for the survey. Once the required sample size was obtained, public access to the survey was discontinued.

Ethical Principles in Practice

Prior to participation in the study, potential participants were provided with an information sheet detailing the eligibility criteria, purpose and design of the survey, any potential risks involved in the survey, how the data collected will be managed, and information regarding their rights as participants. Informed consent was obtained from each participant preceding commencement of the survey, see Appendix B for full online survey and information sheet.

Parental figures who provided informed consent to participate in the study completed an initial demographic questionnaire containing nine questions before proceeding on to complete the main questions of the survey on the online platform Qualtrics. While it was estimated the survey should take around 20 minutes for each participant to complete, depending on their reading speed and how much or little information they wished to include, no time limit to complete the survey was given, thus allowing participants to respond with no additional time pressures. This also allowed participants to pause and return to the survey as they wished.

On completion of the survey, including for those who chose to exit early, information of website links and hotline numbers for mental health and help-seeking were provided, in the event of the vignettes raised any potential concerns for parental figures own child's mental well-being, or if the vignettes triggered any previous negative emotions for a parental figure if their child, whānau, or themselves, have experienced similar situations.

To thank participants for taking time to participate in the study, participants could choose to enter a draw to win one of 25 $40 digital GiftPay vouchers through entering their email at completion of the survey. A total of $1000 in vouchers was funded through the School of Psychology Post Graduate Research Fund at Massey University. Participants were also provided with the opportunity to enter their email address in order to be provided with the results of the study at the completion of the analysis, with this enabling knowledge to flow both ways, and acknowledging the importance of giving back knowledge to participants.

Importantly, to maintain participant privacy and confidentiality, a separate prize draw and results survey was created to ensure participants' email addresses were not associated with their main survey responses. In total, 60.9% (n = 148) participants entered the prize draw, and 56.4% (n = 137) participants opted to receive the results of the study.

Removal Process of Internet Bots

During recruitment of participants, internet bots, defined as computer software designed simulate human activity through performing automated tasks (Griffin et al., 2021), entered into both the main survey and the prize draw and results survey. Consequently, this resulted in numerous illegitimate responses due to bot-generated data. While bot-generated data in surveys is not an uncommon occurrence in internet-based survey research (Griffin et al., 2021), it was important to ensure data integrity was maintained through strategically analysing the raw data to identify bot responses. Advice regarding cleaning methods to identify bot responses was sought from Massey University's Computer Programmer/Analyst for the School of Psychology, as well as utilising data cleaning methods which have been found to be effective for bot identification in previous research (Xu et al., 2022).

Overall, the analysis strategy for the main survey firstly consisted of downloading the Qualtrics response data of the main survey into Microsoft Excel and sorting the data by start date oldest to newest. This allowed timing checks to be conducted, whereby, bot responses were identified by examining survey start and finish times to identify groups of surveys which both commenced and ended at identical times on the same date, and also had remarkably similar survey duration times. Open-ended responses checks were also performed; this involved examining survey responses to the open-ended questions for duplicated, repetitive, and non-sensical responses. Additionally, the question "how did find out about this study?" which was asked in the demographic questionnaire section of the survey, unintentionally provided a validity test of responses, and was used as another tool to identify bot responses. Participants were provided with four possible recruitment avenues to select from, with one consisting of 'my child's school'. This answer was initially included due to being a potential recruitment avenue; however, this recruitment option was not utilised. Therefore, survey responses which selected 'my child's school' were also able to be deemed as bots. All responses identified as bots were highlighted in red. Full documentation of the bot identification process is available on request.

The prize draw and results survey was also strategically analysed to identify bot responses in order to ensure only legitimate participants were entered into the randomised prize draw for the 25x $40 GiftPay vouchers. After downloading the Qualtrics response data of the prize and results survey into Microsoft Excel, to determine which responses on the prize draw and results survey align with the main survey bot responses; the main survey was sorted by end date, and the prize and results survey sorted by start date. These two Microsoft Excel documents were situated side by side on the screen. Thorough examination was then conducted

to carefully identify the prize and results survey responses which start times align with the end times of the bot responses previously identified in the main survey. Responses identified as bots on the prize and results survey were highlighted in red and subsequently deleted.

After the initial bot identification analysis had been conducted, Massey University's Computer Programmer/Analyst for the School of Psychology also examined the Microsoft Excel main survey data document to provide confidence the bots responses from the main survey had all been identified and data integrity had been maintained. This process involved looking at indicators of bot responses, such as examining time stamps and location data; with majority of the identified bot responses being from foreign countries. This process confirmed all previously identified bot responses had been identified correctly.

Overall, after multiple examinations of the raw data conducted by both the researcher and Massey University's Computer Programmer/Analyst for the School of Psychology to identify bot responses, a total of 338 main survey responses were identified as bot responses; and 358 prize and results survey responses were identified as bot responses. This discrepancy between identified number of bots is attributed to some responses being identified as having no connection to the main survey in regard to start and finish time stamps, thus it is believed the bot bypassed the main survey.

Importantly, in order to mitigate any ethical issues associated with privacy and confidentiality during the bot identification process, survey responses remained anonymous; therefore, participant's IP address or location longitude and latitude were not used in the bot identification process. An exception to this was during Massey University's Computer Programmer/Analyst for the School of Psychology examination for bot responses; he had special access to participant location in regard to country, which was used to further identify and confirm bot responses. As the Computer Programmer/Analyst was conducting the bot identification analysis from a technical perspective, looking exclusively at the indicators of a valid and invalid response, and not at the actual survey results, this process was deemed ethically valid, after discussions regarding ethical considerations between researcher and research supervisor.

Research Design

Analytic Strategy

This research employed a mixed-methods analytic strategy; with the data obtained from participants responses to the survey being analysed both quantitatively and qualitatively. A

predominantly quantitative methodological approach was used to fulfil the primary aim of understanding Aotearoa New Zealand parental figure's mental health literacy knowledge, regarding distress recognition and help-seeking intentions for child and adolescent mental distress. For the quantitative component of the study, simple logistic regression and Pearson's chi-square tests were used to investigate factors which influence parental figure recognition of distress and help-seeking intentions to investigate the research questions. IBM SPSS statistics 28.0 for MAC was utilised to statistically analyse responses.

A qualitative component using content analysis was also utilised to investigate the exploratory questions. Content analysis of the open-ended responses allowed for a more in-depth exploration and understanding (Greene et al., 1989) of parental figure attitudes, beliefs, and knowledge towards help-seeking intentions, help-seeking sources, and parental figure perceived barriers which may hinder the help-seeking process for children experiencing mental distress.

Mixed Methods Research has been argued to be an advantageous approach through providing greater understanding of research phenomena (De Silva, 2011; Greene et al., 1989); while also providing an opportunity for the researcher to develop and enhance research skills (De Silva, 2011). Implementing both quantitative and qualitative analyses allow for expansion of inquiry and enables both analysis methods to be complementary to each other, yielding enhanced, strengthened results, and a greater comprehensive understanding of phenomena (Greene et al., 1989). Adopting a mixed methods approach is particularly useful for this study, with the qualitative component providing understanding of parental figure attitudes, beliefs, and knowledge regarding help-seeking, thus complementing the core quantitative analysis section exploring factors which influence help-seeking intentions. This provided the opportunity to obtain an enhanced understanding of Aotearoa New Zealand parent mental health literacy knowledge.

Hypothesis one was tested by running multiple versions of analysis using simple logistic regression for each form of distress in order to determine whether parental figure recognition of child and adolescent distress predicts parental figure help-seeking intentions.

Hypothesis two (a) and (b) were tested by running multiple versions of analysis for each form of distress using Pearson's chi-square test in order to compare the proportion of parental figures who recognise distress across the 8-year-old and 14-year-old vignettes, and the proportion of parental figures who would seek help across the 8-year-old and 14-year-old vignettes.

Hypothesis three (a) and (b) were tested by running multiple versions of analysis using Pearson's chi-square test, in order to compare the proportion of parental figures who recognised distress for the 8-year-old and 14-year old externalising, internalising, and control vignettes; and the proportion of parental figures who would seek help for the 8-year-old and 14-year-old externalising, internalising, and control conditions.

Power Analysis

To ensure this study possessed an appropriate sample size in order to ensure sufficient power (thus avoiding type II error and rendering an ethically valid study) (Columb & Atkinson, 2016b), an appropriate sample size was calculated through conducting a power analysis for each hypothesis using the G-Power web tool; with the sample size of this study being derived from the largest sample size obtained out of all power analysis conducted for each hypothesis. For all power analyses an alpha of 0.05 and power value of 0.8 was used. The following paragraphs outline the sample sizes obtained.

For hypothesis one, a power analysis for logistic regression was conducted using an odds ratio of 6.68. This was calculated using two probability estimates: a probability of 0.56 for parental figures who recognised distress and would respond 'yes' to help-seeking, and a probability of 0.16 for parental figures who did not recognise distress but would still respond 'yes' to help-seeking. Additionally, for this power analysis, a binominal distribution was assumed. A sample size of 47 was calculated. While research remains limited in this area, the two probability estimates were based off an overseas study conducted by Oh and Bayer (2015); they found 56% of parents who recognised problematic behaviour associated with mental distress in their child sought help, whereas, of parents who did not recognise problematic behaviour in their child, 16% of these parents still sought help.

For hypothesis two (a), after conducting a power analysis for Pearson's chi-square test using a proportion p1 of 0.7 for recognition of distress for the 8-year-old vignette and proportion p2 of 0.85 for recognition of distress for the 14-year-old vignette, a sample size of 242 was calculated. While research in this area remains limited, these probability estimates were adapted from an overseas study conducted by Bussing et al. (2003), who found of parents with a child with ADHD, 85% recognised mental distress in their 5-8-year-old child, and 90% recognised mental distress in their 9-11-year-old child. However, these findings are significantly higher compared to other studies investigating parental figure recognition of child mental distress, in the absence of comparing specific child age groups (Oh & Bayer, 2015; Pescosolido et al., 2008; Teagle, 2002; Thurston et al., 2015). Additionally, this current study

is looking at a higher age group using 14-year-old vignettes, in comparison to 9–11-year-olds in Bussing et al. (2003). Therefore, these factors were both taken into consideration when making the decision to use the proportions of p1 0.7 and p2 0.85.

For hypothesis two (b), after conducting a power analysis for Pearson's chi-square test using a proportion p1 of 0.4 for help-seeking for the 8-year-old vignette and proportion p2 of 0.6 for help-seeking for the 14-year-old vignette, a sample size of 194 was calculated. While research in this area remains limited, these proportion estimates were adapted from an overseas study conducted by Bussing et al. (2003), which found of parents with a child with ADHD, only 33% had sought help by getting their 5–8-year-old child professionally evaluated, and 44% had sought help by getting their 9-11 year old child professionally evaluated. However, as this current study is looking at parental figure intentions to help seek, in comparison to parental figures who actually sought help in Bussing et al.'s (2003) study, help-seeking intentions were estimated to be slightly higher than those found in Bussing et al. (2003). Therefore, a decision to use a proportion p1 of 0.4 was made. Further, as this research is looking at a higher age group using 14-year-old vignettes, in comparison to 9–11-year-olds in Bussing et al. (2003), a decision to use a proportion p2 of 0.6 was made, based off an estimate that parental figures will choose to help-seek for the 14-year-old vignette around 50% more than the 8-year-old vignette.

For hypothesis three (a), after conducting a power analysis for Pearson's chi-square test using a proportion p1 of 0.7 for parental figure recognition of distress for the internalising distress vignette and proportion p2 of 0.9 for parental figure recognition of distress for the externalising vignette, a sample size of 124 was calculated. While research in this area also remains limited, the proportion estimates were based on a similar overseas study conducted by Thurston et al. (2015), which found the odds of parents recognising child externalising distress was 1.29 times higher than recognising internalising distress. A decision to use the proportion p1 of 0.7 was made based on this being the lowest estimated proportion of distress recognition in the power analysis conducted for hypothesis two (a). Therefore, in line with Thurston et al. (2015) findings, the estimated proportion of 0.7 for parental figure recognition of internalising distress was multiplied by 1.29 to derive a proportion estimate of 0.9 for parental figure recognition of externalising distress.

For hypothesis three (b), after conducting a power analysis for Pearson's chi-square test using a proportion p1 of 0.4 for parental figure intentions to seek help for the internalising distress vignette and proportion p2 of 0.74 for parental figure intentions to seek help for the externalising distress vignette, a sample size of 66 was calculated. While research in this area also remains limited, the proportion estimates were based on a similar overseas study

conducted by Thurston et al. (2015), which found parents were 1.85 times more likely to report intentions to seek help for child externalising distress in comparison to child internalising distress. A decision to use the proportion p1 of 0.4 was made based on this being the lowest estimated proportion for help-seeking in the power analysis conducted for hypothesis two (b). Therefore, in line with Thurston et al. (2015) findings, the proportion estimate of 0.4 for parental figure help-seeking for internalising distress was multiplied by 1.85 to derive a proportion estimate of 0.74 for parental figure help-seeking for externalising distress.

Therefore, after conducting a power analysis for each hypothesis, it was decided a sample size of 300 would be aimed for; with this sample size derived from the highest sample size estimate of 242 for hypothesis two (a), while also considering an allowance for data that may need to be excluded due to missing data, for example, parental figures not completing the whole survey, or parental figures responding they do not have a child in their care.

Missing Data

Of the 243 usable/eligible survey responses, 10 responses had only responded to one or two out of the three vignettes. For the purpose of accurate analysis, these responses have been excluded from the two quantitative analyses performed on SPSS: simple logistic regression and Pearson's chi-square test, testing hypothesis one, hypotheses two (a) and (b), and hypotheses three (a) and (b), respectively. However, these 10 responses have been included in all other analysis.

Coding of Survey Data

Survey data for the distress recognition questions "do you think this child is experiencing any form of mental distress?" and the help-seeking intention questions "if you were responsible for this child, would you seek help for them?" was coded numerically on SPSS, whereby a 'yes' response was coded as '1', a 'no' response was coded as '0', and missing data was coded as -99.

Chapter Four: Results

Chapter Four reports the results of the current study, and is presented in seven main sections. The first section provides a summary of parental figure responses to the vignettes. The second section reports the logistic regression findings for research question one. The third section reports the Pearson's chi-square findings for research question two – part a, followed by findings from research question two - part b. Following this, the fourth section reports the Pearson's chi-square findings for research question three – part a, followed by findings from research question three – part b. The fifth and sixth section present findings for exploratory questions one and two(b), respectively. Finally, the last section reports the qualitative content analysis findings of exploratory questions two(b), three, and four, respectively.

Summary of Vignette Survey Responses

The following section provides descriptive statistics of the frequencies of parental figure responses to recognition of distress and help-seeking intentions in regard to the three 8-year-old vignettes and three 14-year-old vignettes. Table 3 provides descriptive data, presenting the percentage and number of parental figures responses, as well as information on missing data from responses for each vignette. Presented in Table 4 is the mean, standard deviation, kurtosis, and skew of responses.

Table 3

Summary of Vignette Survey Responses Part One

Externalising distress	**Level**	**%**	***n***
8yr distress recognition	Yes	90.1	109
	No	7.4	9
	Missing data	2.5	3
8yr help-seeking	Yes	92.6	112
	No	5	6
	Missing data	2.5	3
14yr distress recognition	Yes	93.4	114
	No	4.1	5
	Missing data	2.5	3
14yr help-seeking	Yes	91	111
	No	3.3	4
	Missing data	5.7	7
Internalising distress	**Level**	**%**	***n***
8yr distress recognition	Yes	95	115
	No	3.3	4
	Missing data	1.7	2
8yr help-seeking	Yes	94.2	114
	No	4.1	5
	Missing data	1.7	2
14yr distress recognition	Yes	94.3	115
	No	0.8	1
	Missing data	4.9	6
14yr help-seeking	Yes	88.5	108
	No	4.9	6
	Missing data	6.6	8
Control no significant distress	**Level**	**%**	***n***
8yr distress recognition	Yes	14	17
	No	85.1	103
	Missing data	0.8	1
8yr help-seeking	Yes	23.1	28
	No	73.6	89
	Missing data	3.3	4
14yr distress recognition	Yes	16.4	20
	No	80.3	98
	Missing data	3.3	4
14yr help-seeking	Yes	24.6	30
	No	68.9	84
	Missing data	6.6	8

Table 4

Summary of Vignette Survey Responses Part Two

Externalising distress	**Mean**	**Std. Deviation**	**Kurtosis**	**Skew**
8yr distress recognition	.92	.27	8.60	-3.23
8yr help-seeking	.95	.22	15.42	-4.14
14yr distress recognition	.96	.20	19.71	-4.62
14yr help-seeking	.97	.18	24.91	-5.15
Internalising distress	**Mean**	**Std. Deviation**	**Kurtosis**	**Skew**
8yr distress recognition	.97	.18	25.91	-5.24
8yr help-seeking	.96	.20	19.71	-4.62
14yr distress recognition	.99	.09	116.00	-10.77
14yr help-seeking	.95	.22	14.75	-4.06
Control no significant distress	**Mean**	**Std. Deviation**	**Kurtosis**	**Skew**
8yr distress recognition	.14	.35	2.37	2.08
8yr help-seeking	.24	.43	-.48	1.24
14yr distress recognition	.17	.38	1.21	1.79
14yr help-seeking	.26	.44	-.83	1.09

As represented in Table 4, the mean values for the 8-year-old and 14-year-old externalising and internalising distress vignettes are in close proximity to 1, indicating the majority of parental figures were able to accurately recognise the child and adolescent in each vignette was experiencing a form of mental distress; with the small values of standard deviations between *SD*=.09 and *SD*=.27 indicating consistency amongst parental figure's responses. In contrast, for the 8-year-old and 14-year-old control vignettes, the mean values are in closer proximity to 0, indicating majority of parental figures accurately identified no indication of distress in the control vignettes; however, the standard deviations between *SD*=.35 and *SD*=.44 show slightly more variability in parental figure responses in comparison to the externalising and internalising vignette responses.

Research Question One

Does parental figure recognition of child and adolescent mental distress predict their help-seeking intentions?

Six independent analyses using simple logistic regression were conducted in order to determine whether parental figure recognition of child and adolescent mental distress predicts their help-seeking intentions, see Tables 6, 8, 10, 12, 14, and 16. To provide additional information, a crosstabulation has also been provided for each analysis to display distress recognition and help-seeking frequencies, see Tables 5, 7, 9, 11, 13, and 15. It was hypothesised parental figure recognition of child and adolescent mental distress would lead to a higher likelihood of help-seeking.

Analysis one: Does parental figure recognition of distress predict their help-seeking intentions for the 8-year-old externalising distress vignette.

Table 5

Distress and Help-Seeking Intention Frequencies for 8-Year-Old Externalising Distress Vignette

			Help-Seeking Intentions		
			No	Yes	Total
Distress Recognition	No	Count	4	5	9
		% of Total	3.4%	4.3%	7.7%
	Yes	Count	2	106	108
		% of Total	1.7%	90.6%	92.3%
Total		Count	6	111	117
		% of Total	5.1%	94.9%	100.0%

Table 6

Simple Logistic Regression Distress Recognition and Help-Seeking Intentions for 8-Year-Old Externalising Distress

Variables in the Equation

							95% C.I.for EXP(B)	
		B	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1	Distress Recognition	3.747	.980	14.635	1	<.001	42.400	6.217	289.150
	Constant	.223	.671	.111	1	.739	1.250		

Note. R^2 = .12 (Cox & Snell), .36 (Nagelkerke).

Simple logistic regression was performed to analyse the relationship between parental figure recognition of distress and parental figure help-seeking intentions in regard to an 8-year-old child externalising distress.

As shown in Table 6, parental figure recognition of 8-year-old child externalising distress is a positive and significant (b=3.75, s.e.=.98, $p < .001$) predictor of the probability of parental figures help-seeking for 8-year-old child externalising distress, with the OR indicating that the odds of intentions to help-seek were 42.40 times higher for parental figures who recognised distress than those who did not (95% CI [6.22, 289.15). This large OR seems to represent the fact that the overwhelming majority of parental figures recognised distress and would help-seek for the 8-year-old externalising distress vignette, as displayed in Table 5[6].

[6] This note regarding large OR also applies to logistic regression analyses two, four, and five.

Analysis two: Does parental figure recognition of distress predict their help-seeking intentions for the 8-year-old internalising distress vignette.

Table 7

Distress Recognition and Help-Seeking Frequencies for 8-Year-Old Internalising Distress

			Help-Seeking Intentions		
			No	Yes	Total
Distress Recognition	No	Count	2	2	4
		% of Total	1.7%	1.7%	3.4%
	Yes	Count	3	112	115
		% of Total	2.5%	94.1%	96.6%
Total		Count	5	114	119
		% of Total	4.2%	95.8%	100.0%

Table 8

Simple Logistic Regression Distress Recognition and Help-Seeking Intentions for 8-Year-Old Internalising Distress

Variables in the Equation

								95% C.I.for EXP(B)	
		B	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1	Distress Recognition	3.620	1.159	9.762	1	.002	37.333	3.854	361.630
	Constant	.000	1.000	.000	1	1.000	1.000		

Note. R^2 = .07 (Cox & Snell), .23 (Nagelkerke).

Simple logistic regression was performed to analyse the relationship between parental figure recognition of distress and parental figure help-seeking intentions in regard to an 8-year-old child internalising distress.

As shown in Table 8, parental figure recognition of 8-year-old child internalising distress is a positive and significant (b=3.62, s.e.=1.16, p = .002) predictor of the probability of parental figures help-seeking for 8-year-old child internalising distress, with the OR indicating that the odds of intentions to help-seek were 37.33 times higher for parental figures who recognised distress than those who did not (95% CI [3.85, 361.63]).

Analysis three: Does parental figure recognition of distress predict their help-seeking intentions for the 8-year-old control distress vignette.

Table 9

Distress Recognition and Help-Seeking Frequencies for 8-Year-Old Control Vignette

			Help-Seeking Intentions		
			No	Yes	Total
Distress Recognition	No	Count	85	15	100
		% of Total	72.6%	12.8%	85.5%
	Yes	Count	4	13	17
		% of Total	3.4%	11.1%	14.5%
Total		Count	89	28	117
		% of Total	76.1%	23.9%	100.0%

Table 10

Simple Logistic Regression Distress Recognition and Help-Seeking Intentions for 8-Year-Old Control Vignette

Variables in the Equation

							95% C.I.for EXP(B)	
		B	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1	Distress Recognition	2.913	.637	20.937	1	<.001	18.417	5.288	64.143
	Constant	-1.735	.280	38.363	1	<.001	.176		

Note. R^2 = .20 (Cox & Snell), .30 (Nagelkerke).

Simple logistic regression was performed to analyse the relationship between parental figure recognition of distress and parental figure help-seeking intentions in regard to an 8-year-old child control vignette without clinically significant distress.

As shown in Table 10, parental figure recognition of 8-year-old child control vignette without clinically significant distress is a positive and significant (b=2.91, s.e.=0.64, p <.001) predictor of the probability of parental figures help-seeking for the 8-year-old child control vignette without clinically significant distress, with the OR indicating that the odds of

intentions to help-seek were 18.42 times higher for parental figures who recognised distress than those who did not (95% CI [5.29, 64.14]).

Analysis four: Does parental figure recognition of distress predict their help-seeking intentions for the 14-year-old externalising distress vignette.

Table 11

Distress Recognition and Help-Seeking Frequencies for 14-Year-Old Externalising Distress

			Help-Seeking Intentions		
			No	Yes	Total
Distress Recognition	No	Count	3	2	5
		% of Total	2.6%	1.7%	4.3%
	Yes	Count	1	109	110
		% of Total	0.9%	94.8%	95.7%
Total		Count	4	111	115
		% of Total	3.5%	96.5%	100.0%

Table 12

Simple Logistic Regression Distress Recognition and Help-Seeking Intentions for 14-Year-Old Externalising Distress

Variables in the Equation

								95% C.I.for EXP(B)	
		B	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1	Distress Recognition	5.097	1.357	14.099	1	<.001	163.500	11.432	2338.461
	Constant	-.405	.913	.197	1	.657	.667		

Note. R^2 = .13 (Cox & Snell), .52 (Nagelkerke).

Simple logistic regression was performed to analyse the relationship between parental figure recognition of distress and parental figure help-seeking intentions in regard to a 14-year-old adolescent externalising distress. As shown in Table 12, parental figure recognition of 14-year-old adolescent externalising distress is a positive and significant (b=5.1, s.e.=1.36, *p* <.001) predictor of the probability of parental figures help-seeking for the 14-year-old

adolescent externalising distress, with the OR indicating that the odds of intentions to help-seek were 163.50 times higher for parental figures who recognised distress than those who did not (95% CI [11.43, 2338.46]).

Analysis five: Does parental figure recognition of distress predict their help-seeking intentions for the 14-year-old internalising distress vignette.

Table 13

Distress Recognition and Help-Seeking Frequencies 14-Year-Old Internalising Distress

			Help-Seeking Intentions		
			No	Yes	Total
Distress Recognition	No	Count	1	0	1
		% of Total	0.9%	0.0%	0.9%
	Yes	Count	5	108	113
		% of Total	4.4%	94.7%	99.1%
Total		Count	6	108	114
		% of Total	5.3%	94.7%	100.0%

Table 14

Simple Logistic Regression Distress Recognition and Help-Seeking Intentions for 14-Year-Old Internalising Distress

Variables in the Equation

								95% C.I.for EXP(B)	
		B	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1	Distress Recognition	24.276	40192.962	.000	1	1.000	34894248 688.191	.000	.
	Constant	-21.203	40192.962	.000	1	1.000	.000		

Note. R^2 = .0.5 (Cox & Snell), .15 (Nagelkerke).

Simple logistic regression was performed to analyse the relationship between parental figure recognition of distress and parental figure help-seeking intentions in regard to a 14-year-old adolescent internalising distress.

As shown in Table 14, while the OR found is extremely large, no statistically significant relationship was found ($p = 1.00$), whereby, parental figure's recognition of 14-year-old adolescent internalising distress did not influence help-seeking intentions. This finding is likely due to the lack of variance in the data, where all but one parental figure recognised distress in the 14-year-old internalising vignette, as seen in Table 13. As a result, there is no way to compare parental figure help-seeking intentions in those who recognised distress versus those who did not.

Analysis six: Does parental figure recognition of distress predict their help-seeking intentions for the 14-year-old control distress vignette.

Table 15

Distress Recognition and Help-Seeking Frequencies for 14-Year-Old Control Vignette

			Help-Seeking Intentions		
			No	Yes	Total
Distress Recognition	No	Count	81	14	95
		% of Total	71.1%	12.3%	83.3%
	Yes	Count	3	16	19
		% of Total	2.6%	14.0%	16.7%
Total		Count	84	30	114
		% of Total	73.7%	26.3%	100.0%

Table 16

Simple Logistic Regression Distress Recognition and Help-Seeking Intentions for 14-Year-Old Control Vignette

Variables in the Equation

								95% C.I.for EXP(B)	
		B	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1	14yr Control Distress Recognition	3.429	.693	24.521	1	<.001	30.857	7.941	119.907
	Constant	-1.755	.289	36.782	1	<.001	.173		

Note. $R^2 = .27$ (Cox & Snell), .39 (Nagelkerke).

Simple logistic regression was performed to analyse the relationship between parental figure recognition of distress and parental figure help-seeking intentions in regard to a 14-year-old adolescent control vignette without clinically significant distress.

As shown in Table 15, parental figure recognition of 14-year-old adolescent control vignette without clinically significant distress is a positive and significant (b=3.43, s.e.=0.69, p <.001) predictor of the probability of parental figures help-seeking for the 14-year-old adolescent control vignette without clinically significant distress, with the OR indicating that the odds of intentions to help-seek were 30.86 times higher for parental figures who recognised distress than those who did not (95% CI [7.94, 119.91]).

Research Question Two – Part a

Influence of Child Age on Parental Figure Recognition of Distress

Three analyses using Pearson's chi-square test were conducted in order to determine whether a child's age influences parental figure ability to recognise child and adolescent mental distress. A crosstabulation has been provided for each analysis to display distress recognition frequencies (see Tables 17 through to 19). It was hypothesised parental figures would have higher recognition of mental distress for the 14-year-old adolescent vignettes in comparison to the 8-year-old vignettes.

Analysis one: Influence of child age on parental figure recognition of externalising distress.

Table 17

Child Age in Vignette and Externalising Distress Recognition

			Distress Recognition		
			No	Yes	Total
Vignette Age	14yr	Count	5	114	119
		% within Vignette Age	4.2%	95.8%	100.0%
	8yr	Count	9	109	118
		% within Vignette Age	7.6%	92.4%	100.0%
Total		Count	14	223	237
		% within Vignette Age	5.9%	94.1%	100.0%

Pearson's chi-square test was performed to analyse whether there was a relationship between parental figure recognition of externalising distress and a child's age, in regard to a 14-year-old and 8-year-old.

The chi-square test showed that there was not a statistically significant association between the age of the child in the vignettes and parental figure recognition of externalising distress X^2 (1, n = 237) = 1.25, asymptomatic p = .26. As seen in Table 17, it was found that 92.4% (n = 109) of parental figures recognised distress in the 8-year-old vignette, and 95.8% (n =114) of parental figures recognised distress in the 14-year-old vignette.

The chi-square analysis was re-conducted as an exact test to ensure the results of the chi-square analysis would still hold when re-conducted as an exact test. Findings from the Fisher's exact test also found no statistically significant association (two-tailed, p = .29).

Analysis two: Influence of child age on parental figure recognition of internalising distress.

Table 18

Child Age in Vignette and Internalising Distress Recognition

			Distress Recognition		
			No	Yes	Total
Vignette Age	14yr	Count	1	115	116
		% within Vignette Age	0.9%	99.1%	100.0%
	8yr	Count	4	115	119
		% within Vignette Age	3.4%	96.6%	100.0%
Total		Count	5	230	235
		% within Vignette Age	2.1%	97.9%	100.0%

Pearson's chi-square test was performed to analyse whether there is a relationship between parental figure recognition of internalising distress and a child's age, in regard to a 14-year-old and 8-year-old.

The chi-square test showed that there was not a statistically significant association between the age of the child in the vignettes and parental figure recognition of internalising distress X^2 (1, n = 235) = 1.76, asymptomatic p = .18. As seen in Table 18, it was found that 115 (n = 96.6%) of parental figures recognised distress in the 8-year-old vignette, and 99.1% (n = 115) of parental figures recognised distress in the 14-year-old vignette.

Additionally, the assumption that the expected frequencies should be greater than 5 was not met, whereby 50% of cells had an expected frequency count less than 5. As a result, this can cause a loss of statistical power, leading to inaccuracy of significance (Field, 2009). Therefore, a Fisher's exact test was also performed, which confirmed the finding of a no statistically significant association (two-tailed, $p = .37$).

Analysis three: Influence of child age on parental figure recognition of control distress.

Table 19

Child Age in Vignette and Control Vignette Distress Recognition

			Distress Recognition		
			No	Yes	Total
Vignette Age	14yr	Count	98	20	118
		% within Vignette Age	83.1%	16.9%	100.0%
	8yr	Count	103	17	120
		% within Vignette Age	85.8%	14.2%	100.0%
Total		Count	201	37	238
		% within Vignette Age	84.5%	15.5%	100.0%

Pearson's chi-square test was performed to analyse whether there is a relationship between parental figure recognition of distress in the control vignette with no clinically significant distress and a child's age, in regard to a 14-year-old and 8-year-old.

The chi-square test showed that there was not a statistically significant association between the age of the child in the vignettes and parental figure recognition of distress in the control vignette with no clinically significant distress X^2 (1, $n = 238$) = .35, asymptomatic $p = .55$. As seen in Table 19, it was found that 14.2% ($n = 17$) of parental figures recognised distress in the 8-year-old vignette, and 16.9% ($n = 20$) of parental figures recognised distress in the 14-year-old vignette.

The chi-square analysis was also re-conducted as an exact test to ensure the results of the chi-square analysis would still hold when re-conducted as an exact test. Findings from the Fisher's exact test also found no statistically significant association (two-tailed, $p = .59$).

Research Question Two – Part b

Influence of Child Age on Parental Figure Help-Seeking Intentions

Three independent analyses using Pearson's chi-square test were conducted in order to determine whether a child's age influences parental figure help-seeking intentions. A crosstabulation has been provided for each analysis to display help-seeking intention frequencies (see Tables 20 through to 22). It was hypothesised externalising distress will lead to greater parental figure willingness to seek help in comparison to the internalising distress condition and the control condition.

Analysis one: Influence of child age on parental figure help-seeking intentions for externalising distress.

Table 20

Child Age in Vignette and Help-Seeking Intentions for Externalising Distress

			Help-Seeking Intentions		
			No	Yes	Total
Vignette Age	14yr	Count	4	111	115
		% within Vignette Age	3.5%	96.5%	100.0%
	8yr	Count	6	112	118
		% within Vignette Age	5.1%	94.9%	100.0%
Total		Count	10	223	233
		% within Vignette Age	4.3%	95.7%	100.0%

Pearson's chi-square test was performed to analyse whether there is a relationship between parental figure help-seeking intentions for externalising distress and a child's, age in regard to a 14-year-old and 8-year-old.

The chi-square test showed that there was not a statistically significant association between the age of the child in the vignettes and parental figure help-seeking intentions for externalising distress X^2 (1, n = 233) = .37, asymptomatic p = .55. As seen in Table 20, it was found that 94.9% (n = 112) of parental figures indicated they would seek help for the 8-year-old vignette, and 96.5% (n = 111) of parental figures indicated they would seek help for the 14-year-old vignette.

Additionally, the assumption that the expected frequencies should be greater than 5 was not met, whereby 25% of cells had an expected frequency count less than 5. Therefore, a Fisher's exact test was also performed, which confirmed the finding of a no statistically significant association (two-tailed, $p = .75$).

Analysis two: Influence of child age on parental figure help-seeking intentions for internalising distress.

Table 21

Child Age in Vignette and Help-Seeking Intentions for Internalising Distress

			Help-Seeking Intentions		
			No	Yes	Total
Vignette Age	14yr	Count	6	108	114
		% within Vignette Age	5.3%	94.7%	100.0%
	8yr	Count	5	114	119
		% within Vignette Age	4.2%	95.8%	100.0%
Total		Count	11	222	233
		% within Vignette Age	4.7%	95.3%	100.0%

Chi-square test was performed to analyse whether there is a relationship between parental figure help-seeking intentions for internalising distress and a child's, age in regard to a 14-year-old and 8-year-old.

The chi-square test showed that there was not a statistically significant association between the age of the child in the vignettes and parental figure help-seeking intentions for internalising distress X^2 (1, $n = 233$) = .15, asymptomatic $p = .70$. As seen in Table 21, it was found that 95.8% ($n = 114$) of parental figures indicated they would seek help for the 8-year-old vignette, and 94.7% ($n = 108$) of parental figures indicated they would seek help for the 14-year-old vignette.

The chi-square analysis was also re-conducted as an exact test to ensure the results of the chi-square analysis would still hold when re-conducted as an exact test. Findings from the Fisher's exact test also found no statistically significant association (two-tailed, $p = .77$).

Analysis three: Influence of child age on parental figure help-seeking intentions for control distress vignettes.

Table 22

Influence of Child Age in Vignette on Help-Seeking for Control Vignettes

			Help-Seeking Intentions		
			No	Yes	Total
Vignette Age	14yr	Count	84	30	114
		% within Vignette Age	73.7%	26.3%	100.0%
	8yr	Count	89	28	117
		% within Vignette Age	76.1%	23.9%	100.0%
Total		Count	173	58	231
		% within Vignette Age	74.9%	25.1%	100.0%

Chi-square test was performed to analyse whether there is a relationship between parental figure help-seeking intentions for the control vignette with no clinically significant distress and a child's age, in regard to a 14-year-old and 8-year-old.

The chi-square test showed that there was not a statistically significant association between the age of the child in the vignettes and parental figure help-seeking intentions for the control vignette with no clinically significant distress X^2 (1, n = 231) = .18, asymptomatic p = .68. As seen in Table 22, it was found that 23.9% (n = 28) of parental figures indicated they would seek help for the 8-year-old vignette, and 26.3% (n = 30) of parental figures indicated they would seek help for the 14-year-old vignette.

The chi-square analysis was also re-conducted as an exact test to ensure the results of the chi-square analysis would still hold when re-conducted as an exact test. Findings from the Fisher's exact test also found no statistically significant association (two-tailed, p = .76).

Research Question Three – Part a

Influence of Distress Type on Parental Figure Recognition of Distress

Six independent analyses using Pearson's chi-square test were conducted in order to determine whether the type of mental distress described in the vignettes (externalising, internalising, and control) influenced parental figure recognition of child and adolescent mental distress. A crosstabulation has been provided for each analysis to display distress recognition frequencies (see Tables 23 through to 28). Odds ratios were also calculated for tests which showed statistically significant association, in order to measure the association between the type of distress and parental figure distress recognition. It was hypothesised externalising distress will lead to higher parental figure recognition of mental distress in comparison to the internalising distress vignette and the control vignette.

Analyses one, two, and three: Influence of distress type on parental figure recognition of distress for the 8-year-old vignettes.

Table 23

Influence of Distress Type (Externalising and Internalising) on Distress Recognition for 8-Year-Old Vignettes

			Distress Recognition		
			No	Yes	Total
Distress Type	Externalising	Count	9	109	118
		% within Distress Type	7.6%	92.4%	100.0%
	Internalising	Count	4	115	119
		% within Distress Type	3.4%	96.6%	100.0%
Total		Count	13	224	237
		% within Distress Type	5.5%	94.5%	100.0%

As seen in Table 23, Pearson's chi-square test was performed to analyse whether there was a relationship between the type of distress described in the vignettes (externalising and internalising) and parental figure recognition of distress in regard to the 8-year-old vignettes.

Results found no statistically significant association between the type of distress and parental figure recognition of distress in the 8-year-old externalising and internalising distress

vignettes X^2 (1, n = 237) = 2.08, asymptomatic p = .15. Findings from the Fisher's exact test also found no statistically significant association (two-tailed, p =.17).

Table 24

Influence of Distress Type (Externalising and Control) on Distress Recognition for 8-Year-Old Vignettes

			Distress Recognition		
			No	Yes	Total
Distress Type	Externalising	Count	9	109	118
		% within Distress Type	7.6%	92.4%	100.0%
	Control	Count	103	17	120
		% within Distress Type	85.8%	14.2%	100.0%
Total		Count	112	126	238
		% within Distress Type	47.1%	52.9%	100.0%

Table 25

Influence of Distress Type (Internalising and Control) on Distress Recognition for 8-Year-Old Vignettes

			Distress Recognition		
			No	Yes	Total
Distress Type	Internalising	Count	4	115	119
		% within Distress Type	3.4%	96.6%	100.0%
	Control	Count	103	17	120
		% within Distress Type	85.8%	14.2%	100.0%
Total		Count	107	132	239
		% within Distress Type	44.8%	55.2%	100.0%

As seen in Table 24 and Table 25, two additional Pearson's chi-square tests were performed to analyse whether there was a relationship between the type of distress described in the vignettes (externalising/control and internalising/control) and parental figure recognition of distress in regard to the 8-year-old vignettes.

There was a statistically significant association between the type of distress and parental figure recognition of distress in the 8-year-old externalising and control distress

vignettes X^2 (1, n = 238) = 146.06, asymptomatic p <.001, and internalising and control distress vignettes X^2 (1, n = 239) = 164.35, asymptomatic p <.001. Findings from both of the Fisher's exact tests also found statistically significant association (two-tailed, p <.001 and p <.001, respectively). Based on the odds ratio, the odds of parental figures recognising distress in the 8-year-old vignettes was 73.38 times higher (95% CI [31.31, 171.97]) if the child was experiencing externalising distress in comparison to the control with no clinically significant distress; and 174.19 times higher (95% CI [56.77, 534.50]) if the child was experiencing internalising distress in comparison to the control with no clinically significant distress.

Analyses four, five, and six: Influence of the type of distress on parental figure recognition of distress for the 14-year-old vignettes.

Table 26

Influence of Distress Type (Externalising and Internalising) on Distress Recognition for 14-Year-Old Vignettes.

			Distress Recognition		
			No	Yes	Total
Distress Type	Externalising	Count	5	114	119
		% within Distress Type	4.2%	95.8%	100.0%
	Internalising	Count	1	115	116
		% within Distress Type	0.9%	99.1%	100.0%
Total		Count	6	229	235
		% within Distress Type	2.6%	97.4%	100.0%

As seen in Table 26, Pearson's chi-square test was performed to analyse whether there was a relationship between the type of distress described in the vignettes (externalising and internalising) and parental figure recognition of distress in regard to the 14-year-old vignettes.

Results found no statistically significant association between the type of distress and parental figure recognition of distress in the 14-year-old externalising and internalising distress vignettes X^2 (1, n = 235) = 2.63, asymptomatic p = .11. Findings from the Fisher's exact test remained the same, finding no statistically significant association (two-tailed, p =.11).

Table 27

Influence of Distress Type (Externalising and Control) on Distress Recognition for 14-Year-Old Vignettes.

			Distress Recognition		
			No	Yes	Total
Distress Type	Externalising	Count	5	114	119
		% within Distress Type	4.2%	95.8%	100.0%
	Control	Count	98	20	118
		% within Distress Type	83.1%	16.9%	100.0%
Total		Count	103	134	237
		% within Distress Type	43.5%	56.5%	100.0%

Table 28

Influence of Distress Type (Internalising and Control) on Distress Recognition for 14-Year-Old Vignettes.

			Distress Recognition		
			No	Yes	Total
Distress Type	Internalising	Count	1	115	116
		% within Distress Type	0.9%	99.1%	100.0%
	Control	Count	98	20	118
		% within Distress Type	83.1%	16.9%	100.0%
Total		Count	99	135	234
		% within Distress Type	42.3%	57.7%	100.0%

As seen in Table 27 and Table 28, two additional Pearson's chi-square tests were performed to analyse whether there was a relationship between the type of distress described in the vignettes (externalising/control and internalising/control) and parental figure recognition of distress in regard to the 14-year-old vignettes.

There was a statistically significant association between the type of distress and parental figure recognition of distress in the 14-year-old externalising and control distress vignettes X^2 (1, n = 237) = 149.91, asymptomatic p <.001, and internalising and control distress vignettes X^2 (1, n = 234) = 161.88, asymptomatic p <.001. Findings from both of the Fisher's exact tests also found statistically significant association (two-tailed, p <.001 and p

<.001, respectively). Based on the odds ratio, the odds of parental figures recognising distress in the 14-year-old vignettes was 111.72 times higher (95% CI [40.43, 308.74]) if the adolescent was experiencing externalising distress in comparison to the control with no clinically significant distress; and 563.50 times higher (95% CI [74.28, 4274.95]) if the adolescent was experiencing internalising distress in comparison to the control with no clinically significant distress.

Research Question Three – Part b

Influence of Distress Type on Parental Figure Help-Seeking Intentions for Distress

Six independent analyses using Pearson's chi-square test were conducted in order to determine whether the type of mental distress described in the vignettes (externalising, internalising, and control) influenced parental figure help-seeking intentions for child and adolescent mental distress A crosstabulation has been provided for each analysis to display distress recognition frequencies (see Tables 29 through to 34). Odds ratios were also calculated for tests which showed statistically significant association, in order to measure the association between the type of distress and parental figure distress recognition. It was hypothesised externalising distress will lead to greater parental figure willingness to seek help in comparison to the internalising distress condition and the control condition.

Analyses one, two, and three: Influence of distress type on parental figure help-seeking intentions for the 8-year-old vignettes.

Table 29

Influence of Distress Type (Externalising and Internalising) on Help-Seeking Intentions for 8-Year-Old Vignettes.

			Help-Seeking Intentions		
			No	Yes	Total
Distress Type	Externalising	Count	6	112	118
		% within Distress Type	5.1%	94.9%	100.0%
	Internalising	Count	5	114	119
		% within Distress Type	4.2%	95.8%	100.0%
Total		Count	11	226	237
		% within Distress Type	4.6%	95.4%	100.0%

As seen in Table 29, Pearson's chi-square test was performed to analyse whether there was a relationship between the type of distress described in the vignettes (externalising and internalising) and parental figure help-seeking intentions for distress in regard to the 8-year-old vignettes.

Results found no statistically significant association between the type of distress and parental figure help-seeking intentions for the 8-year-old externalising and internalising distress vignettes X^2 (1, n = 237) = .10, asymptomatic p = .75. Findings from the Fisher's exact test also found no statistically significant association (two-tailed, p =.77).

Table 30

Influence of Distress Type (Externalising and Control) on Help-Seeking Intentions for 8-Year-Old Vignettes.

			Help-Seeking Intentions		
			No	Yes	Total
Distress Type	Externalising	Count	6	112	118
		% within Distress Type	5.1%	94.9%	100.0%
	Control	Count	89	28	117
		% within Distress Type	76.1%	23.9%	100.0%
Total		Count	95	140	235
		% within Distress Type	40.4%	59.6%	100.0%

Table 31

Influence of Distress Type (Internalising and Control) on Help-Seeking Intentions for 8-Year-Old Vignettes.

			Help-Seeking Intentions		
			No	Yes	Total
Distress Type	Internalising	Count	5	114	119
		% within Distress Type	4.2%	95.8%	100.0%
	Control	Count	89	28	117
		% within Distress Type	76.1%	23.9%	100.0%
Total		Count	94	142	236
		% within Distress Type	39.8%	60.2%	100.0%

As seen in Table 30 and Table 31, two additional Pearson's chi-square tests were performed to analyse whether there was a relationship between the type of distress described in the vignettes (externalising/control and internalising/control) and parental figure help-seeking intentions for distress in regard to the 8-year-old vignettes.

There was a statistically significant association between the type of distress and parental figure help-seeking intentions for the 8-year-old externalising and control distress vignettes X^2 (1, n = 235) = 122.91, asymptomatic p <.001, and internalising and control distress vignettes X^2 (1, n = 236) = 127.14, asymptomatic p <.001. Findings from both of the Fisher's exact tests also found statistically significant association (two-tailed, p <.001 and p <.001, respectively). Based on the odds ratio, the odds of parental figures help-seeking for the 8-year-old vignettes were 59.33 times higher (95% CI [23.54, 149.57]) if the child was experiencing externalising distress in comparison to the control with no clinically significant distress; and 72.47 times higher (95% CI [26.90, 195.26]) if the child was experiencing internalising distress in comparison to the control with no clinically significant distress.

Analysis four, five, and six: Influence of distress type on parental figure help-seeking intentions for the 14-year-old vignettes.

Table 32

Influence of Distress Type (Externalising and Internalising) on Help-Seeking Intentions for 14-Year-Old Vignettes.

			Help-Seeking Intentions		
			No	Yes	Total
Distress Type	Externalising	Count	4	111	115
		% within Distress Type	3.5%	96.5%	100.0%
	Internalising	Count	6	108	114
		% within Distress Type	5.3%	94.7%	100.0%
Total		Count	10	219	229
		% within Distress Type	4.4%	95.6%	100.0%

As seen in Table 32, Pearson's chi-square test was performed to analyse whether there was a relationship between the type of distress described in the vignettes (externalising and internalising) and parental figure help-seeking intentions for distress in regard to the 14-year-old vignettes.

Results no statistically significant association between the type of distress and parental figure help-seeking intentions for the 14-year-old externalising and internalising distress vignettes X^2 (1, n = 229) = .44, asymptomatic p = .51. Findings from the Fisher's exact test also found no statistically significant association (two-tailed, p =.54).

Table 33

Influence of Distress Type (Externalising and Control) on Help-Seeking Intentions for 14-Year-Old Vignettes.

			Help-Seeking Intentions		
			No	Yes	Total
Distress Type	Externalising	Count	4	111	115
		% within Distress Type	3.5%	96.5%	100.0%
	Control	Count	84	30	114
		% within Distress Type	73.7%	26.3%	100.0%
Total		Count	88	141	229
		% within Distress Type	38.4%	61.6%	100.0%

Table 34

Influence of Distress Type (Internalising and Control) on Help-Seeking Intentions for 14-Year-Old Vignettes.

			Help-Seeking Intentions		
			No	Yes	Total
Distress Type	Internalising	Count	6	108	114
		% within Distress Type	5.3%	94.7%	100.0%
	Control	Count	84	30	114
		% within Distress Type	73.6%	26.3%	100.0%
Total		Count	90	138	228
		% within Distress Type	39.5%	60.5%	100.0%

As seen in Table 33 and Table 34, two additional Pearson's chi-square tests were performed to analyse whether there was a relationship between the type of distress described in the vignettes (externalising/control and internalising/control) and parental figure help-seeking intentions for distress in regard to the 14-year-old vignettes.

There was a statistically significant association between the type of distress and parental figure help-seeking intentions for the 14-year-old externalising and control distress vignettes X^2 (1, n = 229) = 119.26, asymptomatic p <.001, and internalising and control distress vignettes X^2 (1, n = 228) = 111.69, asymptomatic p <.001. Findings from both of the Fisher's exact tests also found statistically significant association (two-tailed, p <.001 and p <.001, respectively). Based on the odds ratio, the odds of parental figures help-seeking for the 14-year-old vignettes was 77.70 times higher (95% CI [26.36, 229.05]) if the adolescent was experiencing externalising distress in comparison to the control with no clinically significant distress; and 50.4 times higher (95% CI [20.05, 126.69]) if the adolescent was experiencing internalising distress in comparison to the control with no clinically significant distress.

Exploratory Question One

Can Parental Figures Correctly Recognise the Mental Distress Diagnosis for Each Vignette?

In the following section, the results pertaining to exploratory question one are presented in Table 35, displaying the percentage and number frequencies of parental figure responses to the survey question "what diagnosis do you think best fits this child?" This question was asked for each vignette, in the format of a drop-down menu containing six different diagnosis (Attention-Deficit-Hyperactivity-Disorder, Depression, Anxiety, Depression AND Anxiety, Bipolar, Obsessive-Compulsive-Disorder) and an 'other' option.

Table 35

Parental Figures' Recognition of Correct Mental Distress Diagnosis in Vignettes

Variable	Level	%	*n*
8yr externalising distress	ADHD	70.2	85
	Depression	0.8	1
	Anxiety	4.1	5
	Depression and anxiety	1.7	2
	Bipolar	0.8	1
	Other	12.4	15
14yr externalising distress	ADHD	73.8	90
	Depression	1.6	2
	Anxiety	4.9	6
	Depression and anxiety	4.1	5
	Bipolar	2.5	3
	Other	5.7	7
8yr internalising distress	ADHD	0.8	1
	Depression	3.3	4
	Anxiety	15.7	19
	Depression and anxiety	71.1	86
	Other	4.1	5

14yr internalising distress	Depression	6.6	8
	Anxiety	17.2	21
	Depression and anxiety	69.7	85

As shown in Table 35, the majority of parental figures were able to correctly identify the mental distress diagnosis described in each of the internalising and externalising vignettes. For the 8-year-old vignettes, 70.2% of parental figures (n = 85) correctly identified ADHD as the type of distress described in the externalising vignette; and 71.1% of parental figures (n = 86) correctly identified the internalising vignette to be describing both depression and anxiety. In regard to the 14-year-old vignettes, 73.8% of parental figures (n = 90) correctly identified ADHD as the type of distress described in the externalising vignette; and 69.7% of parental figures (n = 85) correctly identified the internalising vignette to be describing both depression and anxiety.

Exploratory Question Two (a)

Do Parental Figures Have a Preference for Informal or Formal Help-Seeking Methods?

In the following section, the results pertaining to exploratory question two (a) are presented in Table 36, displaying the percentage and number frequencies of parental figure responses to the survey question "we are interested in knowing which of the following would be your preferred method of help-seeking?" Parental figures selected from a drop-down menu containing seven formal and informal methods of help-seeking.

Table 36

Parental Figures' Preferred Method of Help-Seeking

Variable	Level	%	*n*
Formal help-seeking	General Practitioner	51.9	126
	Counsellor	16.0	39
	Psychologist	13.6	33
Informal help-seeking	Friends	0.8	2
	Family	1.6	4
	Online sources	2.1	5
	Other	4.9	12
	Missing data	9.1	22

In total, n = 221 parental figures responded to the question "we are interested in knowing which of the following would be your preferred method of help-seeking?" Significant differences were found between parental figure preference for formal versus informal help-seeking methods. It is evident parental figures had a preference for formal help-seeking services, with 81.5%, n=198 selecting a formal help-seeking service as their preferred method of help-seeking. Specifically, over half of parental figures (51.9%, n=126) responded their preferred method of help-seeking for a child and adolescent mental distress would be a general practitioner, followed by a counsellor (16%, n=39), and a psychologist (13.6%, n=33).

In contrast, the three provided options of informal help-seeking methods, consisting of friends, family, and online sources, were significantly less favourable as preferred help-seeking methods amongst parental figures, with only a total of 4.4% of parental figures (n=11) selecting an informal method as their preferred method of help-seeking.

Content Analysis

It was envisioned that the open-ended responses would provide descriptive insight and advance understanding of parental figures survey responses. The following section presents content analysis, identifying the existence and frequency of common themes which appeared within parental figures' open-ended responses, in regard to the exploratory questions two (b), three, and four.

To achieve validity of the content analysis, rules for coding were created to determine the inclusion and exclusion criteria of responses coded as a theme, in order to ensure consistency in the coding processes of identifying themes (Drisko & Maschi, 2015). An inductive approach to coding the data was employed, whereby themes were derived explicitly from the open-ended response data (Drisko & Maschi, 2015). Prior to explicitly identifying themes from the individual open-ended responses, all open-ended responses were initially read, in order to get a general familiarity with the open-ended response material, whilst also taking notes on general themes as they emerged. Themes were considered flexible, allowing for new themes which arose through the coding process to be added to the analysis. Themes were coded by frequency, whereby, the number of times a theme appeared in parental figures' open-ended responses was counted in order to determine the theme's frequency. It was determined specific words and phrases explicitly emphasising the same content would be included as a theme. In the instance where a parental figures' response was relevant to multiple themes, these were entered into all applicable themes, and responses which did not fit into criteria of a specific theme were not recorded. Additionally, coding was completed by hand due to the

ability to recognise errors such as misspelling, which coding software programmes may not pick up on.

After themes from the open-ended responses pertaining to each research question had been identified, quotations from the open-ended responses corresponding to each theme within the exploratory research questions were selected to be used as an illustrative example of each theme to provide further context and understanding.

Exploratory Question Two (b)

Why Do Parental Figures Prefer Formal/Informal Help-Seeking Methods?

To explore this question, for parental figures who selected 'yes' to help-seeking for at least one of the three vignettes, additional help-seeking questions were asked. In total, $n = 221$ parental figures responded to the question "we are interested in knowing which of the following would be your preferred method of help-seeking?" (refer back to Table 36 for more information). Parental figure's open-ended responses $n = 212$ to the follow-up question "why would you prefer to seek this source of help?" were analysed, corresponding to the preferred help-seeking method they had previously selected, to identify the common themes. For this exploratory question, a 'theme' was included if the frequency of a theme included at least five responses. An exception to this was within the informal help-seeking methods and 'other', which only a total of 23 parental figures selected as their preferred help-seeking method. Themes within 'friends and family', 'online sources', and 'other', were included if the frequency of a theme included at least three responses. Additionally, some parental figures responded to this question in regard to the children and adolescents in the vignettes, while others responded from a more personal perspective in regard to help-seeking for their own child(ren).

In the following section, Table 37 displays the frequencies of common themes which appeared within parental figures' open-ended responses. The most common themes pertaining to each help-seeking method are then discussed, illustrated by quotations taken from the open-ended responses.

Table 37

Why Do Parental Figures Prefer Formal/Informal Help-Seeking Methods?

Variable	Level	%	*n*
General practitioner	Referrals/resources	44.3	94
	First step/good starting point	17.5	37
	Trusted/rapport/history of child	9.4	20
	Check alternative causes/underlying health conditions	4.2	9
	Cost effective/accessible	2.4	5
Counsellor	Knowledgeable/professional	5.7	12
	Referrals	2.8	6
	Starting point	2.8	6
	Provide advice/strategies	2.4	5
	Personal experience	2.4	5
Psychologist	Professional/specialised/knowledgeable	14.2	30
Friends and Family	Insight/advice	2.4	5
Online sources	Gain knowledge/resources	1.4	3
Other	Insight from teacher/school	1.4	3

Within the open-ended responses, parental figures frequently discussed multiple reasons for preferring a particular method of help-seeking; therefore, some parental-figure responses have been entered into multiple themes pertaining to their chosen method of help-seeking. Additionally, numerous parental figures also included discussions of multiple help-seeking methods in their response. For the purpose of accurate analysis, any themes mentioned which deviate from their specific chosen method of help-seeking have not been included within other help-seeking method themes.

General Practitioner

Of the 126 parental figures who identified a general practitioner (GP) as their preferred method of help-seeking (as seen in Table 36), several themes emerged, providing insight into parental figure preference for help-seeking through a GP. Parental figures felt GPs were a good starting point in the help-seeking process, often due to the ability for GPs to provide referrals and resources for children experiencing mental distress; and also due to the trust, rapport, and history they had built with their GP over many years. Further, while the theme ‘good first

step/starting point' can underpin the majority of the other themes identified, many parental figures solely mentioned GPs as being a good first step but provided no further information as to why. Therefore, it was appropriate to categorise 'good first step/starting point' as an explicit theme.

> "I would go and see a GP for some form of triage - hoping they could help me get the right type of help for my child. GPs are the gatekeepers of the medical system!"

> "Using the GP as a starting point makes the most sense as they can then refer us to the appropriate support."

> "Initially I would go to our GP as he has been my doctor for many, many years and has also been the GP of my children since birth. He … has an understanding of my whole family. I trust him to provide me with advice, which would highly likely be a referral to the more specific help we may need."

> "I think it's best to start with the family GP, as they have the entire history of the child. They can point you in the direction of the right professional or organisation."

Parental figures also discussed a preference to help-seek for child mental distress through a GP due to their ability to investigate alternative causes and underlying health conditions which may be contributing to the symptomology a child is experiencing. Parental figures also discussed GPs being cost effective and easily accessible.

> "In the first instance, I'd seek help from a GP as a gateway… ruling out deficits in vision and hearing, along with other possible underlying health needs, is essential."

> "Faster help. If I went alone, I would get nowhere and be broke. If I get referred, they actually do shit."

Counsellor

Of the 39 parental figures who identified a counsellor as their preferred method of help-seeking (seen in Table 36), several themes emerged, providing insight into parental figure preference for help-seeking through a counsellor. The most commonly mentioned theme involved parental figures preferring counsellors due to them being professional, qualified and

knowledgeable in the area of mental distress and well-being. As these ideas are similar, responses which emphasise the content of being professional, qualified, and knowledgeable were incorporated into one theme.

> "I feel it would be a good first step for professional advice, from someone who is trained in the area of mental well-being."

> "They are qualified to work specifically with young people & build a relationship with them."

Parental figures also believed counsellors would be able to offer advice and strategies, as well as referrals, making them a preferable starting point for help-seeking for child mental distress. Referrals and good starting point have been merged into one theme for this method of help-seeking, as these were most commonly discussed simultaneously.

Within the open-ended responses, some parental figures also drew upon their own personal experiences with counsellors as a reason for counsellors being their preferred help-seeking method; thus, personal experience was considered as another theme informing parental figures preference of counsellors.

> "… I would expect a counsellor to be able to help the child with issues with attention by giving them 'strategies' to help them."

> "I would use a school counsellor as a first step to see if they can talk with the child and help them get started understanding what's happening to them. And they could also recommend further help if it's beyond their abilities."

> "… I have used counsellor for my children for very specific issues and they still use the tools provided for this today."

Another theme which also emerged in parental figure responses was counsellors being outside of the family unit. Some parental figures felt this may encourage children to open up to counsellors, and also provide an opportunity for a unique perspective of a child's behaviour.

> "Counsellors are generally good at getting kids to open up and talk more freely than they might do with a parent."

> "A person outside of the family can sometimes give a better perspective on what's going on. They are qualified to work specifically with young people & build a relationship with them. They are someone who can be trusted in confidentiality and will contact GP if required for medication if needed."

Psychologist

Of the 33 parental figures who identified a psychologist as their preferred method of help-seeking (seen in Table 36), only one commonly occurring theme was highlighted within open-ended responses. Parental figures commonly discussed psychologists as their preference due to being a professional and knowledgeable in the field of mental health, with specialised knowledge specifically in child mental health. As these are all similar in concept, it felt most appropriate to group these together as one theme.

> "I prefer a psychologist's support for mental health issues as I feel they are more likely to have specialized training in these areas. The length of study and knowledge collection is more extensive than some others. I feel they actually teach you effective skills."

> "I believe a psychologist would be more helpful than the GP and one who specializes in child psychology could diagnose these children if they have an illness and help them deal with it."

> "I believe a psychologist would be best equipped to deal with mental distress and would have specialist training to do so."

Friends and Family

Two parental figures had a preference for help-seeking through a friend, and four had a preference for help-seeking through family (See Table 36). As these are similar informal help-seeking methods, friends and family have been grouped together. Parental figures who selected friends or family as their preferred method of help-seeking appeared to select this option as a first step in the help-seeking process in order to gain insight and advice through friends and family before seeking-help through another method. Additionally, while only six parental figures selected either friends or family as their preferred help-seeking method, an additional

eight parental figures also discussed seeking insight and advice from friends and family in their responses as well.

> "I would speak with the child first then to whānau they could have better insight into what happened."

> "Friends would be my first port of call to figure out who to see. I imagine that we might end up with a psychologist or psychiatrist, but I prefer to have referrals from friends so that we can have greater trust."

> "Friends first to see if it is a common experienced behaviour within school cohort, then see a counsellor. Would prefer getting an opinion of the behaviour & issues without the child first before involving the child."

Online Sources

Only five parental figures selected online sources as their preferred method of help-seeking. However, three parental figures discussed utilising online sources to gain knowledge and resources before seeking help through other methods. A further four parental figures also discussed utilising online sources to gain further knowledge; however, online sources was not their preferred method of help-seeking.

> "More knowledge, this would be my first point of call then can see if they need counselling or GP."

> "I'd start by researching the behaviour issues myself through online sources and see if it's necessary to seek further help like a councillor [Sig] or psychologist."

Other

Among the 12 parental figures who selected the 'other' option as their preferred method of help-seeking, three parental figures highlighted a theme of seeking insight from the school or teacher before proceeding to other methods of help-seeking.

> "(Teacher) Because they have on the ground knowledge of what's happening during school hours and all these case studies seem to be directed at the school. Teachers

and learning support have method of testing kids, finding triggers and changing environments to help kids as the first step before medical professionals are sought."

Exploratory Question Three

Are There Common Themes as to Why Parental Figures Chose to Seek, or Not seek, Help for the Internalising, Externalising and Control Vignettes?

To explore this question, parental figures were asked "please help us understand the reason for your answer", after responding with their help-seeking intentions for each vignette. For this exploratory question, a 'theme' was included if the frequency of a theme included at least five responses. However, an exception to this was within the 'would not help seek' sections for the 8-year-old and 14-year-old externalising and internalising vignettes, and 'would help seek' for the control vignettes, as these categories only had a small number of responses. Within the open-ended responses, parental figures frequently discussed multiple reasons for their decision to help-seek or not help-seek; therefore, some parental-figure responses have been entered into multiple themes. Additionally, sub-themes have been included for the 'behaviour changes' theme which was frequently discussed within parental figure responses for the 8-year-old and 14-year-old externalising and internalising vignettes. Parental figure responses which mentioned a sub-theme(s), were also entered into the theme of 'behavioural changes'; parental figures who more broadly mentioned a change in behaviour were also entered into this theme.

In the following section, Tables 38 to 43 display the frequencies of common themes which appeared within parental figures' open-ended responses. The most common themes pertaining to each help-seeking method are discussed, illustrated by quotations taken from the open-ended responses.

Table 38

Parental Figure Reasons for Help-Seeking Intentions: 8yr Externalising Distress Vignette

Variable	Theme	%	*n*
Would seek help	Behaviour changes	42.2	51
	Affecting schooling	19.8	24
	Affecting social/emotional	14.1	17
	Personal experience	6.6	8
	Determine diagnosis	5.0	6
	Check underlying causes/alternative reasons	17.4	21
	Long term and progressive effects	5.0	6
	Symptom duration	5.8	7
	Teacher concern	4.1	5
Would not seek help	Just a phase	2.5	3

Table 39

Parental Figure Reasons for Help-Seeking Intentions: 14yr Externalising Distress Vignette

Variable	Theme	%	*n*
Would seek help	Change in behaviour	45.1	55
	Affecting schooling	17.2	21
	Affecting social/emotional	11.5	14
	Personal experience	9.0	11
	To determine diagnosis	6.6	8
	Check underlying causes/alternative reasons	11.5	14
	Long term and progressive effects	8.2	10
	Possible medication management	5.7	7
Would not seek help	Personal experience	0.8	1
	Normal for age	1.6	2

As shown in Table 38 and Table 39, the themes identified within parental figure reasons for their help-seeking intentions are relatively consistent across the two vignette age groups. Of the parental figures who would seek help for the 8-year-old and 14-year-old externalising vignettes, the child's change in behaviour was the most prominently mentioned theme as to why parental figures would seek help. For the externalising vignettes, the effects the change in behaviour is having on the child's schooling was most frequently discussed; however, social and emotional effects were also discussed.

"It sounds to me like the child is struggling with paying attention and it is having an impact on their school work. I am not sure how to deal with this so would get help." – 8-year-old vignette

"There's a lot going on for this child. They appear to be unhappy, unfocused, isolated, unable to make friends. The fact that the grades have suddenly dropped dramatically seems a little alarming. I would feel that they needed a professional to help them navigate their way, or point out what needs to be done to help them. The fact that the problems encompass academic, social, emotional, physical, would make me very concerned." – 14-year-old vignette

Parental figures felt it was important to help-seek for the child or adolescent in order to identify if there were any underlying causes or alternative reasons for the change in behaviour being exhibited. Conversely, other parental figures wanted to seek help to determine a diagnosis, and for the 14-year-old vignette, the possibility of medication management was also discussed.

"I would seek help for Alex, but not mental health help in the first instance. There could be many explanations for Alex's sudden behavioural changes which I feel should be ruled out first: hearing or vision issues may be making schoolwork a struggle. If Alex is masking these issues, this could be the reason behind their outbursts. Other issues I would consider in the first instance include issues in the home environment such as food insecurity affecting concentration, nutritionally inadequate food, parental separation etc. Only once physical or environmental issues had been ruled out would I consider mental health help might be required." – 8-year-old vignette

"There is something effecting why Alex is behaving the way they are. It's important to talk to your kids to try "peel the onion" and understand what may be the root cause of this in-case there is an underlying issue that needs to be addressed before it manifests into something more." – 14-year-old vignette

"Many of the behaviours that Alex is exhibiting are causing significant issues at school. I would be exploring whether Alex has ADHD. It is essential that Alex and the parents and the school understand what is happening for Alex so that these behaviours can be managed through therapy and medication if a diagnosis is confirmed." – 14-year-old vignette

Parental figures also discussed their concern of the potential adverse long-term effects the symptomology in the vignettes may have on both the 8-year-old child and 14-year-old adolescent's future; with the long-term effects being discussed more frequently for the 14-year-old vignette in comparison to the 8-year-old vignette.

> "This is hindering the child's effectiveness and ability to achieve tasks. This is a disadvantage for them at school and will affect them when they get to the workforce if an action plan is not put in place. They may not reach full potential without strategies and medication." – 8-year-old vignette

> "If this child does not receive help it will adversely affect their future; mental health, future job/educational opportunities, relationships. They may become isolated and develop additional mental health problems." – 14-year-old vignette

For the small number of parental figures who responded they would not help seek for the child or adolescent externalising vignette, the most commonly mentioned reason for this was due to parental figures believing the behaviour was just a phase the 8-year-old child will grow out of, and the 14-year-old adolescent's behaviour was normal for their age, with some parental figures mentioning hormonal changes.

> "Kids go through different behaviour phases." – 8-year-old vignette

> "I think young teens have these problems. Lots of hormonal changes working out who they are and peer group challenges. I'd not seek help professionally but keep an eye on them, open up conversations and be present." – 14-year-old vignette

Table 40

Parental Figure Reasons for Help-Seeking Intentions: 8yr Internalising Distress Vignette

Variable	Theme	%	*n*
Would seek help	Change in behaviour	65.3	79
	Affecting schooling	13.2	16
	Affecting social/emotional	43.8	53
	Abnormal behaviour for age	4.1	5
	Check underlying causes/alternative reasons	14.1	17
	Long term and progressive effects	5.0	6
	Duration of symptoms	5.0	6
	Child withdrawing	20.7	25
Would not seek help	Manageable at home	2.5	3

Table 41

Parental Figure Reasons for Help-Seeking Intentions: 14yr Internalising Distress Vignette

Variable	Theme	%	*n*
Would seek help	Change in behaviour	53.3	65
	Affecting schooling	5.7	7
	Affecting social/emotional	36.9	45
	Abnormal behaviour for age	4.1	5
	Check underlying causes/alternative reasons	5.7	7
	Long term and progressive effects	15.6	19
	Medication	4.1	5
	Child withdrawing	13.9	17
Would not seek help	Monitor symptoms	1.6	2
	Manageable at home	2.5	3

As shown in Table 40 and Table 41, the themes identified within parental figure reasons for their help-seeking intentions are relatively consistent across the two vignette age groups. Of the parental figures who would seek help for the 8-year-old and 14-year-old internalising distress vignettes, the child's change in behaviour was the most prominently mentioned theme as to why parental figures would seek help. The effects the change in behaviour is having on the child's schooling was less frequently discussed in the internalising vignettes in comparison to the externalising vignettes; however, in line with the internalising symptomology described, parental figures showed high levels of concern in their responses

about the effects symptomology is having on the child socially and emotionally, as well as the child withdrawing from sports which was something they previously enjoyed, and isolating themselves from friends and family.

> "Due to this being over the course of 6 months I would be concerned that the child was still experiencing these emotions and feelings, particularly around the areas of the child not enjoying sport they used to enjoy, and becoming socially distanced from friends and family." – 8-year-old vignette

> "Concerning decline and change in behaviour. Decline in mood and withdrawal from regular activities and interactions with others." – 8-year-old vignette

> "She/he went from seemly being happy to having anxiety and feelings of hopelessness, isolating herself from her peers and family for the past six months. I would be very concerned and talk to her GP and school counsellors." – 14-year-old vignette

Parental figures discussed wanting to check underlying causes and alternative reasons as to why the child and adolescent are experiencing this form of symptomology, with this being more frequently mentioned within responses to the 8-year-old vignette.

> "… I would be worried about what could have triggered these feelings - hormonal changes, bullying, sexual assault, ptsd...?? Several possibilities that would all benefit from professional help." – 8-year-old vignette

> "I'd want to help support this child to find strategies to deal with their anxiety, perhaps try to find the root of the problem (if there is one). Has something happened at school? Are there friendship problems?" – 14-year-old vignette

A less frequently occurring theme which appeared within responses for the internalising vignettes (but was not a theme within responses to the externalising vignettes) was the behaviour described being abnormal for the both the child and adolescent's age.

> "This child is worrying all of the time and withdrawing from things that they previously enjoyed. This is not normal child behaviour and would indicate to me that they need some help." – 8-year-old vignette

> "Out of character, not normal for a teenager to be consistently worried about life, showing signs of anxiety and depression that is starting to have an effect on his everyday life." – 14-year-old vignette

Parental figures appeared more concerned about the progressive effects of the symptomology described for the 14-year-old vignette in comparison to the 8-year-old vignette, with parental figures displaying a particular concern for risk of suicide and self-harm in their responses to both vignettes, but more frequently within the 14-year-old vignette.

> "This type of behaviour will often spiral so I think it is important to seek some help for some coping strategies." – 8-year-old vignette

> "… Things can escalate very quickly and we want to prevent other negative thoughts or actions eg suicide / self harm [Sig] and or substance abuse." – 14-year-old vignette

For the small number of parental figures who responded they would not help seek for the child or adolescent internalising vignette, the most commonly mentioned reason for this was due to parental figures wanting to initially try managing the situation at home by communicating with the child before seeking outside help.

> "I would try determining the cause of the depression and anxiety as step 1 before seeking help. I would provide a safe place to talk through their emotions to gain an understanding of the changes in the sudden behaviours and mitigating any triggers or circumstances in my control. If there was no clear cause for these behaviours, I would then seek help." – 8-year-old vignette

> "Not initially first. I would prefer to talk to my child first and seek help when I feel they are not opening up to me." – 14-year-old vignette

Table 42

Parental Figure Reasons for Help-Seeking Intentions: 8yr Control Vignette

Variable	Theme	%	*n*
Would seek help	Emotional behaviour and outbursts	11.6	14
	Check underlying causes/alternative reasons	3.3	4
	Personal experience	1.7	2
Would not seek help	Monitor symptoms	10.7	13
	Normal behaviour for age	45.5	55
	Not effecting daily life and functioning	7.4	9
	Ability to recognise inappropriate behaviour	23.1	28
	Manageable at home	28.1	34

Table 43

Parental Figure Reasons for Help-Seeking Intentions: 14yr Control Vignette

Variable	Theme	%	*n*
Would seek help	Emotional behaviour and outbursts	13.9	17
	Check underlying causes/alternative reasons	4.9	6
	Personal experience	2.5	3
	Concern about long term affects	2.5	3
Would not seek help	Monitor symptoms	5.7	7
	Normal behaviour for age	31.1	38
	Not effecting daily life and functioning	7.4	9
	Ability to recognise inappropriate behaviour	19.7	24
	Manageable at home	24.6	30

Of the parental figures who would seek help for the 8-year-old and 14-year-old control vignettes, the child's emotional behaviour and outbursts exhibited in the vignettes were the most frequently mentioned reasoning as to why parental figures would seek help. However, the type of help-seeking parental figures alluded to within their responses was often for tools to help manage the child's outbursts, rather than help-seeking for mental distress.

"Not necessary to seek formal help but seek out ways to more calmly express their feelings of frustration or rage." – 8-year-old vignette

"I would seek low-level help like an anger management course as it's not ok to lash out, but I don't consider this a clinical mental health issue." – 14-year-old vignette

In regard to parental figures who would not seek help for the 8-year-old and 14-year-old control vignettes, several prominent themes emerged. The majority of parental figures felt the emotional behaviour and occasional outbursts described within the control vignettes was normal behaviour for the child's age, with some parental figures discussing hormonal changes as an explanation for the emotional behaviour exhibited in the 14-year-old vignette, and developmental changes as an explanation for the emotional behaviour within the 8-year-old vignette. The child and adolescent's ability to recognise their behaviour of yelling and door slamming as inappropriate, and show remorse by apologising, was also commonly commented on within parental figures open-ended responses. Additionally, within responses, parental figures also frequently discussed the behaviour exhibited would be manageable at home through talking to the child or adolescent about their feeling and behavioural responses and provide strategies to help them to more effectively manage their emotions. However, some parental figures felt it would also be important to monitor the behavioural symptoms, and to seek help if escalation occurred.

"I felt that Jordan's emotional regulation struggles are typical of a child of their age and stage. Jordan later displays insight into how their behaviour isn't appropriate given the circumstances (arguments and tantrums) and reflects this by apologising. Jordan doesn't seem to show trouble with fitting in socially given that they have friends and enjoyed extra-curriculars, one of which is a team sport." – 8-year-old vignette

"I believe I have the knowledge and skill set to talk to this child to discuss and help correct the behaviours. If still concerned I would speak to the school to discuss their experiences with day to day observed behaviours." – 8-year-old vignette

"This appears to be normal teenage behaviour, would be good to chat about anger and management of it, but sound like normal hormonal changes in a teenager. Everyone gets angry, it is a normal emotion the child might be going through a little bit of frustration

at study etc generally just need good communication with the child, be there if they need to talk." – 14-year-old vignette

"This seems to be normal child behaviour. I would probably work with them personally to problem solve how to be able to cope with strong emotions without angry outbursts, but otherwise I would accept this as relatively normal given the child is doing well in all aspects and is remorseful after their outbursts." – 14-year-old vignette

"… If the door-slamming behaviour escalated further, then I would absolutely seek help for them." – 14-year-old vignette

Exploratory Question Four

What are the Common Barriers Parental Figures Perceive in Regard to Help-Seeking?

To explore this question, when participating in the survey, parental figures were asked "we are also interested in, when people want to seek help, what, if any, would you personally perceive as barriers that may get in the way of seeking help for a child/adolescent experiencing distress?". A total of 209 parental figure open-ended responses were analysed to identify the common themes. For this exploratory question, a 'theme' was included if the frequency of a theme included at least five responses. Within the open-ended responses, parental figures frequently discussed multiple reasons for preferring a particular method of help-seeking; therefore, some parental-figure responses have been entered into multiple themes pertaining to their chosen method of help-seeking.

In the following section, a Table 44 displays the frequencies of common themes which appeared within parental figures' open-ended responses, the most common themes regarding parental figure perceived barriers are discussed, illustrated by quotations taken from the open-ended responses.

Table 44

Parental Figure Barriers to Help-Seeking

Variable	Level	%	*n*
Systems Barriers	Waitlists	38.8	81
	Negative views/experiences health system	11.5	24
	Not being taken seriously	6.7	14
	Lack of rapport and trust	5.3	11
Individual Barriers	Lack of knowledge of help sources	15.8	33
	Lack of knowledge of distress	5.3	11
	Feeling of overreaction	3.8	8
	Parent denial	2.9	6
Practical Barriers	Monetary cost	45.9	96
	Parent availability	5.7	12
Societal Barriers	Stigma/embarrassment/judgement	25.8	54
Other Barriers	Child unwilling	10.5	22

Several prominent themes emerged, providing insight into common barriers parental figures perceive in regard to help-seeking, with these themes consisting of cost, waitlists, stigma, lack of knowledge on where to seek help, negative views and experiences with the health system, and the child unwilling to receive help. Many of these themes overlapped in parental figure discussions. For example, parental figures frequently discussed systems barriers, including waitlists, and negative views and experiences of the health system, and practical barriers, such as monetary cost, all in a single response, as illustrated in the quotation excerpts which follow.

> "Finances. The public health system is so broken and so overloaded that kids have to be near suicidal to seek help and even then it takes weeks to months to get anywhere. So private is more quickly accessed but you have to be able to afford to see these specialists."

> "Lack of qualified professionals who can offer assistance and cost. An understaffed and underfunded public health system means that wait times to be seen are very long, oftentimes exacerbating that child's distress."

> "The mental health system is immensely under resourced and so it makes it difficult to see the right person early on. I've seen from experience that patients often only

get the attention from professional until they've gone to the extremes (either self harm or breakdowns) and never before which is truly saddening."

Parental figures also perceived stigma, judgment, and embarrassment to be a considerable barrier in help-seeking for children and adolescents. Responses frequently mentioned parental figure fear of their child or themselves as a parental figure experiencing stigma, in regard to judgment and negative attitudes from other individuals, including friends and family member (public stigma), as well as their child being labelled and discriminated against due to having a mental health history on their records (institutional stigma). Frequently mentioned alongside stigma in parental figures responses was the child being unwilling to receive help due to stigma from their peers.

"I'd be worried about any 'labelling' that may be put on my child, and the affects that may have on their future, and people's perception of them if they are 'labelled' with a mental health disorder."

"Judgement as a failed parent, that you've done something to your child making them act the way they are."

"Social stigmas associated with mental health. Teens don't want to stand out, be any different from their peers."

"Child's unwillingness to see a counsellor due to perceptions of something being wrong with them/stigma from peers"

Additionally, the theme of a child being unwilling to receive help was not solely related to stigma, parental figures also mentioned child unwillingness due to autonomy and not wanting to talk about their personal lives and address their mental health.

"Getting the child's buy-in to receiving help: Kids often don't feel like they have much agency over their own lives and so being told that they have to see a therapist might be met with resistance. As such, rather making it seem like you're forcing them to get help, you need to work with them, and help them understand the potential benefits to them of receiving help."

"Child/teenager in denial and avoiding to address their mental health."

> "Also the Rangatahi themselves can be a barrier, some don't want to change, by having to take medication or commit to a live [sig] change."

Parental figures also mentioned not having knowledge on where to seek help or how to initiate the help-seeking process as a barrier to help-seeking for child and adolescent mental distress, with this being an important aspect of parent mental health literacy.

> "Lack of awareness of the support out there or who to contact first."

> "The correct pathway to find help is rather tricky to navigate, unless you have done it before."

> "It is also so hard as a parent to know what to do, where to go to get the support for our children."

Other, less frequently mentioned themes of barriers to help-seeking were also discussed within parental figure responses, with these consisting of parent availability to be able to take their child to appointments; lack of rapport and trust between child, parental figure, and mental health professionals; fears of not being taken seriously by general practitioners and mental health professionals; and parental figures not possessing adequate knowledge of mental distress symptomology, with this comprised of two sub-themes: fears of over-reacting and uncertainty of potential mental health symptomology; and parental figure denial their child requires mental health help.

> "Being able to access resources within school hours as I work full time. Having to go to services, often in a clinical setting rather than have them come to us"

> "Trust, from my own experience with myself and my children. Trust is a huge part of seeking help."

> "Not being taken seriously/dismissed by professionals."

> "Denial from me as a parent considering the fact that I thought I have done and doing or giving my best for the welfare of my child and along the way, you question your ways."

Chapter Five: Findings, Discussion and Conclusion

Overview

The current research sought to address the significant gap in knowledge about child mental distress prevalence and service use in Aotearoa New Zealand. It set out to investigate Aotearoa New Zealand parental figure's knowledge of mental health literacy to gain an understanding of their ability to recognise and seek help for mental distress in children and adolescents, as parental figures play a fundamental role in facilitating child access to mental health services, as discussed in Chapter One. This current study also endeavoured to understand the impact of factors which have previously been found in overseas research to influence parental figure recognition of child and adolescent distress and their help-seeking intentions (Godoy & Carter, 2013). Specifically, this study investigated whether a child's age and type of mental distress influenced recognition and help-seeking intentions; as well as the associated between recognition of mental distress and help-seeking intentions amongst Aotearoa New Zealand parental figures. This chapter opens with a summary of the principal findings, followed by a more detailed discussion of each of the three research question findings, with the four exploratory question findings also incorporated. Following the discussion of research findings, a discussion of the study's strengths, potential limitations and directions for future research is presented, followed by some concluding thoughts.

Principal Findings

The findings of this study suggest Aotearoa New Zealand parental figures possess high levels of mental health literacy knowledge, with an average of 93.2% of parental figures who participated in this study being able to accurately recognise distress within the four vignettes presenting with mental distress. The majority of parental figures also identified the correct mental distress diagnosis for both the externalising and internalising vignettes. Additionally, an average of 91.6% of parental figures indicated positive help-seeking intentions for the four vignettes presenting with mental distress, with majority of parental figures indicating a preference for formal help-seeking methods in comparison to informal help-seeking methods. In regard to the two control vignettes (which exhibited no clinically significant mental distress symptomology), an average of 82.7% of parental figures were able to accurately recognise the absence of mental distress within the two control vignettes, and an average of 71.2% of parental figures indicated a preference to not help-seek for the two control vignettes. The

findings also suggest Aotearoa New Zealand parental figures were more willing to seek help for child and adolescent mental distress when they recognised the presence of mental distress within the vignettes. Interestingly, findings from this current study indicate the child's age in the vignettes did not influence parental figure's ability to recognise and help-seek for mental distress in the vignettes. Further, whether the child in the vignette was experiencing externalising or internalising distress did not appear to influence parental figure recognition of distress or their help-seeking intentions. Each of these findings will be discussed in further detail in the following sections.

Relationship Between Parental Figure Recognition of Distress and Help-Seeking Intentions

In line with the initial hypothesis that parental figure recognition of child and adolescent distress will lead to higher likelihood of help-seeking for the vignettes, the relationship between parental figure distress recognition and help-seeking intentions within the child vignettes is conspicuous, given that each of the six logistic regression analyses conducted for the six vignettes found recognition of mental distress to be a significant predictor of parental figure help-seeking intentions. These findings indicate parental figures help-seeking for children is most likely to occur when they are able to recognise the experience of mental distress in children, and are consistent with previous research highlighting the importance of parental figure problem recognition as a predictor of parental figure willingness to seek help; for example, Thurston et al. (2015) found parents were 21.59 times more likely to seek help for a child when a mental health problem was recognised, and Ryan et al. (2015) found parental problem perception was significantly associated with increased service use for child and adolescent mental distress.

A general consensus is found within help-seeking models determining recognition of mental distress as the first step in the help-seeking pathway (Cauce et al., 2002; Godoy & Carter, 2013; Srebnik et al., 1996). However, while problem recognition appears to be a significant predictor of parental figures help-seeking for child and adolescent mental distress, Godoy and Carter (2013) propose child symptomology of mental distress is not necessarily enough to influence mental distress recognition, and symptomology and recognition of distress is not necessarily enough to motivate parental figures to help-seek. Godoy and Carter's (2013) theoretical model suggests there are a variety of factors which contribute to parental figure appraisal of child behaviour, recognition of distress, and help-seeking intentions. The

following sections will discuss some of these factors in greater detail, in relation to this current study's research findings.

Influence of Child Age on Parental Figure Distress Recognition and Help-Seeking Intentions

Within Godoy and Carter (2013) theoretical model, child characteristics and developmental considerations, including child age, have been proposed to influence parental figure recognition of mental distress and help-seeking intentions. Therefore, this research sought to understand the influence of a child's age on Aotearoa New Zealand parental figures' recognition of mental distress and help-seeking intentions, using vignettes describing 8-year-old and 14-year-old externalising and internalising mental distress, and a control vignette with no clinically significant distress. Based on previous overseas research discussed in Chapter One, along with Godoy and Carter's (2013) theoretical model, it was hypothesised parental figures would have higher recognition of mental distress and higher likelihood of help-seeking for the 14-year-old adolescent vignettes in comparison to the 8-year-old vignettes. In contrast to the hypothesis, the current research findings suggest age is not an influential factor contributing to distress recognition and help-seeking intentions amongst parental figures, with the six Pearson's chi-square analysis finding no association between the child's age in the vignettes and parental figure recognition of distress and help-seeking intentions, therefore rejecting hypotheses two (a) and two (b). Specifically, in regard to the four vignettes displaying clinically significant symptomology of externalising and internalising distress, it was found an average of 92.18% of parental figures who participated in this study recognised mental distress in the 8-year-old externalising and internalising vignettes, and an average of 93% of parental figures indicated they would seek help for these two 8-year-old vignettes. Similarly, an average of 94.24% of parental figures who participated in this study recognised mental distress in the two 14-year-old vignettes describing externalising and internalising distress, and an average of 90.12% of parental figures indicated they would seek help for these two 14-year-old vignettes.

This finding is inconsistent with other research which suggests child age has an influence on parental figure ability to recognise mental distress and help-seek - specifically, that parental figures are less likely to recognise and help-seek for mental distress in younger children (Bussing et al., 2003; Godoy and Carter, 2013; Pavuluri et al., 1996). This could possibly be attributed to the differing samples of parental figures possessing different levels of mental health literacy knowledge, whereby, in the demographic questions, majority of parental figures self-identified themselves as having reasonably good mental health knowledge.

In line with Godoy and Carter's (2013) theoretical model, Pavuluri et al. (1996) proposed parental figures may interpret distress symptomology as developmentally normative behavioural difficulties that a child is likely to grow out of as a possible explanation for lower levels of mental distress recognition and help-seeking for younger children. Congruent with this, in a study conducted by Hurley et al. (2017), parental figures expressed their concern regarding difficulties they face in making distinctions between developmentally normal behaviours and symptoms of mental distress in their children. An example of this can be found within a study conducted by the Royal Children's Hospital (2017), whereby some parental figures were unaware persistent difficulties with aggression and frequent crying was abnormal behaviour for primary-school aged children. However, parental figures in this current study were able to differentiate between developmentally normative behavioural difficulties, and behaviours considered as symptomology of mental distress; with this indicating parental figures possessed high levels of mental health literacy knowledge. This was demonstrated in parental figures' high levels of recognition and help-seeking intentions within the four vignettes describing symptomology of clinically significant mental distress and the lower rates of recognition and help-seeking intentions for the two control vignettes exhibiting no clinically significant mental distress symptomology.

Further, while these results indicate no support for child age being an influential factor in parental figure recognition of distress and help-seeking intentions, the findings of high rates of recognition and help-seeking intentions for the children in the vignettes still show support for Godoy and Carter's (2013) proposal that child characteristics and developmental considerations influence parental figure recognition of distress and help-seeking intentions for children. Parental figures frequently attributed their decisions to help-seek for the behaviour described in the vignettes to a change in the child's normal behaviour, and for the internalising vignettes specifically, some parental figure also discussed the behaviour being exhibited in the vignettes was abnormal for the child's age (in both the 8-year-old and 14-year-old child vignettes). This indicates parental figures were able to recognise these behaviours as abnormal in regard to the child's normal characteristics, and abnormal for their age and development.

Additionally, while there was only a small number of parental figures who did not recognise symptomology of mental distress and indicated they would not seek help for the child vignettes describing symptomology of mental distress, these parental figures frequently attributed the behaviour exhibited in the externalising distress vignette as being 'normal for age' and 'just a phase'. These findings are also consistent with Godoy and Carter's (2013) theoretical model, and Pavuluri et al. (1996).

Influence of Distress Type on Parental Figure Distress Recognition and Help-Seeking Intentions

Characteristics of the problematic behaviours associated with child and adolescent mental distress has also been documented in research to influence both parental figure recognition of mental distress and help-seeking intentions (Godoy & Carter, 2013; Thurston et al., 2015). Therefore, this research also sought to understand the influence of mental distress type on Aotearoa New Zealand parental figure recognition of mental distress and help-seeking intentions, using vignettes describing 8-year-old and 14-year-old ADHD (externalising distress) and depression with comorbid anxiety (internalising mental distress), and a control vignette with no clinically significant distress. Based on previous overseas research discussed in Chapter One, along with Godoy and Carter's (2013) theoretical model, it was hypothesised externalising distress would lead to higher parental figure recognition of distress and greater willingness to seek help in comparison to the internalising and control vignettes. In contrast to the hypothesis, findings from the Pearson's chi-square analyses suggest that the type of distress described in the vignettes, in regard to externalising and internalising distress, did not appear to have an influence on parental figure recognition of distress and help-seeking intentions. Additionally, parental figures recognised distress and indicated greater help-seeking intentions for both externalising and internalising distress in comparison to the control vignette with no clinically significant distress, thus, hypotheses three (a) and three (b) are partially rejected.

The finding from this current study that the type of distress did not appear to have an influence on Aotearoa New Zealand parental figure's ability to recognise externalising and internalising distress in the vignettes is surprising, given that research frequently suggests externalising types of mental distress in children are more likely to be recognised by parental figures, due to the overt nature of externalising types of distress. Externalising behavioural symptoms tend to be more obvious to parental figures due to the outward presentation, and can often cause significant impairment and interference in a child's daily life, with behaviours associated with ADHD often having disruptive effects in both the child and parents' lives (Bussing et al., 2003; Godoy and Carter, 2013; Scheper & Visser, 2021). Overseas research has also previously documented this, finding greater recognition of externalising distress amongst parental figures (Teagle, 2002; Thurston et al., 2015).

Additionally, the finding that the type of distress did not appear to influence parental figures distress recognition for the externalising and internalising distress vignettes is particularly salient, given that the externalising vignettes used in this current study were adapted from the externalising vignette used in Thurston et al.'s (2015) study, which found the

externalising vignettes in their study to have greater recognition rates amongst parental figures. A possible explanation for the discrepancies in findings between this current study and Thurston et al.'s (2015) may be due to the internalising vignettes used in this current study exhibiting higher severity of symptoms than those used in Thurston et al. (2015). For example, Thurston et al.'s (2015) internalising vignette described symptoms of anxiety in a 10-year-old child, specifically, symptoms described the child as overly worried and nervous in multiple contexts, concern regarding getting perfect grades and keeping things neat, as well as difficulties with sleep and concentration. In comparison, the internalising vignettes used in this current study described symptomology of both depression and comorbid anxiety. While the anxiety symptoms are relatively consistent with those described in Thurston et al.'s (2015) internalising vignette, the vignette also described symptoms of depression, including withdrawing from friends, family, diminished interest in activities previously enjoyed, irritability, and depressed emotions. Thus, with the addition of depression symptomology in the internalising vignettes used in this current study, the symptomology in the externalising and internalising vignettes may have appeared more equal in severity in comparison to the vignettes used in the Thurston et al.'s (2015) study.

Further, Godoy and Carter's (2013) theoretical model propose parental figure perceptions and appraisals of the problematic behaviour, including perceived severity, influence parental figure distress recognition and help-seeking intentions. Previous literature has also documented associations between parent appraisals of symptom severity and likelihood of mental distress recognition and help-seeking for children experiencing mental distress (Godoy and Carter, 2013; Johnston & Burke, 2019; Thurston et al., 2015). Therefore, a possible explanation for the high rates of distress recognition and help-seeking intentions amongst parental figures in this current study, as well as the lack of difference within recognition rates and help-seeking intentions for the externalising and internalising vignettes, may be due to parental figures perceiving the symptomology described in the externalising and internalising vignettes to be of relatively equal severity. Whereby, the internalising distress vignettes described quite serious symptomology of depression and anxiety, in comparison to less emotionally severe, yet more externally severe behaviours described in the ADHD externalising distress vignettes. For example, in the 8-year-old internalising vignette, the child 'sometimes wishes he/she could disappear' and 'often cries a lot', and in the 14-year-old internalising vignette, the adolescent has 'fears about the future' and 'expresses feelings of hopelessness'. In contrast, within the 8-year-old and 14-year-old externalising vignettes, the child and adolescent have 'difficulty paying attention', 'school grades below academic

capabilities' and 'exhibits difficulty regulating emotions' which is evidenced by outbursts and difficulty maintain friendships. While parental figure perceived severity of distress in the vignettes was not explicitly measured, high levels of perceived severity and concern for the both the externalising and internalising vignettes can be seen within parental figure's open-ended responses, with parental figures frequently mentioning a high level of concern for the change in behaviour described in the internalising vignettes affecting the child emotionally and socially, and also frequently expressed concern for these behaviours potentially leading to self-harm and suicide if left untreated. In contrast, parental figures frequently mentioned the change in behaviour in the externalising vignettes affecting the child's schooling, ability to maintain friendships, and the adverse long-term effects symptomology may have on the child's future. Thus, parental figures may have perceived the inward nature and emotional presentation of symptomology described in the internalising vignettes to be equally severe as the overt nature and effects of symptomology described in the externalising vignettes.

Further, as the control vignette exhibited no clinically significant symptoms of mental distress, Godoy and Carter's (2013) theoretical model may also explain why parental figures had higher recognition and help-seeking intentions for mental distress within the externalising and internalising distress in comparison to the control vignettes with no clinically significant distress. Parental figures may have perceived the symptomology described in the externalising and internalising vignettes to be of higher severity than symptomology described in the control vignette, and therefore had higher recognition rates and indicated greater intention to help-seeking for the vignettes exhibiting clinically significant mental distress in comparison to the control. This possible explanation is illustrated within previous studies which have found perceived symptom severity and greater parental concern influences help-seeking intentions amongst parental figures (Eiraldi et al., 2006; Godoy & Carter, 2013; Maniadaki et al., 2006; Thurston et al., 2015).

Aotearoa New Zealand Parental Figures Preferred Help-Seeking Methods

The current study also sought to understand parental figures' attitudes and knowledge in regard to help-seeking methods, as motivation for help-seeking is also influenced by parental figure attitudes toward help-seeking and consideration of cost versus benefits of seeking help (Godoy & Carter, 2013). Results found that an overwhelming majority of parental figures indicated a preference for formal help-seeking methods in comparison to informal help-seeking methods. Some of the most commonly mentioned themes which were evident amongst parental figure responses for preferring formal sources of help-seeking included GPs being

able to provide referrals; and having an existing relationship with the child and family, as well as being able to check for any physical causes for the symptoms; counsellors and psychologists being professional and knowledgeable; and psychologists also being specialised in the field of mental health. The preference for formal help-seeking methods, along with the themes mentioned in parental figure responses, allude to positive views, attitudes and knowledge about the importance of professional methods of help-seeking, thus indicating Aotearoa New Zealand parental figures have sound mental health literacy knowledge, specifically in regard to help-seeking.

Additionally, the finding that Aotearoa New Zealand parental figures who participated in this study had a preference for formal help-seeking methods was surprising, as overseas literature has reported findings of parental figures engaging more frequently with informal methods of help-seeking for children experiencing mental distress (Lawrence et al., 2015; Luo et al., 2022; Tapp et al., 2018). A possible explanation for the finding from this current study is that, when understanding parental figure help-seeking preference, literature often looks at parental figure engagement in formal versus informal help-seeking methods (Lawrence et al., 2015; Luo et al., 2022; Tapp et al., 2018). Conversely, this current study sought to understand parental figure help-seeking preference through asking parental figures what their preferred method of help-seeking would be. Therefore, Aotearoa New Zealand parental figure preference for formal methods of help-seeking may not necessarily be the most likely method of help-seeking they would engage with, due to barriers which may hinder parental figure decisions to utilise formal methods of help-seeking over informal methods, or may impede parental figure decisions to seek help altogether (Godoy & Carter, 2013). The impact of barriers on help-seeking for child and adolescent distress will be discussed in further detail in the following section.

Aotearoa New Zealand Parental Figures Perceived Barriers to Help-Seeking

Parental figures in this study were also able to identify various systems, individual, societal, and practical barriers which they perceived may impede their decisions to seek help for child mental distress. In particular, some of the frequently mentioned barriers to help-seeking included monetary cost (45.9%), waitlists (38.8%), and stigma (25.8%), with the barriers identified in this current study being consistent with barriers found within the literature (Boulter & Rickwood, 2013; Godoy & Carter, 2013; Hansen et al., 2021; Reardon et al., 2017). Godoy and Carter's (2013) theoretical model proposes, when making decisions around help-seeking for children, parental figures weigh the costs and benefits of help-seeking, with the

consideration of costs and benefits potentially resulting in parental figures to feel conflicted, with this impacting on willingness to seek help. While parental figures in the current study identified various barriers to help-seeking, parental figures also indicated highly positive help-seeking intentions for the vignettes in this study which suggests that the benefits of help-seeking for the vignettes outweighed the potential costs associated with parental perceived barriers.

With this being said, it is important to acknowledge, while the finding that parental figures preferred formal methods of help-seeking, and indicated positive help-seeking intentions for the vignettes in this study, these frequently mentioned parental perceived barriers along with the significant gap between child mental distress prevalence and service use in Aotearoa New Zealand, may suggest that while parental figures indicated a preference for formal methods of help-seeking, this does not necessarily indicate parental figures will seek formal methods of help for children experiencing mental distress in real life situations. Nonetheless, the finding that Aotearoa New Zealand parental figures who participated in this study had a preference for formal sources of help-seeking is promising in suggesting Aotearoa New Zealand parental figures' have good levels and sound mental health literacy knowledge.

Additionally, 15.8% of parental figures in this current study also mentioned lack of knowledge on available help-seeking sources as a barrier to seeking help for child and adolescent mental distress, with knowledge on where and how to seek help being an important aspect of mental health literacy (Hurley et al., 2020; Tully et al., 2019). This percentage is significantly lower than those reported in previous overseas research regarding knowledge of help-seeking sources as a barrier to help-seeking for parental figures (Bussing et al., 2003; Hansen et al., 2021; Lawrence et al., 2015; Reardon et al., 2017). For example, Hansen et al. (2021) found 60.3% of parents reported lack of information regarding where to seek help as a barrier to help-seeking for child mental distress. Thus, the relatively low percentage of Aotearoa New Zealand parental figures who perceived knowledge on available help-seeking sources as a barrier to help seeking, in comparison to overseas research, is also promising in suggesting Aotearoa New Zealand parental figures' have good levels of mental health literacy knowledge.

Study Strengths

The use of vignettes in this study was an effective methodological approach to ascertain Aotearoa New Zealand parental figures mental health literacy knowledge, through providing an impersonal and non-threatening method of exploring sensitive topics regarding child mental

health (Lapatin et al., 2012). Vignettes are also beneficial due to the ability to portray realistic scenarios while also allowing for researchers to tailor vignettes to align with the specific research topic and investigation; for example, through making composites of situations that target information a study is research. Vignettes also allow for manipulation of specific variables (Lapatin et al., 2012), such as age, type and level of distress, as exhibited in the vignettes used for this current study. The ability to tailor the level of distress a mental distress vignette exhibits is particularly beneficial for community samples, as the topic of mental distress can sometimes be distressing for people in the community. Through utilising vignettes to investigate Aotearoa New Zealand parental figures' mental health literacy knowledge, rather than asking parental figures about their own children and personal experiences, this current study was able to be conducted at a level which obtained comprehensive information and findings on parental figure mental health literacy, while also being conducted at low risk in regard to research involving human participants. This study is therefore a useful example for researchers and future research projects demonstrating studies involving mental health are able to be conducted at low risk.

As vignettes are beneficial in research investigating mental health literacy due to the ability for manipulation of the level of distress symptomology in vignettes, it would be advantageous for future research of parental figure mental health literacy in Aotearoa New Zealand to utilise vignettes with less conspicuous symptomology to investigate the threshold of child mental distress symptomology parental figures are able to recognise. This would be beneficial for gaining a greater understanding of Aotearoa New Zealand parental figures levels of mental health literacy in regard to distress recognition and help-seeking intentions, with this in turn assisting in better targeted mental health literacy promotion. Further, as vignettes are an advantageous methodological approach for research seeking to understand people's knowledge, attitudes and beliefs of various topics, it would be of benefit to have a readily available and openly accessible bank of vignettes for researchers to use in these types of studies.

Additionally, incorporating a qualitative component in this study through open-ended responses analysed using content analysis was also an important strength, as parental figure's open-ended responses allowed for a more in-depth exploration of Aotearoa New Zealand parental figures mental health literacy knowledge through gaining an understanding of their attitudes, beliefs, and knowledge in regard to help-seeking for child mental distress. Parental figures appeared to have good engagement with the open-ended questions, illustrated through parental figures making an effort to write reasonably detailed responses. The effort and detail

parental figures made in their open-ended responses also suggests this research topic mattered to them. Consistent with this, 56.4% (*n*= 137) of parental figures embraced the opportunity to receive the research findings of this study. This indicates Aotearoa New Zealand parental figures have a genuine interest and engagement in the topic of mental health literacy. Offering parental figures with the opportunity to receive the research findings is also important as this allows important knowledge to flow both ways.

Parental figures frequently incorporated their own personal or familial experiences with mental distress into their open-ended responses when discussing their help-seeking intentions, thus suggesting some parental figures utilised personal experiences to inform their help-seeking intentions. This also suggests parental figures felt this survey was a safe space to discuss their own personal experiences with mental distress. Research has found parental figures can often dismiss or catastrophise symptomology of mental distress in children and adolescents (Johnston & Burke, 2020; McGinnis, 2021); with the catastrophising of symptomology being associated with parental figures own personal experience with mental distress (McGinnis, 2021). Therefore, the findings of high recognition rates and positive help-seeking intentions for the externalising and internalising vignettes, and the significantly lower rates of recognition and help-seeking intentions for the control vignettes exhibiting no clinically significant mental distress symptomology suggest, even though some parental figures had personal experiences inform their responses, this did not lead parental figures to catastrophise or dismiss the symptomology described in the vignettes - supporting the finding that Aotearoa New Zealand parental figures appear to have high levels of mental health literacy knowledge. This also has important implications for mental health professionals. The indication that parental figures are not catastrophising or dismissing child mental distress gives validity that parental figures have important mental health knowledge and understanding from personal experiences that they are able to apply to better understand children's mental health. Therefore, this can be beneficial to mental health professionals in regard to engaging in a collaborative approach with parental figures for child mental distress.

In regard to the demographics of parental figures who participated in this study, majority of parental figures ranged in age between 40 to 50-years-old. Previous research has identified generational gaps in mental health literacy knowledge, finding mental health literacy is poorer within the older age groups (Farrer et al., 2008; Fisher & Goldney, 2003). These previous findings may possibly be attributed to the lack of mental health programmes and campaigns in earlier decades; current mental health literacy campaigns target the younger generation, along with messages promoting mental health literacy commonly being delivered

in internet media which may be less accessed by older generations (Farrer et al., 2008; Fisher & Goldney, 2003). However, the findings of this current study suggest Aotearoa New Zealand parental figures have high levels of mental health literacy knowledge. With the sample predominately consisting of older generations (40-50-years-old), this indicates mental health campaigns in Aotearoa New Zealand are working. As mental health campaigns appear to be predominantly targeted at the younger population (Government Inquiry into Mental Health and Addiction, 2018), this finding suggests even when younger generations are targeted for mental health literacy, the older generations of parental figures are learning as well. It would be interesting for future research to investigate this further, in order to advance understanding of where the older generation gain their mental health literacy knowledge, along with understanding where the most effective distribution methods of mental health literacy are for each generation. Advancing knowledge in these areas can provide important insights for the delivery of highly accessible and more targeted promotion of mental health literacy, in order to continue advancing mental health literacy in Aotearoa New Zealand parental figures.

Study Limitations

The current study fulfilled the research aim of understanding Aotearoa New Zealand parental figure mental health literacy knowledge; however, it is important to acknowledge a number of potential limitations. Therefore, these potential limitations need to be considered when interpreting the results and findings of this study. The following sections details the potential limitations identified in this study, while also suggesting how future research can improve upon them.

Methodological Approach Limitations

While online surveys are an efficient method of recruiting research participants, it is important to acknowledge the unique threat of bot responses entering online surveys to sample validity and data integrity associated with online recruitment methods. Thus, the presence of internet bot responses entering this study's online survey is an important potential limitation to consider. Conscientious effort was given to identify bot responses through data cleaning methods which have been found to be effective bot identification methods in previous research (Xu et al., 2022). However, it is important to acknowledge, despite best efforts to maintain data integrity through comprehensive identification of bot responses, and though there is satisfactory confidence all bot responses were removed, absolute certainty is unable to be ensured.

While many online survey platforms often have built in safety mechanisms to attempt to deter bots from accessing surveys, these safety mechanisms are not always as efficient as they may appear. For example, findings from Griffin et al. (2022), discovered that, although enhanced settings in Qualtrics were utilised, 61.8% of their survey respondents were identified as bot responses. Thus, researchers utilising online methods for participant recruitment need to be aware of the potential presence of bot responses in their data, as seen in this current study. In an attempt to mitigate this issue, future surveys could utilise methods of testing validity of responses, such as logic checks, asking identical questions, and honeypot items (Xu et al., 2022). A similar example to the honeypot items method can be seen in this current study, whereby any responses which selected they had found this study through their child's school were deemed as bot responses, as this method of recruitment was implausible. Further, if researchers were to encounter bots in their survey data, there are effective data cleaning methods, such as those utilised in this current study, which can be used to identify bot responses, including timing checks, location checks, and open-ended response checks examining responses for repetitive and non-sensical responses. Additionally, in regard to future research, the presence, identification and removal of bot responses in this current study would be a beneficial discussion topic for a commentary article on bot behaviour in Aotearoa New Zealand online surveys.

Another potential limitation important to consider are the analyses used in this study. At this level of research, the three analyses used were sufficient for this study; however, requiring the analyses to be run multiple times is not the most efficient analytical method. Therefore, a researcher with higher sophistication of quantitative knowledge may consider utilising more advanced analytical techniques when conducting similar research in the future.

Further, while the use of an online survey for data collection was an effective way to investigate Aotearoa New Zealand parental figures mental health literacy knowledge, it is important to acknowledge the potential limitations of using surveys as a method of data collection in research. Online survey data can be at risk of being overrepresented by participants with bias interest or knowledge in the topic being researched, with this potentially resulting in skewed findings (Andrade, 2020). In online surveys, it is relatively impossible to know the motives of participants who responded; therefore, there is no accurate way of understanding the extent of bias in online surveys (Andrade, 2020). For example, in this current study, only 5.3% of parental figures in the sample self-identified as having minimal mental health knowledge. Thus, it is not possible to know whether the findings of this study are an accurate representation of Aotearoa New Zealand parental figures mental health knowledge

as a whole, indicating parental figures in Aotearoa New Zealand do have sound knowledge of mental health literacy; or whether parental figures only responded to the survey because they already had an interested in mental health literacy, and therefore only parental figures who had sound mental health knowledge participated, resulting in bias.

Further, while not necessarily a limitation, it is still important to consider the nature of this study and how this may have impacted on parental figures ability to recognise mental distress in the vignettes. While it was not explicitly stated that the research will be investigating parental figure mental health literacy, parental figures may have still had a reasonable idea of what this study was investigating. Therefore, this may have led to possibly demand biases in parental figures' responses. However, the majority of parental figures were also able to correctly identify the symptomology described in the externalising vignettes aligned with a diagnosis of ADHD, and the majority of parental figures were also able to identify the symptomology described in the internalising vignettes to be describing a diagnosis of both depression and anxiety. This finding suggests, regardless of potential bias in parental figures responses, the ability for the majority of parental figures to accurately recognise which of the vignettes were experiencing mental distress, and which vignettes required help, indicates Aotearoa New Zealand parental figures possess high levels of mental health literacy knowledge.

Sample Demographics Limitations

While this study aimed to gain a representative community sample of Aotearoa New Zealand parental figures, there are important potential limitations to acknowledge in regard to the sample of parental figures who responded to the online survey. Firstly, as Massey University Communications and Public Affairs team published a media release advertising the survey on Massey University's social media platforms, this reached an audience with an academic background and potentially higher levels of mental health knowledge. In line with this, a moderate number of parental figures responded they have obtained their knowledge on mental health through courses, seminars, or academic study, and/or work(ed) in the field of mental health. This could potentially coincide with the majority of parental figures self-identified themselves as having reasonably good mental health knowledge. For future research in this area, using a non-academic pathway as a distribution method, such as distributing through schools to target parental figures, would be a more beneficial distribution method, in order to avoid gaining a sample with potentially disproportionately high levels of mental health knowledge in regard to the general community of parental figures.

Further, the sample of this study consisted predominately of female parental figures (90.1%), and people who identified as New Zealand/European (81.9%). Thus, these research findings are unable to be generalised to represent the wider parental figure population in Aotearoa New Zealand. There is a large voice missing in this study in regard to male parental figures and other important cultural groups of Aotearoa New Zealand, and it is important to consider whether findings would stay consistent if these underrepresented groups had higher involvement in the current research. Future research might seek to explore male parental figures, and other cultural groups' knowledge of mental health literacy, as well as gain an understanding as to why these groups are underrepresented in the current research.

Moreover, in regard to parental figures who participated in this study self-identifying as having reasonably good knowledge of mental health, it would be important for future research to target possible communities in Aotearoa New Zealand where mental health literacy knowledge is hypothesised to not be as high due to mental health being not as widely discussed or recognised. For example, this may include communities where internet reception is not as available, thus, parental figures in these communities may not have access to mental health literacy campaigns. It may also include communities who have been marginalised and omitted from mainstream public health campaigns that target the dominant groups in society.

Implications and Future Research

This current research contributes new insights and understanding as to Aotearoa New Zealand parental figures knowledge of mental health literacy. Parental figures play a fundamental role in facilitating help-seeking and mental health service utilisation for children and adolescents (Wahlin & Deane, 2012). Therefore, it is crucial for parental figures to have mental health literacy knowledge, in order to have early recognition and initiate early help-seeking for child mental distress (Jorm et al., 2007), with this assisting in mitigating adverse outcomes associated with untreated or delayed treatment for child mental distress. Accordingly, the findings from this current research indicating that Aotearoa New Zealand parental figures possess high levels of mental health literacy knowledge is extremely promising. As these research findings have suggested, Aotearoa New Zealand parental figures appear to have high levels of knowledge and positive attitudes and beliefs in regard to child mental distress and help-seeking, of which encapsulate mental health literacy (Hurley et al., 2020; Tully et al., 2019). The ability for Aotearoa New Zealand parental figures to accurately recognise when a child is experiencing mental distress, as well as the absence of mental distress is remarkable, with this study finding significantly higher recognition rates in

comparison to similar overseas studies using vignettes to investigate parental figure recognition of child distress (Pescosolido et al., 2008; Thurston et al., 2015). Aotearoa New Zealand parental figures also appear to have positive help-seeking intentions for children experiencing mental distress, with overseas research frequently findings lower parental figure help-seeking intentions in studies utilising vignettes (Cormier et al., 2020; Jorm et al., 2007; Maniadaki et al., 2006).

There is a common consensus within the literature that parental figures' low levels of mental health literacy is a critical factor contributing to the gap between prevalence of mental distress and service utilisation for the child and adolescent population (Jorm, 2012; Tully et al., 2019). As findings from this current study have indicated, Aotearoa New Zealand parental figures possess high levels of mental health literacy knowledge, with this suggesting Aotearoa New Zealand's extensive public health messaging and campaigns regarding mental health (Kulshrestha & Syed, 2022) are working to increase mental health literacy. However, as Chapter 1 revealed, despite these positive findings, research on the prevalence rates of child and adolescent distress in New Aotearoa, combined with rates of mental health service utilisation for children and adolescents in Aotearoa New Zealand, and considering these findings in the context of global health data, provides reasonable confidence there is a significant gap between child and adolescent mental distress prevalence and service utilisation in Aotearoa New Zealand.

Therefore, rather than low levels of mental health literacy acting as a barrier contributing to the significant gap between child mental distress prevalence and service use in Aotearoa New Zealand, it is important to consider alternative explanations. As previously discussed, within the open-ended responses in this study, parental figures highlighted a range of barriers they perceived which may hinder help-seeking for child distress, with the most common barriers including the monetary cost, stigma, and waitlists. In line with this, a study conducted by Oh and Bayer (2015) found 85% of parental figures reported highly positive helps-seeking intentions in response to child mental distress. However, despite parental figures having highly positive help-seeking intentions, only 29% actually overcame barriers to help-seeking and accessed professional help for their child experiencing mental distress. Thus, barriers at a funding, systems, and societal level may be a plausible explanation to the significant gap between child mental distress prevalence and service use in Aotearoa New Zealand, as highly positive help-seeking intentions, as seen in this study, may not necessarily mean parental figures in Aotearoa New Zealand will overcome barriers to access help for child mental distress.

The impact of barriers on parental figure help-seeking for child mental distress in Aotearoa New Zealand needs to be further investigated in future research, in order to better understand the significant gap between child mental distress prevalence and service use in Aotearoa New Zealand. While findings from this study provide initial evidence that Aotearoa New Zealand parental figures have positive help-seeking intentions, future research may wish to explore this further through investigating Aotearoa New Zealand parental figure help-seeking intentions as a preceding factor to actually accessing and utilising mental health services for child and adolescent distress, in order to determine the level of influence positive help-seeking intentions have on overcoming barriers.

Greater understanding of these barriers would allow for better targeted strategies to help effectively mitigate these barriers, providing better access to services, and in turn, reducing the gap between child mental distress prevalence and service utilisation. For example, in the open-ended responses of this current study, various parental figures mentioned their concern of being stigmatised and judged by society, including professionals, as being a 'bad' parent due to their child experiencing mental distress, with some parental figures concerned they would be held responsible for their child's mental distress. Hansen et al. (2021), also found similar concerns among parental figures in their overseas study, finding 16.1% of parents reported worry regarding their child being removed from the home if they sought help for child mental distress; and 20.2% expressed worry about judgment from others. Therefore, a future step in mitigating this barrier could involve providing increased mental health literacy specifically focused to educating parental figures around the various eitologies and societal influences of children's mental distress as a way for parental figures to understand they are not to blame.

Conclusion

The current study sought to address the significant gap in knowledge around child mental distress prevalence and service use in Aotearoa New Zealand. To address this, the current study set out to investigate Aotearoa New Zealand parental figure's knowledge of mental health literacy, to gain an understanding of their ability to recognise and seek help for mental distress in children and adolescents, as parental figures play a fundamental role in facilitating child access to mental health services. Findings from this study indicate Aotearoa New Zealand parental figures are able to accurately recognise the experience of mental distress in child and adolescent vignettes, with child age and type of mental distress (externalising and internalising) not appearing to influence their decisions. The findings also support previous

studies that found distress recognition appears to influence help-seeking intentions, with parental figures who participated in this research indicating positive help-seeking intentions for child and adolescent mental distress. This suggests Aotearoa New Zealand parental figures possess high levels of mental health literacy knowledge and are willing and prepared to seek help for a young person they see as being distressed. Thus, barriers at a funding, systems, and societal level may be a plausible explanation to the significant gap between child mental distress prevalence and service use in Aotearoa New Zealand, as opposed to parental figure mental health literacy knowledge. Therefore, future research should seek to gain greater understanding of the impact funding, systems, and societal barriers have on parental figure help-seeking for child mental distress in Aotearoa New Zealand, as well as exploring whether the levels of mental health literacy found in the current study are consistently high across different communities in Aotearoa New Zealand.

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Appendix A: Child and Adolescent Vignettes

8-Year-Old ADHD Externalising Distress Vignette

Alex is an 8-year-old and is in year 4 at primary school. Alex has become distracted easily and forgetful at both home and school over the past 6 months. Alex often fails to finish his/her chores and schoolwork and repeatedly makes careless mistakes on schoolwork. Alex has difficulty paying attention for long periods of time and appears very restless and distracted, exhibited at school through getting up from his/her seat frequently, and constantly fiddling with his/her stationary. Alex's teachers have expressed their concerns with Alex's ability to complete schoolwork due to his/her difficulty with paying attention. Alex also often does not appear to listen when spoken to, talks a lot, and often interrupts others when they are talking. Alex has always received good grades on homework and school tasks, but his/her recent behaviour is now affecting his/her schoolwork and grades, with Alex's grades at school for the last eight months being below his/her academic capabilities. Alex also exhibits difficulty regulating his/her emotions, evidenced by regular outbursts which often appear as an 'over the top' reaction to a situation; with this behaviour interfering with his/her ability to keep and make new friends.

14-Year-Old ADHD Externalising Distress Vignette

Alex is a 14-year-old in year 10 at high school. Alex has become distracted easily and forgetful at both home and school over the past 6 months. Alex often fails to finish his/her chores and schoolwork and repeatedly makes careless mistakes on assignments. Alex has difficulty paying attention for long periods of time and appears very fidgety, he/she also complains of internal feelings of restless, stating his/her mind tends to wander. Alex's teachers have expressed their concerns with Alex's ability to sit his/her upcoming important school exams due to Alex's difficulty with paying attention. Alex also often does not appear to listen when spoken to, talks a lot, and often interrupts others when they are talking. Alex has always been a high achiever and exhibits significant ability to excel academically, but his/her recent behaviour is now affecting his/her schoolwork and grades, with Alex's grades at school for the last eight months being below his/her academic capabilities. Alex also exhibits difficulty regulating his/her emotions, evidenced by regular outbursts which often appear as an 'over the top' reaction to a situation; with this behaviour interfering with his/her ability to keep and make new friends.

8-Year-Old Depression Comorbid Anxiety Internalising Distress Vignette

Sam is an 8-year-old and is in year 4 at primary school. For the past 6 months, Sam has been excessively worried and nervous about a lot of things in his/her daily life and has expressed he/she sometimes wishes he/she could disappear. Sam has expressed it is difficulty for him/her to control his/her worry. As a result of Sam's worry, he/she has had difficulties concentrating at school. While previously gaining high praise on homework and school tasks, Sam's completion quality of homework and school tasks have worsened. Sam has also been irritable at home and school, and often cries a lot. Sam has increasingly begun to socialise less with friends and family, preferring to be alone, and seems to not enjoy playing sports anymore, something he/she was rather fond of previously. Sam reports feeling tired, restless, and unhappy.

14-Year-Old Depression Comorbid Anxiety Internalising Distress Vignette

Sam is a 14-year-old and is in year 10 at high school. For the past 6 months, Sam has been worrying excessively about a lot of things in his/her daily life, expects everything to be worse than it actually is, is apprehensive, about a lot of things, and has fears about the future. Sam has expressed it is difficult for him/her to control his/her worry. As a result of Sam's excessive worrying, he/she has had difficulties concentrating at school. While previously exhibiting high academic potential, his/her grades have worsened. Sam has also become irritable at home and school and expresses feelings of hopelessness. Sam has increasingly begun to isolate from friends and family, preferring to be alone, and seems to not enjoy sports anymore, something he/she was rather fond of previously. Sam reports feeling tired, restless, and unhappy.

8-Year-Old Control Vignette With No Clinically Significant Distress

Jordan is an 8-year-old in year 4 at primary school. Jordan has been receiving good grades in school over the past 6 months. Jordan has a few friends at school who he/she enjoys spending time with. Although Jordan usually gets along with most children, Jordan sometimes gets into arguments with his/her friends when playing games or when he/she does not get his/her way. Occasionally, when Jordan gets angry or upset, he/she yells or slams his/her door; however, once Jordan cools down, he/she usually feels bad and apologizes for his/her behaviour. Jordan enjoys participating in several extra-curricular activities, including soccer and the book club.

14-Year-Old Control Vignette With No Clinically Significant Distress

Jordan is a 14-year-old in year 10 at high school. Jordan has been receiving good grades in school over the past 6 months. Jordan has a good friend group at school who he/she enjoys spending time with. Although Jordan usually gets along with other peers at his/her school, Jordan sometimes gets into minor arguments with his/her peers in the classroom. Occasionally, when Jordan gets angry or upset, he/she yells or slams his/her door; however, once Jordan cools down, he/she usually feels bad and apologizes for his/her behaviour. Jordan enjoys participating in several after school activities, including soccer and music lessons.

Appendix B: Full Online Survey Including Information Sheet

Sarah Barnes_2022

Start of Block: Information page

InfoPg

Parent perspectives on children's emotional well-being
Information Sheet

Kia Ora,

My name is Sarah Barnes and I am in the final year of the Master of Arts (Psychology) at Massey University. This research will contribute to the completion of my Master's Thesis. My supervisor for this project is Dr Kirsty Ross. This research aims to gain knowledge that will help us understand the mental health knowledge, attitudes, and beliefs of parental figures in Aotearoa New Zealand. The findings from this study will help contribute valuable data to a current gap in Aotearoa New Zealand research, and also contribute to a wider body of overseas research in this area.

Thank you for showing an interest in participating in this study! Before you decide whether to take part, we want to provide you with some important information regarding the research being conducted, and outline what is involved if you do wish to participate. Importantly, in order to participate in the study, you will need to meet the following criteria: Be over 21 years old; Currently reside in Aotearoa New Zealand; Understand English (the survey will be in English); Are a parental figure of a child between the ages of five to eighteen. A parental figure includes a biological parent, guardian, caregiver. If you do not meet these criteria, we would like to thank you for your time thus far. For those who do meet criteria and are interested in participating, please find further information below.

What is involved?

If you do choose to participate, you will be answering a series of different questions. To begin, we will ask you to provide some general demographic questions - your gender, age, residential region, ethnicity, and age of the child currently in your care - before proceeding to the main questions of the survey. The majority of questions in the survey will be related to three short fictional case studies about a young person. You will be asked to read and provide your thoughts on what may be going on for the young person, and how you as a parent might respond in the situation. Responses will be in the form of yes/no questions, drop-down questions, and open-ended questions. Your responses will always remain entirely confidential and anonymous, and therefore, will not be individually connected to you in any way. We will not be requiring you to provide any personal information that may reveal your identity. We would like to assure you that this is not an evaluation of you personally, or you as a parental figure, and you will not receive a 'score' at the end, so we ask that you please be as honest as possible. In total, the survey should take around 20 minutes to complete depending on your reading speed and how much or how little information you wish to include on the open-ended questions/responses. You will also have the ability to pause and come back to the survey at any time. Importantly, you may choose to withdraw from the survey at any point, for any reason,

and there will be no further questions asked, and we will not include your responses in the analysis if you do choose to not complete the survey.

Are there any risks involved?

During the survey, you will be asked to read three short fictional child case studies and answer corresponding questions in response to the information provided. We will not be asking you to discuss anything regarding your own children or personal experiences. This study, and the associated ethical and risk considerations, has been peer reviewed and evaluated to be of low risk. However, given that this research is focused on the topic of mental health, there is a small possibility some of the questions could be confronting for you if your child, whanau, or yourself, have experienced similar situations. If you, or anyone in your whanau are currently receiving mental health support, please carefully consider your choice to participate in this study. You may want to talk to family, friends or your health professional about whether participating is right for you.

If any feelings of discomfort come up for you, or if any of the material is confronting or upsetting, please remember it is okay for you to withdraw from participating in the survey at any time for any reason, and no further questions will be asked.

Data management

If you do choose to participate, the data from the survey will always remain anonymous, and no identifiable information (such as your email if you choose to provide it) will be included in the analysis. The data will be securely kept in a password protected database which is only accessible by the project team. Importantly, the raw data collected is required to be destroyed after five years.

Participant rights

You are under no obligation to participate in this research, and therefore have the right to choose whether you wish to participate or not. If you do choose to participate, you have the right to decline to answer any of the questions, and you have the right to withdraw from participating at any time, even after commencement of the survey, for any reason. Whilst you will have the opportunity to provide your email in order to receive research findings at completion of the research, and to also be entered into the prize draw, you are under no obligation to provide this information if you do not wish to.

Thank you

As a thank you for taking the time to participate in the study, we would like to provide participants with the opportunity to enter a prize draw to win one of 25 x $40 GiftPay vouchers through entering your email at completion of the survey, if you choose to do so. GiftPay vouchers are a digital gift card allowing recipients to choose where they wish to spend their gift card from a range of retailers. We aim to process entries and randomly draw the winners within one week after the survey closes. For those who are drawn as winners, we aim to contact you within 48 hours after the prize draw.

Researchers and contact details

If you have any further questions regarding this study, please direct these to one of the below email addresses:

Researcher

Sarah Barnes
School of Psychology

Massey University
Palmerston North
New Zealand
Email: Sarah.Barnes.2@uni.massey.ac.nz

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Palmerston North, New Zealand
T +64 6 3569-099 ext 85071 : W psychology.massey.ac.nz

This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University's Human Ethics Committees. The researcher(s) named in this document are responsible for the ethical conduct of this research.

If you have any concerns about the conduct of this research that you want to raise with someone other than the researcher(s), please contact Professor Craig Johnson, Director (Research Ethics), email humanethics@massey.ac.nz.

End of Block: Information page

Start of Block: Consent

Consent_hdr Respondent Consent

Consent_inf Thank you for participating in this questionnaire. Your participation implies consent. You have the right to decline to answer any particular question.

Consent I have read and understood the information sheet for this study and consent to collection of my responses.
(Please click on the 'Yes' choice if you wish to proceed.)

- ○ Yes (1)
- ○ No (2)

Display This Question:

If I have read and understood the information sheet for this study and consent to collection of my r... = Yes

Consent_yes_inf Thank you so much for choosing to participate in this study! We would like to remind you of your right to withdraw from participating at any time, even after commencement of the survey, for any reason, no further questions asked. You will also have the ability to pause and come back to the survey at any time.

End of Block: Consent

Start of Block: Results email address

Early_exit_inf Thank you for taking the time to participate so far!

Results Would you like to enter your email to be provided with the results of this study at the completion of the analysis?

- ○ Yes (1)
- ○ No (2)

Display This Question:

If Would you like to enter your email to be provided with the results of this study at the completio... = Yes

Email_addr Please enter your email address, so we can email a summary of results to you at the completion of the analysis.

_____

End of Block: Results email address

Start of Block: Demographics

Dem_hdr Demographics

Dem_inf
Before we proceed to the core survey, we will ask you to respond to some general demographic questions consisting of your gender, age, residential region, ethnicity, and age of the child currently in your care.
Firstly, we kindly ask you to answer some initial questions regarding your demographic.

Age What is your age?

- Under 21 (1)
- 21-25 (2)
- 25-30 (3)
- 30-40 (4)
- 40-50 (5)
- 50-60 (6)
- 60-70 (7)
- 70+ (8)

Skip To: End of Block If What is your age? = Under 21

Page Break

Gender What is your gender?

- ○ Male (1)
- ○ Female (2)
- ○ Non-binary (3)
- ○ Other (please specify) (4) _____
- ○ Prefer not to say (5)

Region What is your current residential region?

▼ Northland / Te Tai Tokerau (1) ... Southland / Murihiku (16)

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

- ○ NZ/European (1)
- ○ Māori (2)
- ○ Pacific Peoples (3)
- ○ Asian (4)
- ○ MELAA (Middle Eastern/Latin American/African) (5)
- ○ Other ethnicity (6) _____

Page Break

Child_Age
What is the age of the child(ren) currently in your care?

Please select multiple options if there is more than one child in your care.

- ☐ 5 years old (5)
- ☐ 6 years old (6)
- ☐ 7 years old (7)
- ☐ 8 years old (8)
- ☐ 9 years old (9)
- ☐ 10 years old (10)
- ☐ 11 years old (11)
- ☐ 12 years old (12)
- ☐ 13 years old (13)
- ☐ 14 years old (14)
- ☐ 15 years old (15)
- ☐ 16 years old (16)
- ☐ 17 years old (17)
- ☐ 18 years old (18)
- ☐ ⊗ I do not have a child in my care. (0)

Skip To: End of Block If What is the age of the child(ren) currently in your care? Please select multiple options if there... = I do not have a child in my care.

Carry Forward Selected Choices from "What is the age of the child(ren) currently in your care? Please select multiple options if there is more than one child in your care."

Child_Num How many children in each age group you have selected?

	1 child (1)	2 children (2)	3 children (3)
5 years old (Child_Num_x5)	○	○	○
6 years old (Child_Num_x6)	○	○	○
7 years old (Child_Num_x7)	○	○	○
8 years old (Child_Num_x8)	○	○	○
9 years old (Child_Num_x9)	○	○	○
10 years old (Child_Num_x10)	○	○	○
11 years old (Child_Num_x11)	○	○	○
12 years old (Child_Num_x12)	○	○	○
13 years old (Child_Num_x13)	○	○	○
14 years old (Child_Num_x14)	○	○	○
15 years old (Child_Num_x15)	○	○	○
16 years old (Child_Num_x16)	○	○	○
17 years old (Child_Num_x17)	○	○	○
18 years old (Child_Num_x18)	○	○	○
⊗ I do not have a child in my care. (Child_Num_x0)	○	○	○

Page Break

MH_Know How much do you feel you know about mental health?

- ○ No knowledge (0)
- ○ Minimal knowledge (1)
- ○ Some knowledge (2)
- ○ Reasonable knowledge (3)
- ○ Good knowledge (4)
- ○ Excellent knowledge (5)

MH_HowKnow How have you come to have this knowledge?

_____

_____

_____

_____

_____

Study_link How did you find out about this study?

- ○ Social and/or online media platform (1)
- ○ My child's school (2)
- ○ Friend and/or family (3)
- ○ Other (please specify) (4)

_____

End of Block: Demographics

Start of Block: Ineligible

Ineligible
Thank you for taking the time to participate so far!

However, based on your responses, you do not meet the required criteria and are therefore not eligible to participate in this survey.

End of Block: Ineligible

Start of Block: Vignette introduction

Vig_hdr Fictional child descriptions

Vig_inf Please read the fictional descriptions of three children below and answer the corresponding questions that follow.

End of Block: Vignette introduction

Start of Block: Vignette 8yr A (Vig8A)

Vig8A Alex is an 8-year-old and is in year 4 at primary school. Alex has become distracted easily and forgetful at both home and school over the past 6 months. Alex often fails to finish his/her chores and schoolwork and repeatedly makes careless mistakes on schoolwork. Alex has difficulty paying attention for long periods of time and appears very restless and distracted, exhibited at school through getting up from his/her seat frequently, and constantly fiddling with his/her stationary. Alex's teachers have expressed their concerns with Alex's ability to complete schoolwork due to his/her difficulty with paying attention. Alex also often does not appear to listen when spoken to, talks a lot, and often interrupts others when they are talking. Alex has always received good grades on homework and school tasks, but his/her recent behaviour is now affecting his/her schoolwork and grades, with Alex's grades at school for the last eight months being below his/her academic capabilities. Alex also exhibits difficulty regulating his/her emotions, evidenced by regular outbursts which often appear as an 'over the top' reaction to a situation; with this behaviour interfering with his/her ability to keep and make new friends.

Vig8A_1 Do you think this child is experiencing any form of clinically significant mental distress?

- ○ Yes (1)
- ○ No (2)

Display This Question:

If Do you think this child is experiencing any form of clinically significant mental distress? = Yes

Vig8A_1b What diagnosis do you think best fits this child?

- ○ Attention-Deficit-Hyperactivity-Disorder (1)
- ○ Depression (2)
- ○ Anxiety (3)
- ○ Depression AND Anxiety (4)
- ○ Bipolar (5)
- ○ Obsessive-compulsive-disorder (6)
- ○ Other (please specify) (7) _____

Page Break

Vig8A_2 If you were responsible for this child, would you seek help for them?

- ○ Yes (1)
- ○ No (2)

Vig8A_2b Please help us understand the reasons for your answer.

_____

_____

_____

_____

_____

End of Block: Vignette 8yr A (Vig8A)

Start of Block: Vignette 8yr B (Vig8B)

Vig8B Sam is an 8-year-old and is in year 4 at primary school. For the past 6 months, Sam has been excessively worried and nervous about a lot of things in his/her daily life and has expressed he/she sometimes wishes he/she could disappear. Sam has expressed it is difficulty for him/her to control his/her worry. As a result of Sam's worry, he/she has had difficulties concentrating at school. While previously gaining high praise on homework and school tasks, Sam's completion quality of homework and school tasks have worsened. Sam has also been irritable at home and school, and often cries a lot. Sam has increasingly begun to socialise less with friends and family, preferring to be alone, and seems to not enjoy playing sports anymore, something he/she was rather fond of previously. Sam reports feeling tired, restless, and unhappy.

Vig8B_1 Do you think this child is experiencing any form of clinically significant mental distress?

- ○ Yes (1)
- ○ No (2)

Display This Question:

If Do you think this child is experiencing any form of clinically significant mental distress? = Yes

Vig8B_1b What diagnosis do you think best fits this child?

- ○ Attention-Deficit-Hyperactivity-Disorder (1)
- ○ Depression (2)
- ○ Anxiety (3)
- ○ Depression AND Anxiety (4)
- ○ Bipolar (5)
- ○ Obsessive-compulsive-disorder (6)
- ○ Other (please specify) (7) _____

Page Break

Vig8B_2 If you were responsible for this child, would you seek help for them?

- ○ Yes (1)
- ○ No (2)

Vig8B_2b Please help us understand the reasons for your answer.

_____

_____

_____

_____

_____

End of Block: Vignette 8yr B (Vig8B)

Start of Block: Vignette 8yr C (Vig8C)

Vig8C Jordan is an 8-year-old in year 4 at primary school. Jordan has been receiving good grades in school over the past 6 months. Jordan has a few friends at school who he/she enjoys spending time with. Although Jordan usually gets along with most children, Jordan sometimes gets into arguments with his/her friends when playing games or when he/she does not get his/her way. Occasionally, when Jordan gets angry or upset, he/she yells or slams his/her door; however, once Jordan cools down, he/she usually feels bad and apologizes for his/her behaviour. Jordan enjoys participating in several extra-curricular activities, including soccer and the book club.

Vig8C_1 Do you think this child is experiencing any form of clinically significant mental distress?

- ○ Yes (1)
- ○ No (2)

Display This Question:

If Do you think this child is experiencing any form of clinically significant mental distress? = Yes

Vig8C_1b What diagnosis do you think best fits this child?

- ○ Attention-Deficit-Hyperactivity-Disorder (1)
- ○ Depression (2)
- ○ Anxiety (3)
- ○ Depression AND Anxiety (4)
- ○ Bipolar (5)
- ○ Obsessive-compulsive-disorder (6)
- ○ Other (please specify) (7) _____

Page Break

Vig8C_2 If you were responsible for this child, would you seek help for them?

- ○ Yes (1)
- ○ No (2)

Vig8C_2b Please help us understand the reasons for your answer.

_____

_____

_____

_____

_____

End of Block: Vignette 8yr C (Vig8C)

Start of Block: Vignette 14yr A (Vig14A)

Vig14A Alex is a 14-year-old in year 10 at high school. Alex has become distracted easily and forgetful at both home and school over the past 6 months. Alex often fails to finish his/her chores and schoolwork and repeatedly makes careless mistakes on assignments. Alex has difficulty paying attention for long periods of time and appears very fidgety, he/she also complains of internal feelings of restless, stating his/her mind tends to wander. Alex's teachers have expressed their concerns with Alex's ability to sit his/her upcoming important school exams due to Alex's difficulty with paying attention. Alex also often does not appear to listen when spoken to, talks a lot, and often interrupts others when they are talking. Alex has always been a high achiever and exhibits significant ability to excel academically, but his/her recent behaviour is now affecting his/her schoolwork and grades, with Alex's grades at school for the last eight months being below his/her academic capabilities. Alex also exhibits difficulty regulating his/her emotions, evidenced by regular outbursts which often appear as an 'over the top' reaction to a situation; with this behaviour interfering with his/her ability to keep and make new friends.

Vig14A_1 Do you think this child is experiencing any form of clinically significant mental distress?

- ○ Yes (1)
- ○ No (2)

Display This Question:

If Do you think this child is experiencing any form of clinically significant mental distress? = Yes

Vig14A_1b What diagnosis do you think best fits this child?

- ○ Attention-Deficit-Hyperactivity-Disorder (1)
- ○ Depression (2)
- ○ Anxiety (3)
- ○ Depression AND Anxiety (4)
- ○ Bipolar (5)
- ○ Obsessive-compulsive-disorder (6)
- ○ Other (please specify) (7) _____

Page Break

Vig14A_2 If you were responsible for this child, would you seek help for them?

- Yes (1)
- No (2)

Vig14A_2b Please help us understand the reasons for your answer.

_____

_____

_____

_____

_____

End of Block: Vignette 14yr A (Vig14A)

Start of Block: Vignette 14yr B (Vig14B)

Vig14B Sam is a 14-year-old and is in year 10 at high school. For the past 6 months, Sam has been worrying excessively about a lot of things in his/her daily life, expects everything to be worse than it actually is, is apprehensive, about a lot of things, and has fears about the future. Sam has expressed it is difficult for him/her to control his/her worry. As a result of Sam's excessive worrying, he/she has had difficulties concentrating at school. While previously exhibiting high academic potential, his/her grades have worsened. Sam has also become irritable at home and school and expresses feelings of hopelessness. Sam has increasingly begun to isolate from friends and family, preferring to be alone, and seems to not enjoy sports anymore, something he/she was rather fond of previously. Sam reports feeling tired, restless, and unhappy.

Vig14B_1 Do you think this child is experiencing any form of clinically significant mental distress?

- Yes (1)
- No (2)

Display This Question:

If Do you think this child is experiencing any form of clinically significant mental distress? = Yes

Vig14B_1b What diagnosis do you think best fits this child?

- ○ Attention-Deficit-Hyperactivity-Disorder (1)
- ○ Depression (2)
- ○ Anxiety (3)
- ○ Depression AND Anxiety (4)
- ○ Bipolar (5)
- ○ Obsessive-compulsive-disorder (6)
- ○ Other (please specify) (7) _____

Page Break

Vig14B_2 If you were responsible for this child, would you seek help for them?

- ○ Yes (1)
- ○ No (2)

Vig14B_2b Please help us understand the reasons for your answer.

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End of Block: Vignette 14yr B (Vig14B)

Start of Block: Vignette 14yr C (Vig14C)

Vig14C Jordan is a 14-year-old in year 10 at high school. Jordan has been receiving good grades in school over the past 6 months. Jordan has a good friend group at school who he/she enjoys spending time with. Although Jordan usually gets along with other peers at his/her school, Jordan sometimes gets into minor arguments with his/her peers in the classroom. Occasionally, when Jordan gets angry or upset, he/she yells or slams his/her door; however, once Jordan cools down, he/she usually feels bad and apologizes for his/her behaviour. Jordan enjoys participating in several after school activities, including soccer and music lessons.

Vig14C_1 Do you think this child is experiencing any form of clinically significant mental distress?

- ○ Yes (1)
- ○ No (2)

Display This Question:

If Do you think this child is experiencing any form of clinically significant mental distress? = Yes

Vig14C_1b What diagnosis do you think best fits this child?

- ○ Attention-Deficit-Hyperactivity-Disorder (1)
- ○ Depression (2)
- ○ Anxiety (3)
- ○ Depression AND Anxiety (4)
- ○ Bipolar (5)
- ○ Obsessive-compulsive-disorder (6)
- ○ Other (please specify) (7) _____

Page Break

Vig14C_2 If you were responsible for this child, would you seek help for them?

- ○ Yes (1)
- ○ No (2)

Vig14C_2b Please help us understand the reasons for your answer.

_____

_____

_____

_____

_____

End of Block: Vignette 14yr C (Vig14C)

Start of Block: Seeking help = Yes (SHY)

SHY_1 You have selected that you would seek help for at least one of the previous fictional case studies.

We are interested in knowing which of the following would be your preferred method of help-seeking?

- ○ General practitioner (1)
- ○ Counsellor (2)
- ○ Psychologist (3)
- ○ Friends (4)
- ○ Family (5)
- ○ Parenting books (6)
- ○ Online sources (7)
- ○ Other (please specify) (8) _____

SHY_Why Why would you prefer to seek this source of help?

_____

_____

_____

_____

_____

SHY_Barrier We are also interested in, when people do want to seek help, what, if any, would you personally perceive as barriers that may get in the way of seeking help for a child/adolescent experiencing distress?

_____

_____

_____

_____

_____

End of Block: Seeking help = Yes (SHY)

Start of Block: Support

Help If this survey and/or the fictional case studies have raised any concerns for your own child's mental wellbeing, or you have experienced any discomfort due to the potentially confronting nature of the survey, please find below some helpful website links and hotline numbers.

Parenting hotline numbers and websites: Commonground - a website hub providing parents, family, whānau and friends with access to information, tools and support to help a young person who is struggling. https://mentalhealth.org.nz/common-ground Parenting Place – Offers various resources for every step of your parenting journey https://parentingplace.nz Kids Health – Accurate and reliable information for New Zealand Parents and whanau about the health and wellbeing of children and adolescents in Aotearoa. https://kidshealth.org.nz
General mental health hotline numbers and websites: Mental Health Foundation - https://mentalhealth.org.nz Lifeline – 0800 543 354 (0800 lifeline) or free text 4357 (HELP) Healthline - 0800 611 116 Anxiety and depression - https://depression.org.nz
Helplines for children and young people: Youthline – 0800 376 633 free text 234 or email talk@youthline.co.nz What's Up – 0800 942 8787 (for 5-18 year olds) Kidsline – 0800 54 37 54 (0800 kidsline)

End of Block: Support

Start of Block: Query on prize or results

End
The survey is now complete.

Thank you so much for taking the time to participate in this survey!

Draw **Entry for Gift Card Draw or Request a summary of results**
As an appreciation for your participation, we are offering you the chance to win one of 25 x $40 Giftpay vouchers.
You may also request a summary of results at the completion of the analysis.

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

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

- ○ Prize draw/Results (1)
- ○ Exit (2)

End of Block: Query on prize or results

Appendix C: Ethical Approval

3/06/2022

Dear: Sarah Barnes

Re: Low Risk Notification - 4000026138 - Child Mental Distress - A Parental Perspective

Thank you for your notification which you have assessed as Low Risk.

Your project has been recorded in our database for inclusion in the Annual Report of the Massey University Human Ethics Committee.

The low risk notification for this project is valid for a maximum of three years.

If situations subsequently occur which cause you to reconsider your ethical analysis, please contact a Research Ethics Administrator.

Please note that travel undertaken by students must be approved by the supervisor and the relevant Pro Vice-Chancellor and be in accordance with the Policy and Procedures for Course-Related Student Travel Overseas. In addition, the supervisor must advise the University's Insurance Officer.

A reminder to include the following statement on all public documents:

"This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University's Human Ethics Committees. The researcher(s) named in this document are responsible for the ethical conduct of this research.

If you have any concerns about the conduct of this research that you want to raise with someone other than the researcher(s), please contact Professor Craig Johnson, Director - Ethics, telephone 06 3569099 ext 85271, email humanethics@massey.ac.nz."

Please note, if a sponsoring organisation, funding authority or a journal in which you wish to publish requires evidence of committee approval (with an approval number), you will have to complete the application form again, answering "yes" to the publication question to provide more information for one of the University's Human Ethics Committees. You should also note that such an approval can only be provided prior to the commencement of the research.

Yours sincerely

Professor Craig Johnson
Chair, Human Ethics Chairs' Committee and Director (Research Ethics)

Research Ethics Office, Research and Enterprise
Massey University, Private Bag 11 222, Palmerston North, 4442, New Zealand T 06 951 6841; 06 95106840
E humanethics@massey.ac.nz; animalethics@massey.ac.nz; gtc@massey.ac.nz