An investigation into Primary Teachers' mental health literacy and resilience in supporting children experiencing mental distress in Aotearoa, New Zealand

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Glossary

The following Māori words and their meanings have been based from translations on Te Aka Māori Dictionary (Moorfield, 2022).

Aotearoa	New Zealand
Hauora	Health
Kaiako	Teacher/Instructor
Kōhanga Reo	Māori language preschool
Māori	Indigenous people of New Zealand
Meihana	Name of wellbeing model (Pitama et al., 2007)
Tamariki	Children
Te Tiriti o Waitangi	Treaty of Waitangi
Te Whare Tapa Whā	Name of wellbeing model (Durie, 1985)
Whānau	Family group including extended family and community

Abstract

Mental distress is becoming more prevalent amongst children and can impact long-term wellbeing outcomes when left unrecognised and untreated. Primary teachers play an important role in children's development and are key people to help identify and support children experiencing mental distress. In New Zealand there is a gap of baseline information looking at primary teachers' mental health literacy (MHL) and teacher resilience. The present study aims to address this gap by examining primary teacher's MHL, teacher resilience and perceived level of support when managing student's mental distress.

Applying a mixed-methods design, and gathering data via an online survey, the analysis consisted of both quantitative and qualitative items. The final sample included 508 fully registered New Zealand primary teachers, who had been teaching in New Zealand within the last five years (the G*Power target was 528). The quantitative constructs were statistically analysed using SPSS and qualitative responses through thematic analysis. The measures of MHL and resiliency held strong reliability while perceived support, a construct designed for this survey, did not. The results demonstrated that the level of MHL literacy amongst New Zealand teachers was relatively high compared to peer literature. The level of MHL was positively correlated with teacher resiliency and was statistically higher for teachers with >10 years of teaching experience. There was no observable difference in MHL, teacher resiliency or the relationship between the two when controlling for teaching location (defined as urban and rural teachers). Through the thematic analysis, it was clear that COVID-19 also had a genuine effect on teachers' level of MHL and resilience.

This study confirmed that MHL and resilience is an important topic to teachers with high levels of engagement (despite a lack of statistical power), particularly through the qualitative responses and themes. The evidence that MHL and resiliency is low for new teachers (and appears to build through experience) highlights there is opportunity to do more for younger teachers through education and support. This could include formal mental health training before teachers get into the classroom. Further studies with a powered sample size, qualitative interviews, multiple base line design research, and /or longitudinal studies would build on this research and help provide targeted support for primary teachers to help manage students' mental distress.

1. A review of the literature

1.1 Introduction

Primary teachers have a complex role in today's classrooms. They are expected to cater for every individual child's needs, integrating the curriculum into their class programmes while maintaining positive relationships with parents, staff members and outside agencies. Since the development of the New Zealand Curriculum (New Zealand Ministry of Education et al., 2007), learning has notably changed from a 'whole class' focus to individualised 'needs-based' learning. This has created additional workload for teachers having to plan, implement and guide learning for all different needs.

However, students have a diverse set of needs – from learning disabilities to psychological disorders and psychosocial needs – and this diversity can create challenges within a classroom. In particular, New Zealanders' rates of mental distress have doubled in the last 20 years and are increasing in the younger population (Menzies et al., 2020). With the increasing expectations and demands on teachers to support these distressed students, their own resiliency is at risk of being affected, which can impact their teaching abilities and contribute to them ultimately leaving the profession (Ainsworth & Oldfield, 2019).

The purpose of the present study is to gain insight into primary teachers' mental health literacy (MHL), how they are supporting students currently, and how the teachers' own resilience is impacted by the demands they are presently managing. To frame the importance of this topic, the current chapter will review the rates of mental distress for youth in New Zealand, and the associated need for MHL, the teachers' role and how this relates to young people, and teachers' MHL and resilience. The chapter will then progress onto the aims of the study.

1.2 Mental health and psychological disorders

Mental distress affects a high number of children internationally, with nearly one in seven meeting the diagnostic criteria (of the DSM 5) for a psychological disorder (Polanczyk et al., 2015). Many of these disorders begin before the child is 15 and, if left untreated, can affect their physical health, academic and social success (Department of the Prime Minister

and Cabinet, 2019). They can also raise the risk of drug abuse, self-harm and suicidal behaviours (Radez et al., 2021) and (left unaddressed) will often continue into adulthood (Ford et al., 2007). Some studies suggest the prevalence for childhood mental distress internationally is as high as approximately 20%, although this varies for specific mental disorders (Malatest International, 2016). A variance in prevalence statistics is to be expected due to different diagnostic criteria, as well as different populations.

Nonetheless, there is a pattern emerging that clearly indicates an increase of mental distress in New Zealand's children, along with one of the highest rates of youth suicide in the OECD (Malatest International, 2016). Prior to the current COVID-19 pandemic, there was already a steady increase in the prevalence of psychological disorders amongst children in New Zealand (Ministry of Health, 2021) with an ongoing increase predicted for mental health (MH) problems amongst children and youth due to the psychosocial effects of the past few years due to the impacts of COVID-19 (Power et al., 2020).

Common childhood psychological disorders can be classified into internalising or externalising behaviours (Ogundele, 2018). In a classroom context, externalising disorders are most likely to be noticed by the teacher as they involve more observable behaviours which may include: excessive levels of activity (hyperactivity/impulsivity) and/or distractibility and difficulty concentrating leading to disruption in the classroom (Splett et al., 2019). Internalising disorders (such as depression and anxiety) are likely to be less obvious, causing significant difficulties to the student themselves such as overthinking, ruminating, worrying, and low mood (Splett et al., 2019).

1.3 Mental distress: what supports recovery and wellbeing

As psychological distress is increasing in New Zealand's young people (Menzies et al., 2020), research within this age group is necessary (and findings valuable) to support MH and reduce distress. Research has explored the protective factors associated with the psychological wellbeing of children. Because children are dependent on adults for care, the essential protective factors for children's psychological distress includes social capital. This encompasses a positive and supportive family environment and social support (including the school system), which have beneficial effects on children over time (Colizzi et al., 2020).

This also fits in with Bronfenbrenner's ecological model (Bronfenbrenner, 1979) which is discussed in more depth below.

Ferguson (2006) reviewed the literature on the importance of social capital in relation to children's wellbeing. Community social capital and family social capital were the two indicators associated with children's wellbeing outcomes. A supportive family environment also enables the inter-relationships with school communities to be stronger, providing enhanced support for the child outside of the home (Ferguson, 2006). Schools have not historically been defined within community social capital because this has predominantly been applied within an adult framework and definitions (McPherson et al., 2014). However, it must be noted that the school system is extremely important given that it acts as a core component of a young person's development for thirteen years. The school systems are places where a child's family and school community converge while also being an environment which contributes significantly to the young person's development (McPherson et al., 2014).

To ensure that children experiencing mental distress are being supported by the adults in these systems there is a clear need for those adults to have knowledge and understanding of MH. With New Zealand's rates of youth mental distress increasing, it is important to understand how much support these children are actually getting from adults who are responsible for their care in the home and school environments (Department of the Prime Minister and Cabinet, 2019). Consequently, research is valuable and necessary with teachers to gauge how they can help support MH and reduce distress within schools.

1.4 Mental health literacy - what it is, why it is important and what is known about rates of MHL in the general population, parents and teachers.

MHL has been widely researched and highlighted as an enabler to understanding and supporting mental distress experienced by individuals. It can help encourage the individual experiencing distress to seek help (Altweck et al., 2015), can guide interventions that help change one's own stigma of seeking treatment or towards others experiencing mental distress (Anderson & Pierce, 2012) and provide support programs for people to help someone experiencing mental distress (Bond et al., 2015).

Because of the burgeoning MHL research, the components and definitions of the term have become broad and hard to distinguish (Spiker & Hammer, 2019). The original 'gold standard' definition of MH literacy was presented by Jorm et al., (1997) as "knowledge and beliefs about mental disorders which aid their recognition, management, or prevention" (Jorm et al., 1997, p. 182)). However, recent researchers have suggested that more components of MHL should be incorporated, including 'attitudes, stigma, and positive MH related to help-seeking efficacy and mental illness' (Bjørnsen et al., 2017; Kusan, 2013; Kutcher et al., 2016; Wei, 2017).

Poor MHL is expected to lead to a lack of mental distress identification, thus reducing the probability that an individual will undergo treatment; this consequently, leads to a maintenance of symptoms (Jorm, 2012; Jorm et al., 1997). The systematic review by Gulliver et al. (2010) on MHL gaps also showed that a lack of MH identification and knowledge creates barriers to seeking support for mental distress. Identifiers of poor MHL included poor identification of mental distress and limited knowledge of MH services for youth. When key adult supports (e.g., parents/teachers) for children have a clear understanding of MHL it can ensure that children's mental distress is recognised early and access to services can be used to help support them. Thus, MHL is important for providing access to early intervention and can result in better wellbeing outcomes for people experiencing mental distress.

Several studies have investigated how the level of MHL can lead to better outcomes for young people. Rossetto, Jorm and Reavley (2016) found that the higher MHL an individual has, the more likely they are to support people experiencing mental distress. They concluded that simply having that knowledge gives people more confidence in knowing how to help in an appropriate and targeted way (Rossetto et al., 2016). During a child's development it is crucial to identify and understand mental distress as early as possible to allow for early interventions and support better outcomes for the individuals (Department of the Prime Minister and Cabinet, 2019).

However, some research has suggested that childhood mental distress is not clearly recognised or understood across the general population (Radez et al., 2021). A survey found that in Australia parents were only 35% confident about noticing MH symptoms with their child and had low levels of MHL (The Royal Children's Hospital, 2017). This lack of knowledge has flow on effects. Barriers with help-seeking from adults (for their child)

included parents not knowing how to help or what the causes were (Lawrence et al., 2015). Major barriers stopping children from receiving treatment were lack of knowledge about how to access services or the cost of those services (Tully et al., 2019). The lack of research covering MHL and better outcomes for young people highlights a gap for early intervention in children's mental distress. Overall, international research (predominantly on adults) has found that MHL is positively related to MH help-seeking, enabling more accurate support and services for the individual experiencing mental distress (Smith & Shochet, 2011).

MHL is related to other key factors affecting help seeking. On the whole, community stigma has often been recognised as what stops parents from seeking support for their child's mental distress (Tully et al., 2019). This stigma involves putting the blame of a child's mental distress on the parents (Mukolo et al., 2010). There is limited psychoeducation from MH services for patients around the diagnostic terms of psychological disorders. This causes problems where families and schools lack the understanding and adds to confusion and stigma around MH (Tully et al., 2019). When interventions to increase MHL have been used, it has reduced this stigma (Morgan et al., 2018). For example, a study by Wright et al., (2011) found that when psychoeducation is provided around diagnostic labels for families and schools it helps reduce the stigma attitudes. Consequently, people are more able to give support and encouragement to someone experiencing mental distress in order for them to get the help they need (Jorm et al., 2005; Rossetto et al., 2014).

Schools and teachers are in an important and influential position to help increase community MHL, being able to identify child mental distress, and provide the resources to parents to seek the support services they need. Children can be referred for external service support in New Zealand if they are experiencing significant social, emotional or behavioural distress (CAMHS and ICAFS, 2022). Children are more likely to be engaged with help seeking when they have supportive social influences in the form of adults in their life, who have adequate MHL to engage in that help seeking (Rickwood et al., 2005). Because MHL has been demonstrated to be highly important to supporting individuals experiencing mental distress to get help - and because youth spend so much time at school - it is expected that a teacher's own MHL is likely to have a strong bearing on their ability and willingness to support students that need it.

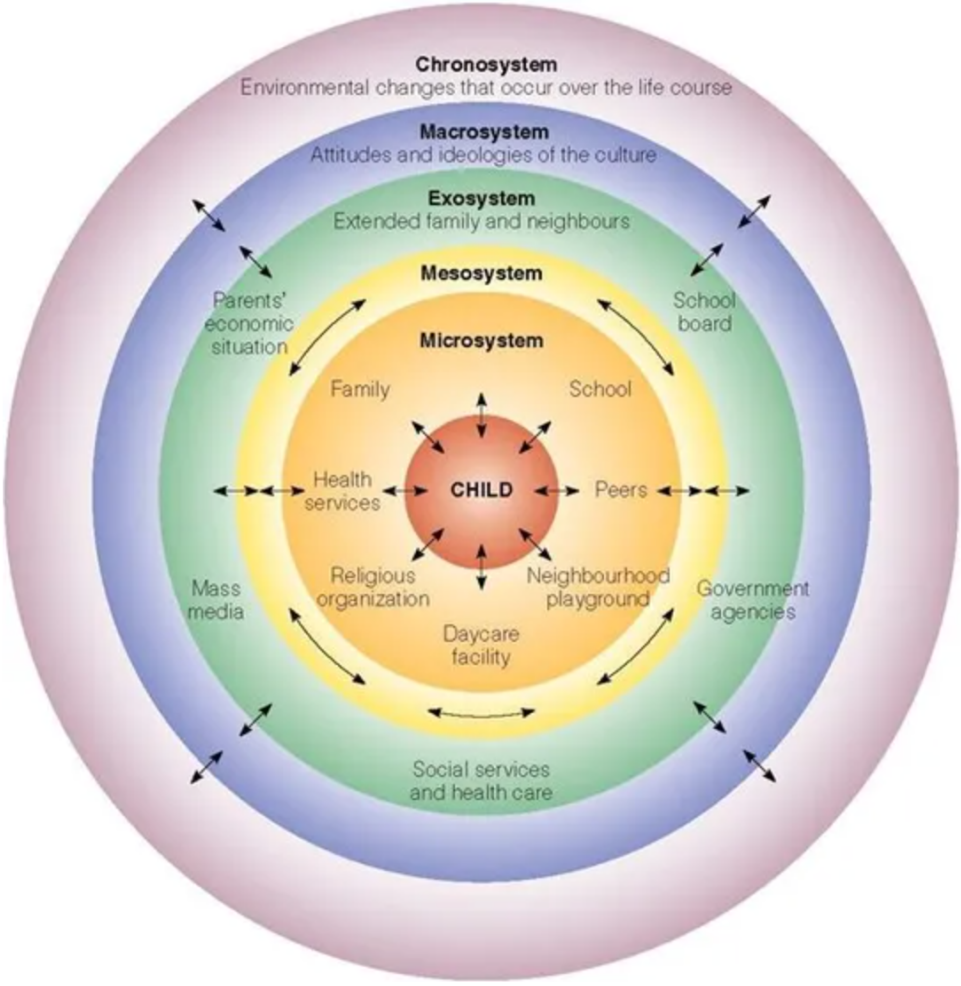
Higher MHL by educators therefore should enable earlier identification of mental distress, which could provide the young person with the appropriate help-seeking and enable long-term better outcomes (Tissera & Tairi, 2020). Unsurprisingly then, intervention programs targeted at increasing teachers' MHL are likely to improve student MH (Kidger et al., 2016). Indeed, research demonstrated that high-school teachers who underwent a MH intervention improved their MH knowledge, reduced stigmatising attitudes and increased confidence in providing help to students in the class (Jorm et al., 2010).

Taken together, having a positive supportive family environment and social support (including the school system) are essential protective factors associated with reduced mental distress and enhanced wellbeing, which have beneficial effects on children over time (Colizzi et al., 2020). MHL interventions have been widely researched and supported in being extremely important to help support children experiencing mental distress in the classroom (Salazar de Pablo et al., 2020; Yamaguchi et al., 2020). However, in New Zealand no research has looked at what New Zealand teachers know about MHL, how they are supported and where the gaps are.

1.5 Teacher's role in Bronfenbrenner's ecological systems theory

Ecological systems theory (Bronfenbrenner, 1979) is a framework that shows how an individual's interactions and relationships with different environments can shape or influence that person. There are five different systems or layers which are all interwoven to help shape the individual. The micro system includes one's family, friends and workplace/school; the meso system involves the interactions between the elements within the micro system; interactions with the community encompass the exo system; the macro system includes political and cultural aspects; and finally, the interaction with time is represented through the chrono system (Bronfenbrenner & Morris, 2007).

Figure 1:
A figure of the Ecological Systems Theory



Source: [Simple Psychology]

The ecological systems theory (Bronfenbrenner, 1979) highlights the important role of the teacher and how different interactions within these systems affect the developing child as well as themselves, those close to them and the learning and emotional outcomes of students. For example, the student's micro system would include teachers, students and family; how these adults connect will play an important role with teachers within the meso system in the school environment. The role teachers play includes their job of being responsible for the student's learning while ensuring their social- emotional wellbeing is being enhanced. Thus, teachers play a critical role in a child's development; because of the large amount of time they spend together, they role model necessary skills for a child's development (Harvey et al., 2016). Harvey et al., (2016) recognise that when a student's

social-emotional wellbeing is enhanced through strong relationships between students and teachers, the student's development is supported and nurtured.

However, it should be noted that although teachers can have a positive influence on a student, they cannot (and should not) have sole responsibility for that student's mental distress. Instead, and in accordance with Bronfenbrenner, a student's mental distress should be looked at holistically through interactions in the meso system (Edwards, 2020). Therefore, teachers are crucial in the development of a student, being able to identify the student's current wellbeing and seek out further support if needed for them (Daniszewski, 2013; Splett et al., 2019; Yamaguchi et al., 2020). Likewise the student must take ownership of their learning and participate socially while collaborating alongside teachers to enable more successful development (Bronfenbrenner, 1979).

If a teacher is unable to establish a positive relationship with students, it can create a disconnect between the student and teacher. The student is at risk of being misunderstood and not having the appropriate support in place thus affecting their social and emotional wellbeing. This creates a greater classroom challenge for the teacher who must then rely on their own resiliency capacity to deal with the situation (Beltman et al., 2011). Taken together, the Ecological Systems Theory's micro and meso systems helps describe and provide context to the research of student and teacher wellbeing outcomes and how the interactions with one another can be contextualised.

1.6 Legislation and standards that cover teachers' obligations for student mental distress

Given the involvement and interactions teachers have which help support a child's development, it is important to highlight the responsibilities teachers have to uphold. Schools have the moral obligation to support student wellbeing in New Zealand. The Education Review Office (2016) notes, teachers have the "ethical responsibility to promote and respond to students physical, social, emotional, academic and spiritual needs in the form of pastoral care, strategic priorities and teaching practices which all require intensive school wide coordination" (p. 4). This is also upheld by the following governing standards:

- The Code of Professional Responsibility and Standards for the Teaching Profession for registered teachers states that teachers are responsible to promote wellbeing of students while protecting them from harm (Education Council, 2017);
- The National Administration guidelines for School Boards establish the requirement to provide physical and emotional environments that are safe for students (Ministry of Education, 2017);
- The United Nations Convention on the Rights of the Child have standards for the protection and treatment of children (Ministry of Social Development, 2021); and
- The Vulnerable Children Act (2014) establish child protection policies (Ministry for Children and the Ministry of Education, 2021).

Aligning with these is The New Zealand Curriculum (2007) in primary schools which includes Health and Physical Education; within the key learning area of health, it is expected that MH is covered. However, no specific achievement objectives state what that looks like for students (New Zealand Ministry of Education et al., 2007). There are different resources provided by the Ministry for teachers to use to teach students about MH but they are specifically for Year 7 up and not necessarily focusing on younger year levels (Cushman et al., 2011). Considering the expectation of teachers to teach students about MH, it is arguably important that teachers have opportunities to build on their own MHL so they are knowledgeable in the area before teaching it.

Overseas, focus is placed on both primary and secondary MHL interventions. The interventions are to support students by building resilience, ways to cope with stress in adolescence, and supporting children to reduce impulsivity by enhancing self-control in the early years (Harold & Gluckman, 2011; Wilcox & Wyman, 2016). All of these aims have been found to have helped academic achievement, positive adult health outcomes and quality of life measures over time (Harold & Gluckman, 2011).

Literature also shows that prevention strategies in early years help to reduce disruptive behaviour in classrooms, and adolescent suicidality (Kellam et al., 2011; Kellam et al., 2008). As discussed above the Chief New Zealand Government Science Advisor reported New Zealand as having one of the highest youth suicide rates in the developed world (Gluckman, 2017). Alongside MH challenges, this report found that many youth lack resilience to help overcome challenges in their lives. Future recommendations from the

Gluckman report (2017) strongly advise for there to be a high priority focus on primary and secondary prevention programs to be introduced and utilised into primary schools.

In addition to the internal support teachers provide in the classroom, external services play a big part in supporting teachers with their students' mental distress in primary schools. It generally is the teacher who will identify a need for support for a student based on specific behaviour or learning difficulty compared to the rest of the class (Ministry of Education, 2015). However, a documented lack of resources and funding by the Government limits how much support can be provided in primary schools and depends on the student's level of needs (Johns, 2017). The Resource Teachers: Learning and Behaviour (RTLB) work alongside teachers, students and their families to help come up with successful outcomes for the students and teachers in the classroom as well as working with outside agencies to help support the students' needs and wellbeing (Ministry of Education, 2015). Registered psychologists may work with teachers to provide resources and support for the student in the classroom setting. To enable this, funding is allocated based on the roll and decile of each school and determined on a case-by-case basis. In secondary schools there is more support for mental distress from resourced onsite school counsellors and other services (career guidance, deans, etc.) (Johns, 2017).

1.7.1 Teachers' mental health literacy

Taking into consideration the tensions between school responsibilities of supporting students' wellbeing and the constraints of external resources for MH support in New Zealand, it is important to know what MHL primary teachers have and how it is useful. New Zealand primary teachers do not undergo any specific MH or psychology training when becoming a registered teacher. As a result, teachers' knowledge of MH normally develops from professional courses, personal interest / experience, previous study out of the educational context, or experience while teaching with outside agencies in the classroom (e.g., working alongside an educational psychologist) (Whitley et al., 2018). Studies have found that teachers are able to identify and provide some support to specific psychological disorders (such as Attention deficit hyperactivity disorder and Autism spectrum disorder) because of the externalising symptoms being more noticeable in the classroom, particularly in male students (Splett et al., 2019). However, it has been argued that teachers need more knowledge

and training in order to identify and support more internalising disorders, such as child anxiety (Ginsburg et al., 2021).

1.7.2 Formal teacher training in MHL

Given the evidence on the importance of MHL, an important question must therefore be, "Are teachers adequately trained in MHL?" Teachers' MHL has been studied outside of New Zealand (Daniszewski, 2013; Dods, 2016; Ginsburg et al., 2021; Gulliver et al., 2019; Kamel et al., 2020; Ní Chorcora & Swords, 2021; Rothì et al., 2008; Splett et al., 2019). Studies in other Western countries (Graham et al., 2011; Reinke et al., 2011; Rothì et al., 2008) highlight teachers' lack of confidence, experience, knowledge, and training as barriers to identifying and addressing MH issues. These studies generally identify the need for support and development of teachers' MHL. However, studies in New Zealand regarding teachers' perceptions of whether their formal training prepared them for understanding MH distress in students are sparse. New Zealand-trained primary teachers generally will have undergone a three-year Bachelor's degree or a one year graduate diploma through University before becoming a 'beginning teacher'. A mentor supports the 'beginning teacher' for two years until they fit the requirements to be registered under the New Zealand CODE (Education Council, 2017) to become a registered teacher.

This extensive programme is to ensure teachers are upholding professional standards and are equipped to cater for the needs of students. However, for the purposes of this current study, a brief review was undertaken of the current 2022 course requirements to receive a primary Teaching Qualification from all of the Universities websites (Massey, Victoria, Canterbury, Otago, and Auckland). This overview indicated that they do not provide any specific courses on MHL according to the course descriptions (Massey University, 2022; University of Auckland, 2022; University of Canterbury, 2022; University of Otago, 2022; Victoria University, 2022). Classroom management descriptors were mostly incorporated into the practicum elements of their courses giving responsibility to experienced teachers to provide mentorship to students of how to manage behaviours in the classroom – not necessarily giving students the knowledge to understand what causes diverse student behaviours, or a comprehensive (and nationally consistent) overview of what to look out for and how to respond. This apprenticeship and mentor model requires the teacher teaching the beginning teacher to have good knowledge of managing child behaviour.

1.7.3 Professional development for teachers in the area of mental health literacy

Many MHL programmes (and resources) have become accessible and available to teachers within New Zealand since the identification of increased MH distress in our youth. However, there are no compulsory courses or professional development programmes that teachers are expected to complete. It is up to the schools to either provide opportunities or the teachers themselves to initiate or take upon themselves to further their MH knowledge. It is currently unknown how many teachers in New Zealand are seeking out extra training in MH to support their confidence in the classroom with students and mental distress and what topics or types of courses might be useful to them. This is a gap this research aims to address.

If teachers are able to identify mental distress in students and help provide them with appropriate supports or refer to specialised services it will help to provide better outcomes for students long term (Ní Chorcora & Swords, 2021). It will also give the teachers confidence to individualise their own teaching programmes to suit different types and levels of mental distress in the classroom (Yamaguchi et al., 2020). In doing so, this would improve the quality of learning and academic achievement and motivation of all children in the classroom (Brophy, 2010). For example, a child experiencing an externalising disorder like ADHD may benefit from learning with computer-based 'games'. This has shown to improve engagement and motivation with learning in the classroom (Alabdulakareem & Jamjoom, 2020). A child experiencing an internalising disorder like anxiety may benefit from having mindfulness or yoga taught in class. This has been shown to reduce anxiety symptoms in children as well as improving social and emotional skills in the classroom (Bazzano et al., 2018). Having the knowledge as to how to support students with diverse distress may alleviate pressure on the teachers to manage the class. Arguably, a teacher having the confidence and skills to adapt their teaching programs may support their success in their profession whilst alleviating extra stress from their workload.

1.7.4 Cultural considerations in the New Zealand context

As discussed above, mental distress has historically attracted stigma (specifically as relates to labelling of mental distress disorders) and been associated with sociocultural trends that tend to exclude people that experience mental distress (Strassle, 2018). In their systematic review across Pacific Rim countries, Ran et al. (2021) concluded that cultural

factors such as individualism, collectivism and religion influence people's behaviours and attitudes toward individuals that suffer from mental distress (Ran et al., 2021).

MHL is embedded within different worldviews depending on an individual's cultural background. Within a Western context, MH is viewed predominantly through a medical lens and can be very individualistic. Conversely, non-Western cultures have traditionally viewed MH through a holistic and collective lens. MH stigma has been influenced by a combination of historical events, experiences of MH and cultural views. Non-Western cultures' collectivism believes in group cohesion and following specific roles, customs and norms (Altweck et al., 2015). Within this cultural view, someone experiencing mental distress is more likely to be seen as an outcast and causing dislocation from the collective (Altweck et al., 2015). Treatment is often sought from medical practitioners when there are physical complaints; however, when this affects MH, help is commonly sought from religious and traditional healers. In Western culture there has been less stigma attached to MH and higher rates of MHL. This is partly due to the individualistic nature of sourcing and seeking help from medical professionals for both medical and physical wellbeing (Gopalkrishnan, 2018).

Given the multi-cultural diversity of New Zealand, teachers' MHL is likely to be influenced by their own cultural experiences in how they perceive or address mental distress in the class, as well as broader societal narratives. The Māori worldview on MH is based on a collective and holistic lens. Treatment of wellbeing in Māori culture can be viewed in the Te Whare Tapa Whā (Durie, 1985) or Meihana (Pitama et al., 2007) wellbeing models, where all aspects of health need to be in balance for harmonious Māori wellbeing.

Conversely, in Western culture each aspect of health is treated individually (Eckersley, 2006). With the spiritual beliefs in Māori being the foundation for Māori culture, MH has generally been treated holistically. 'Spiritual experiences' that Māori may experience could be seen as psychopathological experiences in a Western culture (Lindsay et al., 2022). The Māori culture provides a spiritual framework for these experiences and normalises these experiences (Lindsay et al., 2022). Because of the diverse views around MH in New Zealand, teachers may also have different views on how mental distress is defined.

This discussion has demonstrated that currently in New Zealand there is no compulsory formal teacher training in MHL; professional development is not standardised

across schools or teachers; and within the multi-cultural setting teachers may have different worldviews of mental distress. The complexity of expectations on teachers to support student mental distress – alongside different views of what mental distress is – creates a challenging environment. Depending on how well the teacher feels supported, managing students with mental distress could put external pressure on the teacher that challenges their own resiliency in the classroom.

1.7.5 Review of survey methods and statistical analysis on MHL

Previous studies from around the world have utilised a range of different design methods to gather information on teachers' MHL and how they are supporting students (Yamaguchi et al., 2020). These have included qualitative interviews, pre- and post-intervention methods as well as quantitative surveys.

Gulliver et al. (2019) conducted an anonymous online survey with university teachers from one Australian university, gathering information on their knowledge of depression, experience with students' MH and their own stigma towards depression. Staff that had higher levels of depression literacy were more likely to feel informed to support the student's MH. Unfortunately, only 224 out of 1,370 staff responded to the survey. A proportionately higher number of staff in the arts/social science departments responded to the survey, which may have been because they are more familiar with the field of psychology, including MHL, and so were more drawn to completing the survey in an area they are familiar with (Laws & Fiedler, 2012). Females were also more likely to have higher levels of depression literacy which aligns with previous research (Swami, 2012). This current study will also investigate whether this trend is observed; however, because the majority of primary teachers in New Zealand are female, this may be dependent on the composition of survey respondents.

The Gulliver et al. (2019) study was limited in its breadth due to its sample characteristics (from only one university with low rates of participation) and only measuring depression literacy versus the broad spectrum of MH – thus not showing gaps in knowledge of other forms of mental distress which may affect students. The study only measured University teachers' depression literacy who also have completely different interactions with their students relative to primary teachers. As a function of this sample population, it also does not encapsulate youth who may not attend university because of not achieving the

academic requirements; underperformance and lower education levels are associated with higher rates of MH experiences (Niemeyer et al., 2019). It is important to note that results may be biased to those staff who have taken or teach MHL related papers in the field of psychology; New Zealand primary teachers may not have this experience.

Kamel et al., (2020) assessed primary, middle and secondary school teachers in Saudi Arabia on their awareness about, and attitude towards, students' MH issues through a pretested constructed, semi-structured, anonymous self-administered questionnaire. It had a large sample size of 2,398 participants. There was a combination of public and private schools included to allow for representativeness. The questions for the measure were tested in a pilot study to ascertain validity and reliability. Findings found that teachers are aware of MH issues in the classroom; however, participants highlighted the lack of support of MH services. Teachers who had more awareness of mental distress were more likely to identify needs of students in the classroom; however, this group of teachers was the clear minority, which aligns with other literature (Daniszewski, 2013).

Logistic regression was used to analyse the teacher's background information in association with MH attitudes and awareness. A teacher's own MH experience was correlated with higher awareness levels of MH. This aligns with previous research on whether a teacher's own experience helps inform their own knowledge in different situations and different students. The study showed male teachers were more aware of MH than females which is different to previous studies (Cotton et al., 2006). This could be partly due to cultural differences in Saudi Arabia compared to Western studies where males may have far more access to employment and professional development opportunities than females. Again teachers of humanities were more likely to have greater awareness of MH than those in the sciences and mathematics (Laws & Fiedler, 2012). The Kamel et al study had a large sample size encapsulating a range of schools with varying socioeconomic status. However, one limitation of this study is that solely a Saudi Arabian region was sampled in an urban area (i.e., not including rural areas). The questionnaire also did not allow for qualitative answers in terms of what support they require to support their students and how they are supporting students; these limited answers may have missed important themes and point to further research that is required to address these gaps.

Taken together, it is important for the current study to reach a wide representative population of New Zealand to get a greater understanding of teacher's knowledge and resilience across a variety of schools. To have such a wide sample will mean recruiting a large number of participants; therefore, a quantitative design will be more appropriate. This will give baseline data of what is happening and missing for New Zealand's primary teachers.

Overall, previous research has not comprehensively covered New Zealand teachers' MHL – an important focus of this research. The results, methods and findings of previous studies also highlight the need to get a wide array of sample data across demographics, regions, experiences and urban/rural teaching environments to ensure an adequately representative sample and investigate whether there are any statistical differences between (or controlling for) these factors on MHL. This will have implications for the method and delivery format of the survey used in this research and also strongly suggests the need to undertake a quantitative research approach, albeit with some capacity for respondents to provide comments or qualitative context. The evidence and limitations of previous methods also suggest that multiple areas of MHL should be investigated in order to gain greater insight into teachers' understanding, rather than focusing on a specific area, such as depression.

1.8 Teacher experience and resilience

Teachers (as well as nurses) have been in the spotlight in recent years in New Zealand in relation to being undervalued and underpaid, resulting in an increase in burnout and stress (Soykan et al., 2019). Research on different aspects of teachers' wellbeing have looked at teachers' increased stress levels (Curry & O'Brien, 2012; Richards, 2012), workload (Buchanan et al., 2013; Yin et al., 2016) and burnout (Antoniou et al., 2013) which all negatively correspond with teaching efficacy. The increased pressures of being able to juggle these aspects of the teacher's role can affect wellbeing.

Resilience can be defined as an individual's own resource, and the way in which they can get through challenging situations or adversity (Beltman et al., 2011). The Ecological model (Bronfenbrenner & Morris, 2007) and its framework of systems can yet again be used to understand the construct of resilience. This theory encompasses development and behaviour as a product of intertwining internal and external systems (Kangas-Dick &

O'Shaughnessy, 2020). Resilience can be enhanced or reduced by characteristics and assessed at all systems: person; micro, which includes relationships with family, co-workers, mentors and friends; mesosystems, (two or more micro); and exosystems, of two or more contextual settings. Protective factors that will add whether a teacher is successful in their role in face of challenges and stress can be looked at from each ecological system (Bronfenbrenner & Morris, 2007).

Literature on resilience first looked at how individual traits helped people to get through adverse challenges. This was due to a conceptualisation of resilience as being a set of intrinsic, biological, or personality characteristics an individual was considered to have or not have (Ainsworth & Oldfield, 2019; Masten et al., 1990). Now the theoretical perspective of Bronfenbrenner's (1979) encompasses the individual in their environment and the interactions between these systems, which underpins the factors and processes which help an individual be "resilient" (Ungar, 2013). Thus, resilience is now understood to depend on both the individual and their environments in combination with the different factors in each system, which will either promote or reduce resilience (Ungar, 2013).

A teacher's resilience relates specifically to how the individual faces challenges or adverse experiences within a school context (Admiraal et al., 2000; Antoniou et al., 2013; Austin et al., 2005). Teachers must have high levels of resilience in order to thrive in their role (Kangas-Dick & O'Shaughnessy, 2020). Teachers roles are multi-faceted with responsibilities of their students reaching certain achievement levels as well as meeting and supporting the students' social and emotional needs with an increasing workload (Kangas-Dick & O'Shaughnessy, 2020).

Within teaching, "resilience can be seen as a *capacity*, a *process* and also as an *outcome."* (Mansfield et al., 2016, p. 23). The *capacity* is the way in which an individual teacher uses their own personal and contextual resources to help support them through challenges; the *process* is the way in which the teacher's individual characteristic and their personal and professional environments interact – while the teacher uses different strategies, which allow for the *outcome* of a teacher "who experiences professional engagement and growth, commitment, enthusiasm, satisfaction, and wellbeing." (Beltman, 2015, p. 23). Teachers may enhance their resilience by building on their own personal resource (e.g., motivation; social and emotional competence), utilising contextual resources (e.g., student

relationships, support systems), and developing coping strategies (e.g., problem solving, time management, maintaining work-life balance through self-care) to address challenges with thriving outcomes for the teacher (e.g., commitment, job satisfaction, wellbeing, engagement) (Mansfield et al., 2016). Teacher resilience is thus a multi-faceted and complex construct which is intertwined with many different contextual and individual protective and risk factors.

New Zealand studies are scarce amongst resilience literature. However, Soykan et al., (2019) categorised teachers' resilience as being an aspect of an individual's personal resource of psychological capital and highlighted its role of importance amongst New Zealand teachers. Psychological capital is a way in which an individual reflects on a situation in a positive manner using four resources to improve a situation. The four resources are self-efficacy, optimism, hope and resilience (Luthans et al., 2004). The results found that the more psychological capital a teacher had: the less likely they were to endure stress or burnout; they would see higher work demands in a positive light (as a challenge rather than threat); and used more task focused coping strategies versus emotion focused. Teachers with more experience (or in higher management positions) were found to be more likely to have higher psychological capital than newer teachers to the profession. The sample size used 2,000 teaching professionals but lacked representation of male teachers. Another limitation is that psychological capital was a multidimensional construct including other specific resources rather than specifically focusing on resilience alone.

The findings align with the need for professional development to support teachers' wellbeing to be able to deal with complex situations and needs in the classroom as well as provide them with a supportive environment to work in. It also highlights the importance of teachers' resilience (alongside other psychological capital aspects within a classroom setting) to reduce stress and increase wellbeing to better support students. This is of even more importance today with the increased diversity of MH within a classroom in New Zealand. Thus, teachers with more (collective) MHL leads to more resilience and less burnout, as teachers feel more capable to manage mental distress in the classroom and in their students.

1.9 Linking MHL and resilience

Literature focusing on teacher stress, retention and attrition encompasses a lot of the ways the teaching profession poses challenges to a teacher (Borman & Dowling, 2008; Buchanan, 2010; Guarino et al., 2006; Hong, 2010; Macdonald, 1999). Resilience may only be activated in a situation when there are challenges present (Beltman et al., 2011; Tait, 2008). Beltman et al., (2011) acknowledges the relationship between personal and contextual risk factors with a teacher's resilience. A vast majority of the literature focuses on contextual risk factors impacting on a teacher's resilience with their work and home life. The Beltman et al., (2011) review noted challenges with teacher training programmes, their own families, and the role of being a teacher; however, the most common identified challenges were in teaching contexts – the *individual school or classroom* context (e.g., disruptive students) and the broader *professional work* context (e.g., workload) (Beltman et al., 2011). In the school or classroom context, behaviour management is the most identified challenge. These range from a variety of physical, verbal and defiant disruptive behaviours to students confiding in teachers for emotional support from their own traumatic experiences at home (Howard & Johnson, 2004).

Demetriou et al. (2009) acknowledge that disruptive students (combined with lack of supports) impacts the teacher's own confidence and contributes to them leaving the teaching profession. If a teacher was to reach out for support from the school, it could put them in a position where their teaching ability is being questioned, and they may be seen as insufficient or not living up to their professional standards (Beltman et al., 2011). This can contribute to a negative sense of their own self-efficacy.

The most identified *professional work context* challenge was the increasing workload and extra responsibilities including meetings and planning (Castro et al., 2010). The combined lack of support from the school led to a decrease of commitment to teaching (Day, 2008). Within Fantilli and McDougall's (2009) research, over half of the teachers had thoughts about leaving teaching because of the classroom and school challenges they had experienced. On the other hand, teachers also reported wanting to seek out challenges as they became more experienced and confident in the profession. Some teachers wanted more responsibility to help create changes, as well as finding new challenges with disruptive behaviours more exhilarating and thriving on the challenges set.

Protective personal factors include "intrinsic motivation, self-efficacy, persistence, optimism, and interpersonal skills" (Gu & Day, 2007) whereas contextual protective factors include school support for teacher professional learning, supportive relationships with colleagues and school leaders, and the development of a professional culture that enables reflection about educational practices (Castro et al., 2010; Gu & Day, 2011). This would suggest that with the right supports in place for classroom management of students' mental distress, teachers will feel empowered and more resilient. Thus, they will then be able to teach in a beneficial way for students and thrive in their role. It is therefore important for this current study to look at teachers' self-report of supports in place and whether this acts as a mediating role on their MHL and resiliency.

Brouskeli et al., (2018) focused on the relationship between demographic factors and teacher's resilience across secondary school teachers in Greece. However, the sample size was small and under representative of age and gender. Using The Resilience Scale (Wagnild & Young, 1993) results found that Greek teachers had higher rates of resiliency overall relative to other countries' studies. Several key factors were found to have a relationship with resilience; including demographic factors like *where* (geographically) the teachers teach, *what* they teach and how many years of experience they had teaching. The strength of the overall results may, in part, be related to the economic and political challenges faced in Greece during (and after) the European Debt Crisis between 2011 and 2015, where unemployment rose above 20%. Lower resiliency levels observed in city/urban teachers could be because they are more exposed to disadvantaged populations of children; this comes with under resourced schools and communities, socio-political tensions and teachers being confronted with extra challenges – accelerating burnout and creating challenges with understaffing 12/01/23 7:40:00 PM. Due to these reasons teachers in city/urban schools may miss out on opportunities to engage in reflective practice with their professional community which has been shown to enhance teacher resiliency (Yonezawa et al., 2011). Teachers' age and years of teaching experience did not seem to change levels of resilience; Brouskeli et al., (2018) explained that burnout balances out any resiliency gains made throughout teaching or life experiences. Focused on secondary school teachers only, this study found that teachers who have qualifications in the arts and humanities were more resilient – this might be the case because of the training they may have received during their studies on how to cope with adversity (Brouskeli et al., 2018).

Interestingly, teachers in urban areas tended to have lower resiliency than rural or semi-urban teachers, possibly due to the lower socio-economic populations of children who are predominantly from minority groups (Castro et al., 2010; Day & Hong, 2016). It is not clear whether this relationship would exist with regards to more MH distress in the classroom too. Teachers of social sciences had higher resilience than those of natural sciences; however, in primary teachers this is not relevant since the classroom teachers are expected to teach all areas of the curriculum. Years of teaching experience did not show a difference in a teacher's resilience levels, which goes against the reviewed literature by Beltman et al., (2011). Using controls of demographic variables will be important to examine what is influencing New Zealand teacher's resilience or if it is associated with their MHL levels.

Beltman et al., (2011) reviewed the literature of the resilience of early career teachers. Over 50 studies have taken place in multiple countries where there have been high rates of teachers leaving the education profession. The studies did show that teachers who have been in the profession longer gained more resilience with experience as a protective factor. Contextual and individual protective factors were assessed by qualitative studies allowing teachers to share their own resilience by self-report rather than observing. These self-reports can help schools recognise what supports would be useful for building a teacher's resilience within the classroom. The review highlighted the most challenging contextual risk factor determining teachers' resilience was the challenge of behaviour management. For a new teacher, with a lack of experience, diverse behaviours can be a challenge. Teachers felt like they did not yet have the skills or strategies to use confidently within the classroom, thus feeling inadequate and out of control within their own abilities. Without the right supports and resources in place their resiliency could therefore be impacted. Arguably, this points to a possible link between a teacher's resilience, and the amount of mental distress that is in their classrooms, as well as whether they have the resilience and skills to give these students the support they need while feeling supported themselves.

1.10 Current study in a New Zealand context

A review of this MHL and resilience literatures suggests that teachers may play a key part in supporting children experiencing MH distress. Positive results have been reported in over 20 publications, in multiple settings, with many types of designs and analysis, adding further support to the notion that MHL and teacher's resilience may correlate.

Most studies look at how teachers' resilience is impacted based upon risk and protective factors – in particular classroom behaviour management and school supports. However, there are no current studies which look at the way teachers' resilience is impacted when they have children experiencing mental distress in the classroom and what protective factors help support their resiliency. This study will address this gap by looking at teachers' resiliency associated with MHL and supports that are in place.

With the current statistics of New Zealand's youth suicide rates, and mental distress being experienced by our tamariki (along with statutory obligations of schools to promote student wellbeing), teachers are carrying more responsibility to cater for the needs of themselves and their students. This highlights the importance of MHL for teachers to be able to identify MH in the classroom and knowing how to seek support when needed. It is surprising that research on teachers' MHL and resilience has primarily focused on teachers outside of New Zealand. Therefore, there is a gap in knowing what knowledge New Zealand teachers need to provide targeted interventions with students as well as supporting themselves. This study seeks to extend the current literature and examine teachers' MHL, how they feel they are being supported to address the challenges of students' mental distress and whether this has a correlation to their own teacher resilience in a classroom setting.

Thus, the current study seeks to extend the literature by looking at teacher's resilience as related to MHL and the challenges of supporting students with MH distress. It will provide baseline data of primary Teacher's MHL and resilience levels in New Zealand which will provide opportunities to implement change over time to improve student and teacher wellbeing. MHL and teacher's resilience are complex constructs to measure because of the multi-dimensional nature of the constructs. Taking this into account, Bronfenbrenner's Ecological theory and associated systems underpin the research questions that guide this research, with the aim that findings will point to recommendations that guide future MHL needs for teachers. This study aims to contribute to the literature and profession by providing ways to enact change in order to improve student and teacher wellbeing in New Zealand.

The following chapter details the specific research questions and hypotheses drawn from this analysis of the literature, and the methods sought to answer these questions.

2. Method

2.1 Study Aims

The aim of the study was to assess New Zealand primary teachers' MHL; their perceived levels of support around managing young people with MH needs; and whether there is a correlation between MHL and teachers' own resilience. This study was needed to address the lack of baseline data of primary teachers' MHL and resilience levels in New Zealand. As knowledge of students experiencing mental distress is important in order for teachers to provide individualised support, the research allowed teachers to provide their own experiences with students experiencing mental distress and how they are supported.

2.2 The research questions were:

RQ1: What is the level of MHL in New Zealand teachers and where are the gaps?

RQ2: What is the relationship between MHL and teachers' own resilience?

RQ3: What is the relationship between MHL and teachers' resilience when controlling for levels of perceived support?

RQ4: Does the relationship between MHL and teachers' resilience differ depending on whether the participant teaches in an urban or rural areas?

RQ5: Does the relationship between MHL and teachers' resilience differ when controlling for years of teaching experience?

From the literature discussed in Chapter 1, the following hypotheses were proposed:
H1: Years teaching experience will have a positive relationship with MHL and teacher's resilience.
H2: As a result, MHL and perceived support will have a positive relationship with teachers' resilience.

2.3 Design and methodology

This study utilised a predominantly quantitative research design, with an element of supplementary mixed design with the inclusion of some open-ended questions in a survey of

teachers across a range of New Zealand primary schools. As it was exploratory research, a quantitative approach was considered to be most appropriate to gather a wide representative sample of New Zealand teachers to serve as a baseline of data in this area of research (Jhangiani et al., 2019). Qualitative items were added to support this baseline data and enable participants to expand on their responses if they chose to. In addition, within the restrictions related to COVID-19 in place during the research period, an online survey was considered the most appropriate and efficient method of data collection.

The study was underpinned by a post-positivist critical realist approach; this recognises an objective reality, but that our perception of reality is shaped by our social background. That is, the research collected measurable data to be statistically analysed and interpreted in an objective way (Wildemuth, 1993), but also collected contextual information to be able to make sense of the way participants had answered. Thus, because this research provides baseline data for New Zealand on this topic, it is recognised that there may be a series of factors which needed to be examined rather than controlled (Krauss, 2005). Participants were asked to rate their real personal experiences, which were analysed quantitatively and these were then rated by frequency, intensity and duration. Social / demographic information and open-ended responses was gathered to help make sense of the quantitative data.

The research helps emphasise meaning and create new knowledge to support social justice in our society (Ryan, 2006). The use of inferential statistics helps to use observations to draw inferences about our external reality while acknowledging that not everything is completely knowable (Krauss, 2005). As a result, a reflexive view was taken when interpreting and analysing results – recognising the complex life and experience of the world (Ryan, 2006).

2.4 Ethics/ Cultural Supervision

The proposed research complied with the Massey University Code of Ethical Conduct for Research involving Human Participants. Following peer review, this research was deemed to be of low risk and ethical approval was granted by the Massey University Human Ethics Committee prior to commencement. Cultural Supervision was sought to ensure sensitivity towards the key principles of Te Tiriti o Waitangi: partnership, participation, and protection.

The following steps were followed to ensure this to be the case:

- At the beginning of the survey an information sheet was included that informed participants of the study and that they had the autonomy to decide to participate.
- Participants were asked for informed consent through the survey platform before the survey began.
- Participants' confidentiality and anonymity was maintained by the research lead.
- Codes were given to participants and their corresponding responses.
- Results and conclusions were shared with the participants at the completion of the study.
- It was considered that participants may have benefitted from this survey as it provided reflective insight into their own practice. There was a low risk the participants could have been triggered or feel upset during the survey when reflecting on their own MHL and teaching experiences. At the end of the survey, referrals for support were given to participants to reach out to if needed.

Māori were not the focus, nor the main population for this study; similarly, culture was not an analytical lens for looking at the results. However, integration of some of the ethical Māori values were included (Massey University, 2017):

- *Whakapapa* (relationships): recruitment did not exclude any registered primary teachers who were interested in participating (up to the required sample size).
- *Tika* (purposefulness): this study was to help inform educators and educational/child psychologists of what support there needs to be for primary teachers, which was aimed to enhance the wellbeing of both teachers and students.
- *Manaakitanga* (cultural and social responsibility): participants were treated with respect through a professional manner during the recruiting and survey process. A small draw for gift vouchers was done as gratitude to the participants for their time and participation.
- *Mana* (justice and equity): findings from this research were hoped to be able to help future research in this area, particularly working with educators in partnership or the recommendations might be useful for educators in different settings (for example in a Kōhanga Reo setting).

2.5 Data collection method

2.5.1 Participants

The aim was to recruit approximately 528 New Zealand registered primary teacher participants, which reflects the required sample size indicated by a power analysis (see Appendix A). Given that some participants completed the study but subsequently had to be excluded (e.g., due to substantial quantities of missing data), the target sample size of 587 was set. This was determined by running a power analysis for a significance test for a single coefficient within a linear multiple regression with two predictors (MHL and Supports) specified, with a small effect size of Cohen's $f^2 = 0.02$. This power analysis sought to achieve a power of 90% with a 2-tailed test and an alpha level of 0.05 (each of these are relatively standard). Following the marketing campaign, 888 participants attempted the survey; however, due to exclusion criteria only 508 respondents were eligible for data analysis. Whilst not quite at the level hoped for of 528, it was considered the sample was sufficient for analysis.

Alongside primary teachers, year 7-8 classroom teachers were also included. This is because of the strong and quality relationship that is established between the classroom teacher and children during these intermediate school years. Classroom teachers spend a significant amount of time with the students, whereas in a secondary setting students change teachers more frequently (Education Council, 2017). In addition, secondary school resources for mental distress support are currently higher than primary schools in New Zealand (Education Review Office, 2016). Consequently, it was considered to be important to find out what support would be beneficial to primary and Intermediate teachers to help enhance better student MH outcomes, as well as provide them with support to build their resilience in the classroom (Department of the Prime Minister and Cabinet, 2019).

Convenience sampling was used, as there were 41,100 members which provided a large pool of potential participants (with effort to ensure diversity of schools and regions). This meant that up to 10% of responses could be removed (e.g., did not complete) without the sample size falling below the target. Data collection stopped at the end of the Week 1, Term 3 as the fixed date. There was no specific stopping rule in place once 587 responses were collected. However, if at the end of this timeframe, fewer than 587 responses had been recorded, the survey would reopen for a further week, either until 587 have been recorded, or

the fixed date had passed. Data was not analysed partway through this timeframe as it could have resulted in very high error rates.

2.5.2 Procedure

The data was collected by carrying out a structured survey with the participants. The survey was completed using the Qualtrics platform online. Participants who were interested in the study were directed to a webpage created by the Qualtrics software under Massey University School of Psychology. On opening the webpage an information sheet explained the study (refer to the Appendix B). By clicking 'Next', participants were taken to the eligibility criteria screening where they were asked questions to determine eligibility, as well as demographic questions. If the eligibility criteria were met, participants were able to complete the survey. The survey took approximately 15 minutes to complete. The survey questions gathered information on teacher demographics, their knowledge of MH, their perceived levels of support, their own teacher resilience and view on COVID-19.

2.6 Recruitment

The current study aimed to recruit a diverse range of primary and intermediate teachers from across the whole of Aotearoa New Zealand. The recruitment process was carried out online so that it was inclusive to all participants and their geographic location. There was various recruitment carried out to enlist participants for the study, and these are outlined below. The advertisement was to appeal to the participants by including some detail on how the study might empower and benefit teachers' wellbeing and practice. An introduction to the researcher was included to help create partnership and connection with the participants. The advertisement was to invite participants to go into multiple draws to win a $40 Prezzy egift card. These were decided to be used as they are easy to distribute online and meant teachers could select their own incentive.

2.6.1 Digital Advertisement

An advertisement for recruiting study participants was posted in the 'New Zealand teachers (primary)'and 'DisruptED' groups Facebook page (see Appendix C). Social media was used to expand the volume of recruitment by targeting appropriate audiences. The Facebook platform strengthened the recruitment by snowballing, as it allowed people to easily share the study and information with colleagues or friends who work in education.

In addition to these groups' Facebook pages, paid advertising was used on Facebook to target an ad at primary teachers in New Zealand. Because of the specific and niche sample of primary teachers, investing some money into Facebook Advertising was considered to be efficient; research suggests this often results in quicker responses as it targets the specific audience based on algorithms and settings the researcher chooses to use through the ad manager platform (Iannelli et al., 2020). Facebook advertising is relatively easy to use, convenient and a low cost way to reach a wide range of participants across the country (Neundorf & Öztürk, 2021). However, it must be noted that Facebook advertising is targeted for business users so may affect the quality of sample depending on the campaign objectives and the use of demographic targeting set by the researcher. Massey University School of Psychology Postgraduate Research Funding was applied for, to support funding for Facebook advertising and the participant Prezzy e-gift card draws. One thousand dollars was received and utilised across advertising and gifts for the participants.

2.6.2 Emailing schools

In order to help gather survey responses, the researcher emailed the full 7,500 contributing and full primary schools' principals from New Zealand, attaching information on the study and the advertisement refer to above. The email addresses were retrieved from the Education Counts website where all primary schools contact details are listed.

2.7 Eligibility of Participants

The eligibility criteria were applied to the study and is outlined below. Before beginning the survey, questions were asked to ensure participants met the study criteria, which were:

- Only primary teachers (Years 0-8) who are fully registered in New Zealand were included in the study. The researcher considered that teachers unregistered or provisionally registered may not have relevant experience or uphold the registration requirements to be professional teacher in New Zealand (Education Council, 2017).
- Only primary teachers (Years 0-8) were included in the study.
- Only primary teachers who have been teaching in the last five years were included to ensure up-to-date data with regards to what teachers report is currently happening in New Zealand schools at the present time (Education Council, 2017).
- Access to the Internet was needed because the survey was in an online format.
- Participants needed to have fluent English language to complete the survey.

For eligible participants an online consent question was given, which participants agreed or declined to take part in the study under the conditions set out in the information sheet (see Appendix B). If they agreed to participate, their name and email was recorded to be linked to an ID number within the Qualtrics data file. This name and email address was not retained.

The participant then clicked on the 'Next' button, they were then asked some demographic questions before completing the Mental Health Literacy Scale (MHLS), Support Scale and finally the Teacher Resilience Questionnaire (TRQ) (see Appendix D for survey questions).

2.8 Participant Information

2.8.1 Data/ Participant Preparation and Exclusions

Using Excel the researcher prepared the original dataset before analysis was carried out. The following criteria was applied.

De-identifying information: Participants emails were deidentified for the prize draw as the information was directed to a separate survey dataset than the final analysis dataset.

Consent: Participants were pre-screened at the beginning of the survey to get consent approval before having access to completing the survey separate from the final dataset.

Registered primary Teacher: Participants were pre-screened to check that they had full teacher registration and had taught within the last five years in New Zealand separate from the final dataset.

Not finished survey: People who did not complete all demographic items (ie gender etc) were not excluded from the analysis provided they met the other criteria.

Excessive Missing Values: The main study variables MHL, SSR and TRQ were decided to be compulsory items. COVID-19 items, open-ended SSR items and demographic items were not included as they were exploratory items and analysed thematically. A rule was applied that participants who did not complete 80% or more of the compulsory items would be excluded.

Overly Consistent Responding: Participants who had given the same answer for the SSR and TRQ were excluded.

Duration: Participants who completed the survey in less than five minutes were excluded.

Teacher Location: When running separate analysis for teacher location, participants who did not respond to the questions regarding their location were excluded.

Teacher experience: When running analysis for teacher experience in years, participants who did not respond to this question were excluded.

Missing Data: Missing responses were checked, and expectation-maximisation imputation was applied.

Reverse Coding: Items on the MHL 10, 12, 15, 20-28 were reversed coded.

Scores: The overall score for each individual compulsory variables (MHL, SSR and TRQ) were calculated for each participant. This score was created by taking the sum of each person's responses to the variables items (after reverse coding). Where participants had not completed 100% of each section (but >80%, per qualifying criteria), their average (mean) response for that section was applied in order to ensure that scores were not artificially low. Within the MHL survey, which includes both 4-point and 5-point questions, these were broken into two different subgroups to ensure scores remained comparable.

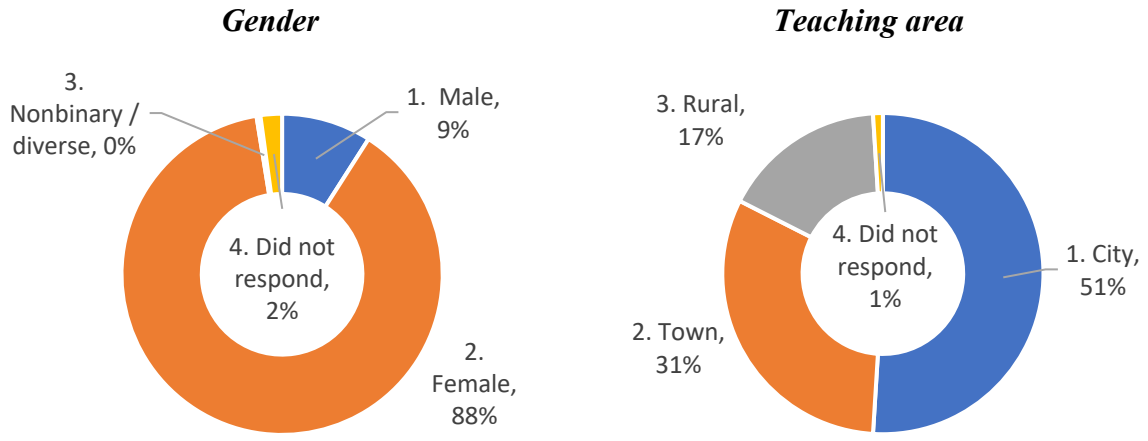
Checking Reliability: A basic reliability check for the items of the compulsory MHL, SSR and TRQ variables was applied using Cronbach's alpha.

2.8.2 Final Sample of Participants

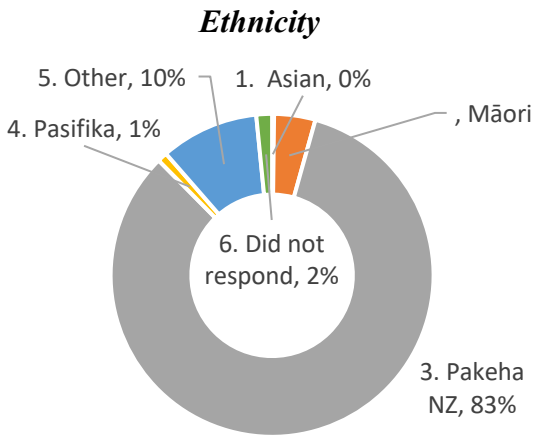
Of the 888 participants who participated in the study, 508 participants completed the entire survey once the above data exclusion rules were applied. Due to missing values, 377 survey participants were excluded because they did not adequately answer 80% of MHL, SSR and TRQ items. Two participants were excluded for completing the survey in less than five minutes. One participant was excluded for overly consistent responding to both the SSR and TRQ items.

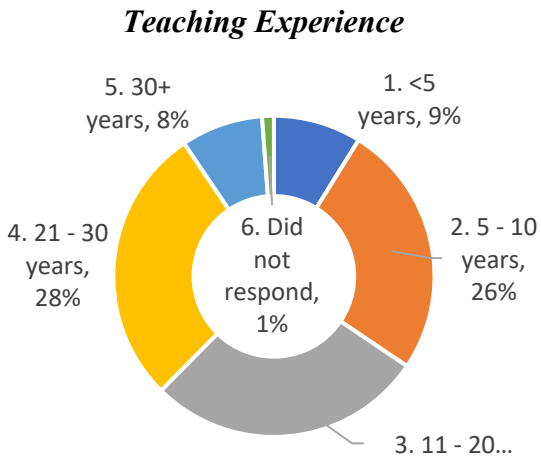
Demographic items were not compulsory items and the following information was gathered on those that responded (refer to Figure 2) The most common years of teaching experience group of participants was 20-30 years (n=143), with the least common years of teaching experience group at 30+ years (n=42). The sample included 449 participants who identified as female, 46 male and 2 responded as Nonbinary/ Gender diverse. 423 participants identified as being of New Zealand European ethnicity, 21 identified as being of Māori ethnicity, 1 Asian, 5 Pasifika and 50 as "other". The most common category for highest education qualification of participants was: Bachelor of Teaching (n=314), the other qualifications listed were: Bachelor of Education, Double degree, Graduate diploma in teaching, Masters, Honours, Postgraduate certificate, Diploma of teaching, Postgraduate Diploma in Language Teaching, Bachelor of Arts, Bachelor of social work, Post Graduate Diploma of Education, Post graduate Arts Therapy and Diploma of Sport and Recreation. The total number of participants location of teaching positions in urban (city) areas were 259 while a combined 244 taught in towns or rurally. The most common specific job title was classroom teacher (n=312), the other job titles listed were: Principal, Deputy Principal, Team Leader, Specialist Teacher, RTLB, Dean, Classroom Release Teacher, Reliever, ECE teacher, Education Consultant, Learning Support Teacher, SENCO (Special Education Needs Co-ordinator) and not teaching.

Figure 2:
Summary of descriptive statistics



(Note: Figure 2 continues over page)





2.9 Measures

2.9.1 Demographic Questions

Age, Qualification, Gender, Years teaching experience, Location of teaching position, Specific job title, and Ethnicity. This information was included to control for different variables that research suggests contributes towards participants' different MHL levels, supports and resilience levels. It was important to use culture as a control measure when carrying out this research and take into account different worldviews which could be influencing teachers' MHL in New Zealand. In doing so, key differences must be acknowledged regarding cultural views of MH in a respectful and non-bias way to ensure MHL is viewed in an integrative way (Gopalkrishnan, 2018).

2.9.2 Mental Health Literacy:

Challenges of Defining (and Measuring) Mental Health Literacy

There are discrepancies on how the concept of MHL should be understood and defined. Because of this, there are challenges on how MHL should be measured and constructed. The current body of literature acknowledges these concerns with its current construct, broad definition and the lack of consistency on how it is measured. As discussed, the definition of MHL is not consistent and has a variety of meaning across the research - and is everchanging as the area develops. The lack of an agreed definition of MHL ultimately affects the validity of it being a construct and what principles should be included within MHL and the concepts which underpin it.

Measuring Mental Health Literacy

Along with the disagreement between definitions and conceptualisation of MHL is the debate about the different ways that have been used to measure it. The Vignette interview by Jorm et al. (1997) was the first tool to be used to measure MHL. This was carried out by a structured interview, with participants given a case vignette, which described someone experiencing mental distress. Participants then had to answer questions about the case. Vignettes have since been used widely across the literature and adapted to different versions including being online. Vignettes are continuously used in current research to measure MHL (O'Connor et al., 2014); however, they have a number of limitations (Kutcher et al., 2016; O'Connor et al., 2014). The questions in vignettes do not differentiate between knowledge and beliefs which will affect how the studies can identify how they have contributed to the literature base, and how studies relate to one another (O'Connor et al., 2014). Considering the majority of the MHL components (Jorm et al., 1997) are measuring knowledge of different forms of mental distress, the lack of differentiation within questions in the vignettes is important.

The way in which a participant responds to identifying the psychological disorder in the case vignette will then affect how they answer the rest of the questions, as it will be based on their own assumptions of the disorder the individual in the case is experiencing (O'Connor et al., 2014) The participants then could be at risk of answering the questions that show their understanding of causes and treatment of a disorder that isn't necessarily the correct one in the question. Last of all, the different kinds of vignettes (e.g., variety of symptoms, types of disorders, the length of the case, age of individual in the case) that are used in different studies could affect the validity and reliability of this measure (Sai & Furnham, 2013). It should be noted that the majority of vignettes focus on only a certain type of disorder and do not focus on all the principles of MHL (Jorm et al., 1997).

Along with vignettes, scale-based measures of MHL have limitations due to their psychometric properties (O'Connor et al., 2014). Research has used methods including Likert-scale-response questions (Evans-Lacko et al., 2010), multiple choice questions (Compton et al., 2011), dichotomous-response questions (Furnham et al., 2011), and a combination of the above in their methods.

The Consensus-based Standards for the Selection of Health Measurement Instruments (COSMIN) (Mokkink et al., 2010) guidelines assessed the psychometric soundness of these measurement approaches, and found variation across the studies. The COSMIN has nine domains; it was found that five domains was the highest number met across the thirteen studies assessed and two of the studies did not assess any of the COSMIN domains (O'Connor et al., 2014). It was also found that not all of the seven attributes of MHL (Jorm et al., 1997) were measured in these studies either (O'Connor et al., 2014). Most of the studies only measured one attribute with the highest number in a study measured was four. The lack of psychometric data being reported; information about the samples used; justification on chosen questionnaire methods; and validity and reliability, were also noted (O'Connor et al., 2014). Not one of the thirteen studies used the same method approach as one another to measure MHL.

The inconsistent ways of measuring MHL, lack of psychometric properties and the disagreement about what the MHL construct is (and measures used) shows that there is a mixed view of research which underpin the principles construct definition raised by Spiker and Hammer (2019). Acknowledging the inconsistencies in this research, the authors recognise that there is a big 'grey' area of measuring MHL.

The Mental Health Literacy Scale

The development of the Mental Health Literacy Scale (MHLS; O'Connor & Casey, 2015) was motivated to address the limitations in the measuring of MHL. Jorm et al.'s (1997) definition of the MHL construct was again used to help create this measure which measured all seven attributes of the MHL. It was created by reviewing the literature, developing items for the measure alongside a clinical panel and research team; the clinical panel provided feedback during the development, pilot testing and made modifications throughout alongside analysing the results of the measure in the pilot. The result was a 35-item scale measure with good validity, internal and test-retest reliability (O'Connor & Casey, 2015).

The MHLS has been used across different populations and countries. It has been translated and validated in many countries such as China (Chen et al., 2021), Vietnam (Dang et al., 2018) and Iran (Heizomi et al., 2020; Nejatian et al., 2021). Populations have included Australian university students (Clough et al., 2018), university students in the United

Kingdom (Gorczynski et al., 2017) pregnant and postpartum Hispanic adolescents (Recto & Champion, 2017) and Australian high school students (Ratnayake & Hyde, 2019).

Despite being widely used and having undergone an extensive development process, the MHLS still has its own limitations. The MHLS face validity may not accurately measure all seven attributes in the definition of MHL (Jorm at el., 1997) that it intended to do. The intention to cover the entire definition of MHL means the measure may be too complex or not accurately measure MHL of participants. Considering the documented criticisms within the existing literature as to how MHL should be defined, it should be noted the authors have created the MHLS based on one definition in this area of research. The authors have not provided a rationale explaining why this definition (Jorm et al., 1997) was chosen, nor provided the evidence to support it. The final limitation is that the sample used in this scale was psychology students. Considering that psychology students will have some knowledge of MHL it is not likely to be a representative sample of the general population. O'Connor and Casey (2015) noted that the psychology students' scores were different to the scores of the sample of MH professionals. When reviewing this scale, it is important to recognise the intensive development process of this measure, while also being aware of its limitations.

It is no surprise then that the literature has reviewed the MHLS and has come out with mixed findings as to whether it is able to measure and accurately assess MHL. Kutcher et al. (2016) reviewed different measures and how they measure MH knowledge. They found that the MHLS has "strong" internal and content validity, "moderate" reliability, and "limited" hypothesis testing. Out of the 16 measures reviewed, the MHLS psychometric properties was the strongest; however, the authors noted that it was important to realise that the measures could not be comparable or identified as being the best. Their review only looked at one principle of MHL, being MH knowledge.

A global review of MHL measures psychometric properties found that Mental Health Promoting Knowledge-10 (MHPK-10) (Bjørnsen et al., 2017) and the multicomponent MHL measure (Jung et al., 2016) to be the most psychometrically sound measures to use. The MHPK-10 is relatively new so has not been used or validated across different populations (originally with Norwegian students). It also was developed to measure and include the 'newer' aspect of MHL concept of positive psychology which Spiker and Hammer (2019) suggested might not be taken up as it widens the definition of MHL further. The

multicomponent MHL measure also used the Jorm et al. (1997) definition of MHL to base itself on. It is relatively new (like the MHPK-10) and has yet to be widely validated or used across different populations.

Altogether, MHL has no "gold standard" measure due to the issues across the research in this area. Nonetheless, after careful consideration of the issues discussed, the current study will use the MHLS tool to measure MHL. The MHLS has been widely used and validated across different countries and populations, whereas the newer scales are yet to be validated to a similar level. Since the MHLS was developed, the debate continues on how MHL is defined; studies must continue in this area regardless of whether consensus can be achieved. Otherwise, vital information risks not being investigated and revealed in this research area. However, currently, the definition by Jorm et al. (1997) is the most widely used in the MHL area, while noting the critiques above. Within MHL and adolescent research, less than half of the studies defined MHL and 71% that did used the Jorm et al (1997) definition (Mansfield et al., 2020). This study intends to add new data to help make positive change in New Zealand and give insight into providing support with our younger population; therefore, using a measure that is most widely used in this area of research is appropriate.

Mental Health Literacy Scale (MHLS)

The MHLS is a 35 item self-report measure based on a 4-point and 5-point Likert scale. The total sum of scores indicates the overall MHL level. Reverse-coded items include items 10, 12, 15, 20-28. The maximum score is 160 and the minimum score is 35. Total score is produced by summing all items.

Questions with a 4-point scale are rated 1- very unlikely/unhelpful, 4 – very likely/helpful and for 5-point scale 1 – strongly disagree/definitely unwilling, 5 – strongly agree/definitely willing. The original items 9 and 10 (relating to the Australian population), have been adjusted to New Zealand population level data and the answer will be modified accordingly.

In addition, given the changes in the DSM 5, modifications have been made to Q5 (*To what extent do you think it is likely that* ***Persistent Depressive Disorder*** *(Dysthymia) is a disorder*) and Q8 (*to what extent do you think it is likely that the diagnosis of* ***Substance***

Abuse Disorder *can include physical and psychological tolerance of the drug (i.e., require more of the drug to get the same effect*).

The benefits of the MHLS are that it can easily be completed in ten minutes, is user friendly and is simple to score. In the current study, the MHLS was used to identify and describe the level of New Zealand primary teacher's MHL. Written permission to use the MHLS was received from the author of the Scale, Dr. Matt O'Connor, on the terms that the scale will be cited, and the results of this study will be shared with him. The variable was labelled and analysed as Mental Health Literacy (MHL).

2.9.3 Supports self-report scale:

These questions were created by the researcher specifically for this study. The purpose was to gain an understanding of participants' perspectives about various aspects to do with students' MH support as a teacher. Participants were able to expand on their answers in the dropdown open text boxes. The items used a Likert scale 1-5 to measure how much support teachers perceived there was for them in helping manage mental distress in the classroom. Total scores were summed together on how supported a teacher felt they were. The maximum score was 0 and the minimum score was 20. Open question answers were qualitatively analysed through thematic analysis (Braun & Clarke, 2006).

Using a scale of 0-5 how often do you use self-care to look after yourself when dealing with children's mental distress?

- On a scale of 0-5 how supported have you been for children experiencing mental distress in the classroom from your school?
- On a scale of 0-5 how supported do you think the children in your classroom are for mental distress?
- On a scale of 0-5 how supported have you been for children experiencing mental distress in the classroom from outside agencies e.g., Educational/Clinical psychologists, RTLB?
- On a scale of 0-5 where would you rank mental distress amongst this list of other classroom challenges?
- What support would you like to see that would benefit you as a teacher and students to cater for the needs of students with mental distress?

Reliability and validity of this scale were not checked or developed prior to commencing the survey or data analysis by the researcher. The variable was labelled and analysed as Supports Self-Report (SSR).

2.9.4 Teacher Resilience

Measuring Resilience

With teachers' resilience being a multidimensional and complex construct, it is no surprise that Beltman (2011) recognised that scale-based tools to examine teacher's resilience are lacking. Most studies that have been carried out are qualitative or used already-made scales which encapsulate resiliency but are not standalone. More recently, scales have been developed to broaden this area of research and gain quantitative data on larger sample sizes across the world. The Global Measure of Teacher Resilience (Morgan, 2011) is a nine-item scale which measures how confident teachers feel about dealing with challenges at school. This survey was created and based on Bandura's (1997) thoughts of how self-efficacy underpins the concept of resilience. The psychometric properties were tested with supported construct validity and very satisfactory reliability of the TRS scales. In regards to the sample tested there were no significant gender differences or between teachers working in different socio-economic communities and no significant effects (Morgan, 2011). However, this scale was only used on a sample of 'Beginning teachers' and experienced teachers were not included. It is important to note that in the original study, the scale had a high reliability as well as in Peixoto et al., (2020) where the psychometric properties were examined against the Multidimensional Teachers Resilience Scale. The Global Measure of Teacher Resilience has not been widely validated or tested in other studies. It is based on a different definition of resilience (incorporating self-efficacy) than the next scales that have since been created.

The Teacher's Resilience Scale (TRS) was created by Daniilidou et al. (2018) to specifically assess the internal and external protective factors of resilience in a user-friendly way. The scale incorporated the best fitting scales from The Connor-Davidson Resilience Scale (CDRisc) and Resilience Scale for Adults (RSA). It is built upon a framework which aligns with current literature on teacher's resilience by assessing internal personal characteristics as well as external supports such as community or family systems. Both internal and external protective factors can help support teacher's overcome challenges within the school context. The TRS displays satisfactory reliability of the four subscales;

however, it has typically low support for convergent validity when assessed by the average variance extracted (Daniilidou et al., 2018). Due to the limited tested psychometric properties more research needs to test its construct and concurrent validity against other resilience measures and for this reason it is unlikely to be the most appropriate for this study.

A similar framework helped build the Multidimensional Teachers Resilience Scale (MTRS) (Mansfield and Wosnitza, 2015) which has been validated and used across different populations and countries (Peixoto et al., 2018, 2020). “Four dimensions of protective factors were used to base the scale on: those specifically related to the profession (e.g., self-efficacy beliefs and pedagogical competencies), emotional aspects (e.g., positive emotions and emotional management), social aspects (e.g., supportive relationships with students and colleagues), and motivational aspects (e.g., intrinsic motivation, persistence, expectations, and goals)” (Peixoto et al., 2020, p. 45). The scale consisted of 26 items across the four dimensions on a 5-point Likert-type scale. Mansfield and Wosnitza (2015) also used a version with 16 with the four dimensions.

In the Peixoto et al. (2018) European study, the four dimensions were used with only 19 items. Two of the scales showed low convergent validity and good convergent validity for the remaining two dimensions (Peixoto et al., 2020). There is acceptable discriminant validity apart from the pairs social-emotional and social-motivational. Reliability is also adequate. The construct validity was measured against the Global Measure of teacher resilience which showed moderate correlation. Altogether this indicates a valid and reliable measuring scale to assess teacher’s resilience across the four dimensions.

Gu (2018) suggests the support of construct validity for this scale affirms the rationale for resilience to be a multi-complex construct and depending on interactions between personal and professional contexts. Taking this into consideration, the authors acknowledge the complexity of resilience (and within the teaching profession). However, Peixoto et al., (2020) acknowledges that more validation studies are needed to help support the psychometric properties of the MTRS across a wider diverse sample of teachers as well as support the results regarding teacher resilience. Addressing the limited research using psychometric instruments for teacher’s resilience, the MTRS is the most researched despite its limitations of how ‘in-extensive’ this has been. Therefore, using this scale was considered to enable this

study to add to this body of research (measuring this broad construct) in a reliable and valid way.

The Multidimensional Teacher's Resilience Scale (MTRS)

Written permission has been received to use the MTRS for this study from the author Dr. Caroline Mansfield on the conditions that it is cited and results of the study are shared.

The MTRS is a 26-item measure with a 5-point Likert scale ranging from 'strongly agree' to 'strongly disagree'. It intends to measure a teacher's own self-report of their resilience in the classroom setting. Because it is multidimensional, it has four subscales which measures different dimensions of teacher's resilience. These dimensions are Social (five items), Professional (six items), Emotional (five items) and Motivational (11 items). The total sum of score indicates teacher's resilience. The maximum total score of teacher's resilience is 130. The benefits of using the MTRS is that it has been the most widely used and validated teacher's resilience scale, it is easy to administer and quick to complete.
The variable was labelled and analysed as Teacher's resilience questionnaire (TRQ).

2.9.5 COVID 19 Questions: These items were asked after each measure to capture a control for this variable which could be contributing to the participant's total scores. It was important to highlight the impact that the current pandemic has had since 2019 as it falls within the last two years of the teaching period of the participants. Participants could only answer these items if they have taught during the pandemic.

Please refer to Appendix D for the complete survey.

2.10 Statistical analysis

The quantitative data collected from the survey was analysed using statistical software programme SPSS with data preparation applied prior to that in Excel. Correlations and multiple regression analyses were used to examine the relationship between participants' demographic characteristics, literacy, support and participants' resilience as well as the controlled variables (Age, gender, ethnicity, decile, years teaching, job title, urban/rural). Using logistic regression helped to identify any associations with teachers' demographics and experiences with their MHL and resilience. Separate analyses were undertaken for each of the research questions.

- RQ1 was answered using the Mental Health Literacy score - interpreting the overall results of the sample population and benchmarking these to other observed results in other studies in the literature. To review knowledge gaps, examination of the results assessed which specific areas saw a notable decline or difference in the average score relative to the overall score.
- RQ2 was analysed by using a multiple regression model where the independent variable is the TRQ (teachers' own resilience) and the dependent variable is the MHL Score. A correlation analysis was also applied, evaluating the simple correlation between the TRQ (teachers' own resilience) and MHL scores.
- RQ3 was answered using a multiple regression model where the independent variable is the TRQ (teachers' own resilience), the dependent variable is the MHL Score and the control variable is the Self-Report Support Score.
- RQ4 was answered using a multiple regression model where the independent variable is the TRQ (teachers' own resilience), the dependent variable is the MHL Score and the control variable is urban/rural classification (i.e., teaching area).
- RQ5 was answered using a multiple regression model where the independent variable is the TRQ (teachers' own resilience); the dependent variable is the MHL Score and the control variable is the Years of Teaching experience.

2.11 Thematic Analysis (Braun & Clarke, 2006)

Thematic analysis was used for analysing the qualitative open-ended items. These included COVID-19 and SSR items of the survey. This was to help gather richer insight into participants experiences and perceptions, and to support the findings of the quantitative data collected. The researcher used the steps created by Braun and Clarke (2006) to analyse these items.

Step 1: Reading. Using Microsoft Excel the data was familiarised by reading through the individual qualitative item responses which were prepared and organised for analysis.

Step 2: Coding. This involved reading through each response to qualitative items and gathering key words and messages for each response. Codes were created that described this content. Each code described the message or feeling from each response. Every response was

read through and new codes were created during this process. At the end all of the codes were collated and grouped together do determine the key messages and points from the data.

Step 3: Themes. The codes were then analysed to find patterns to come up with the overall themes of the data. Multiple codes fitted under the corresponding themes. Some codes were removed or not included if it was found to be not relevant to the topic or appear often enough in the data.

Step 4: Reviewing themes. The original themes were reviewed against the original data to check for the usefulness and representativeness of responses. Themes were changed, added or removed depending on what would make them more accurate. These themes were discussed with the author's research supervisor to check for agreement on theme content, and evidence for the themes (in the form of quotes) added to the trustworthiness of the findings (Krefting, 1991).

Step 5: Defining and naming themes. Using the codebook template the themes were defined by writing exactly what we meant by each theme and how it helps us understand the data. The names of the themes were decided on how succinct and easily understandable the name for each theme. Coding and themes were developed inductively where they were directed by the content of the data. Refer to Appendix E for the Coding Scheme Codebook for the breakdown of codes and themes.

Step 6: Writing up. The results section addresses the themes and what they mean including some examples from the data as evidence. Quantitative results were given through frequencies and proportions which were calculated for each theme The conclusion discusses the main summaries and how the analysis supports the quantitative data in answering the research questions.

3. Results

This chapter presents the results of the survey, assessed using the quantitative and qualitative items. Quantitative measures included data from the demographic, COVID-19, MHL, SSR and TRQ while the qualitative measures include the COVID-19 and SSR open-ended question measures, all of which aimed to address (or provide context on) the research questions and hypotheses. Descriptive statistics are presented first, following the conventions of the exploratory design. The research questions and hypotheses are then addressed. Thematic analysis results are presented at the end to support and supplement the quantitative findings.

3.1 Descriptive Statistics

Table 1:
Summary of Results by Descriptive Category

Category and measure	Count (%)	MHL Score Mean (SD)	TRQ Score Mean (SD)	SSR Score Mean (SD)
Total	**508**	**131.1 (13.0)**	**104.2 (11.5)**	**16.9 (3.1)**
By gender				
1. Male	46 (9.1%)	117.3 (17.6)	102.7 (11.8)	17.22 (2.8)
2. Female	449 (88.4%)	132.6 (11.3)	104.4 (11.3)	16.9 (3.1)
3. Nonbinary / diverse	2 (0.4%)	124 (39.6)	98 (28.3)	19 (4.2)
4. Did not respond	11 (2.2%)	-	-	-
By Ethnicity				
1. Asian	1 (0.2%)	106 (.)	87 (.)	12 (.)
2. Māori	21 (4.1%)	133.5 (11.7)	107.1 (13)	17.8 (3.8)
3. Pakeha NZ	423 (83.3%)	130.5 (12.9)	103.9 (11.3)	16.9 (3.1)
4. Pasifika	5 (1%)	137.2 (19.4)	103.8 (11.4)	17.8 (4.3)
5. Other	50 (9.8%)	135.8 (11.4)	106.3 (12.8)	16.9 (2.8)
6. Did not respond	8 (1.6%)	-	-	-

Table 1 continues over the page

By teaching area				
1. City	259 (51%)	131.5 (13.5)	104.9 (11.8)	17 (3.2)
2. Town	160 (31.5%)	130.3 (12.7)	103.2 (10.5)	16.7 (3.1)
3. Rural	84 (16.5%)	131.3 (11.6)	104.4 (12.2)	17.5 (2.9)
4. Did not respond	5 (1%)	-	-	-
By teaching experience (years)				
1. <5 years	45 (8.9%)	129.6 (17.6)	102.3 (11.6)	17.6 (2.6)
2. 5 - 10 years	130 (25.6%)	129.1 (15.6)	102.7 (11.5)	16.8 (3.3)
3. 11 - 20 years	142 (28%)	131.7 (10.2)	103.4 (10.2)	16.4 (3.1)
4. 21 - 30 years	143 (28.1%)	132 (11.5)	105.9 (11.2)	17.2 (2.8)
5. 30+ years	42 (8.3%)	133.5 (10.9)	109.1 (14.3)	17.6 (3.8)
6. Did not respond	6 (1.2%)	-	-	-

3.2 Reliability

3.2.1 Reliability estimate for MHL

Cronbach's α was used to assess the internal consistency reliability of responses to the MHL scale. This value (α = 0.87) is considered 'good' for research purposes (α > 0.90) from Table 2. The individual reliability statistics indicated that all items are being analysed in the correct direction.

Table 2:
Cronbach's α for MHL

Cronbach's Alpha	N of Items
.896	35

Note: Item reliability statistics for Cronbach's α for MHL are included in Appendix F

3.2.2 Reliability estimate for SSR

Cronbach's α was used to assess the internal consistency reliability of responses to the SSR scale. This value (α = 0.40) is considered 'unsatisfactory' for research purposes (α >

0.90) from Table 3. The individual reliability statistics of Table 4 indicate that each of the items are not strongly correlated to one another, reducing the overall reliability of the measure. While excluding SSR1 causes the most pronounced uplift on Cronbach's α, this change remains immaterial relative to reaching any statistically valuable result.

Table 3:
Cronbach's α for SSR

Cronbach's Alpha	N of Items
.399	5

Table 4:
Item Reliability Statistics for Cronbach's α for SSR

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
SSR1: A child's mental distress is the most challenging classroom challenge I currently deal with.	13.50	8.207	.050	.453
SSR2: Children in my class experiencing mental distress are highly supported by myself as the teacher.	12.98	7.666	.295	.302
SSR3: I am highly supported by my school with regards to managing children experiencing mental distress in the classroom.	13.45	6.792	.302	.270
SSR4: I have been highly supported from outside agencies (e.g. Educational/ Clinical psychologists, RTLB) who provide support for children experiencing mental distress.	14.09	7.200	.210	.341
SSR5: How often do you feel that you use self-care to look after yourself when dealing with children's mental distress?	13.76	5.931	.210	.352

3.2.3 Reliability estimate for TRQ

Cronbach's α was used to assess the internal consistency reliability of responses to the TRQ scale. This value (α = 0.91.) is considered 'excellent' for research purposes (α > 0.90)

from Table 5. The individual reliability statistics of Table 5 (in Appendix G) indicate that all items are being analysed in the correct direction.

Table 5:
Cronbach's α for TRQ

Cronbach's Alpha	N of Items
.909	26

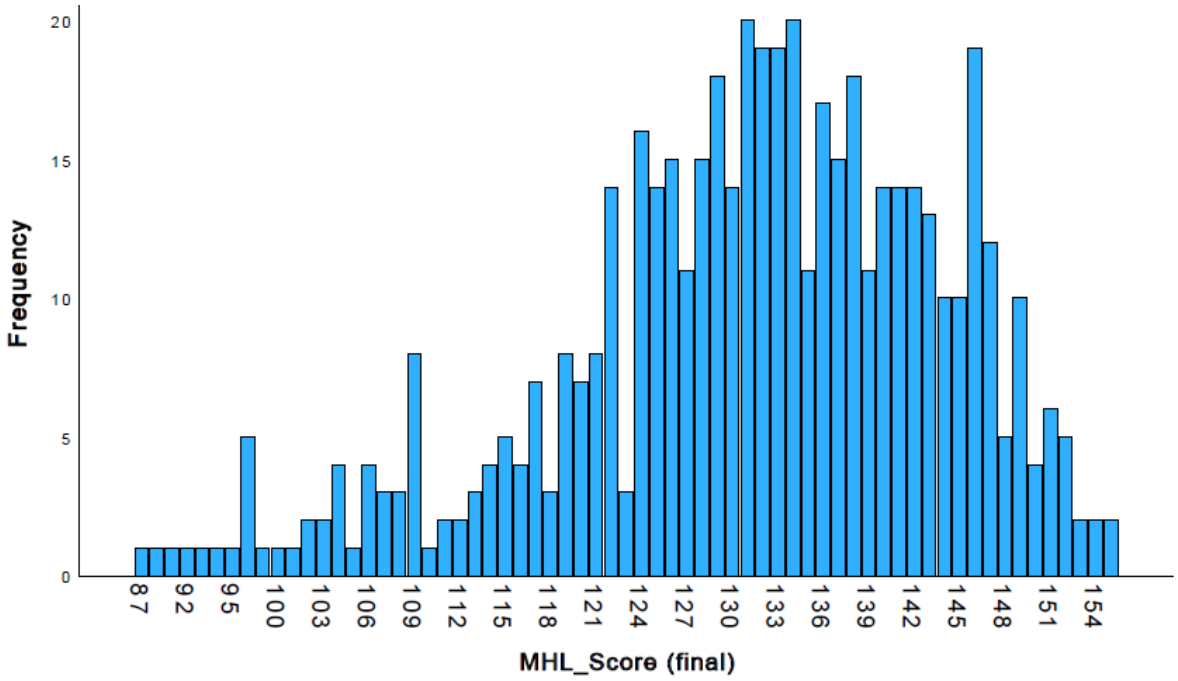
3.3 RQ1: What is the level of MHL in New Zealand teachers and where are the gaps?

The overall mean response to the MHL survey measure was 131.11 (relative to a midpoint score of the scale of 97.5). The median score was very close to the mean at 132 - suggesting a relatively normal, albeit skewed, set of results (see Table 6). This can be seen in the frequency distribution below (Figure 3). Even though the data appear somewhat normal - the MHL failed the Shapiro-Wilk test for normality ($p < 0.001$). These results are comparable to Clough et al. (2018) which Australian University students (domestic) MHL overall mean response to the MHLS was 132.41 (13.12 SD).

Table 6:
MHL score results summary

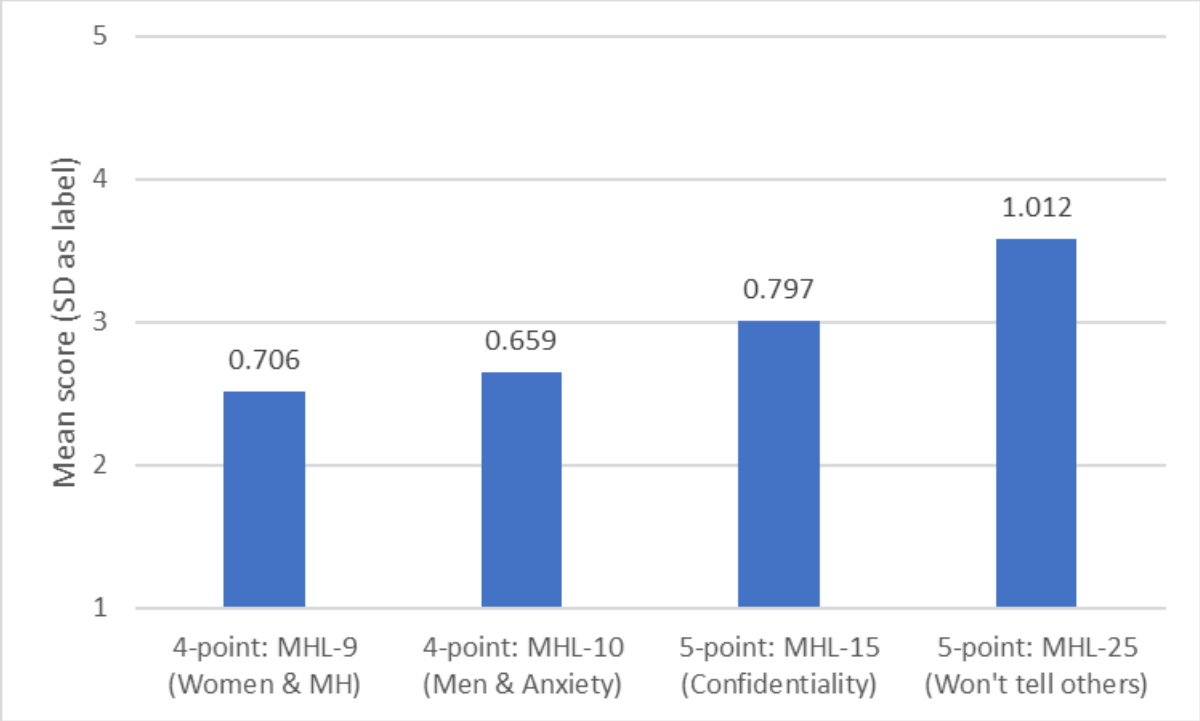
N	Valid	508
	Missing	0
Mean		131.11
Median		132.00
Std. Deviation		12.965
Minimum		87
Maximum		157

Figure 3:
Frequency distribution of MHL scores



To inspect the 'gaps' in teacher MHL, Figure 4 summarises the specific MHL questions that received the two lowest mean scores (post reverse coding) from the 4-point and 5-point Likert scale sections of the questionnaire (respectively). Of the 4-point questions, the two lowest responses related to the propensity for gender to affect higher levels of MH illness in women (MHL-9) and anxiety in men (MHL-10). Across the 5-point questions, the two questions with the lowest means were regarding the circumstances that a psychologist might breach confidentiality (MHL-15) and whether an individual would disclose their own mental illness to others (MHL-25). The circumstances and possible social stigmas that likely drive these responses, as well as discussion on other gaps (including a comparison to how these results compare with other MHL surveys) is included in the discussion.

Figure 4:
Lowest two mean scores on MHL 4- and 5-part Likert questions (including SD)



3.4 RQ2: What is the relationship between mental health literacy and teachers' own resilience?

The relationship between MHL and teacher resilience was measured using a linear regression, with MHL score being the dependent variable. The two variables were loosely positively correlated (R = 0.295), with a weak R-squared of 0.087.

Table 7:
R and R-squared Results

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.295[a]	.087	.086	12.398

a. Predictors: (Constant), TRQ_Score (final)

When regressed (with no controlling variables, including a constant), a respondent's TRQ score was statistically significant and positively correlated in explaining MHL scores ($p < 0.001$). The constant was also statistically significant ($p < 0.001$). The unstandardised beta of 0.333 implies that a respondent's MHL score will increase by 0.333 for each additional TRQ score point they score, above the constant of 96.4.

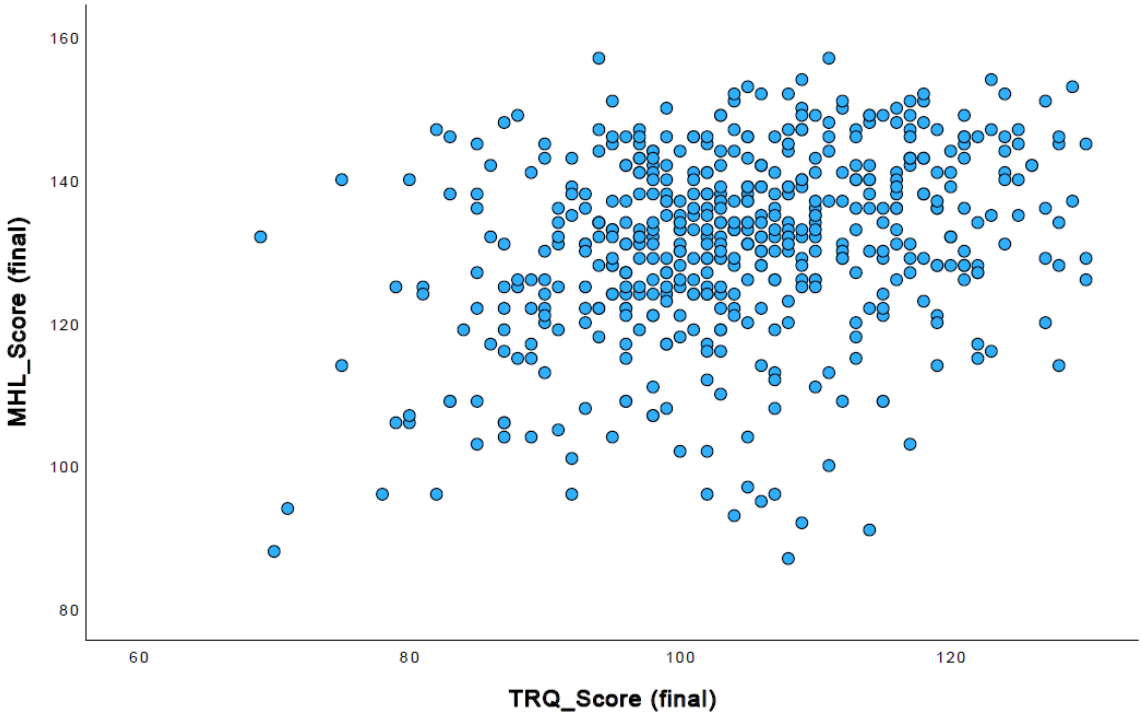
Table 8:
Coefficients from MHL and TRQ Regression, including Intercept

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	96.361	5.025		19.176	<.001
	TRQ_Score (final)	.333	.048	.295	6.958	<.001

a. Dependent Variable: MHL_Score (final)

This relationship can be visualised in the below scatterplot (Figure 5).

Figure 5:
Scatterplot of MHL Scores against TRQ Scores



3.5 RQ3: What is the relationship between MHL and teachers' resilience when controlling for levels of perceived support?

A linear regression was again applied seeking to explain MHL (the dependent variable) with TRQ and SSR scores. A two-step model was applied in order to assess the marginal impact of SSR over and above the previous results (regressing TRQ on MHL). The first model included just TRQ, with model 2 including both TRQ and SSR. As per the below Table 9, both models are statistically significant in explaining MHL; however, the strength of

the model (as measured by the F statistic), does reduce sharply with the inclusion of the SSR (from 48.4 to 25.6).

Table 9:
ANOVA Results between Model 1 and Model 2

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7441.836	1	7441.836	48.411	<.001[b]
	Residual	77783.542	506	153.722		
	Total	85225.378	507			
2	Regression	7835.789	2	3917.894	25.566	<.001[c]
	Residual	77389.589	505	153.247		
	Total	85225.378	507			

a. Dependent Variable: MHL_Score (final)

b. Predictors: (Constant), TRQ_Score (final)

c. Predictors: (Constant), TRQ_Score (final), SSR_Score (final)

The coefficients of the different models support a similar story (Table 10, below). Relative to model 1 (which aligns with the regression in RQ1), the addition of SSR as a control variable reduced the explanatory power of TRQ and is itself not statistically significant in explaining the level of MHL. The significance of TRQ is marginally weakened (*t* value declines from 7.0 to 5.9); however, this remains strongly significant in explaining MHL (as does the inclusion of a constant, *p* values for both remain <0.001 in both models).

Table 10:
Regression Coefficients including TRQ and SSR Regressed against MHL

		Unstandardized Coefficients		Standardized Coefficients			Correlations
Model		B	Std. Error	Beta	t	Sig.	Zero-order
1	(Constant)	96.361	5.025		19.176	<.001	
	TRQ_Score (final)	.333	.048	.295	6.958	<.001	.295
2	(Constant)	94.317	5.177		18.220	<.001	
	TRQ_Score (final)	.304	.051	.269	5.922	<.001	.295
	SSR_Score (final)	.303	.189	.073	1.603	.109	.170

3.6 RQ4: Does the relationship between MHL and teachers' resilience differ depending on whether the participant teaches in an urban or rural area?

Two tests were run to investigate whether (a) teaching area impacted the level of MHL

and (b) whether the relationship between MHL and teachers' resilience (TRQ) differed under different areas. The survey asked participants whether they were teaching in a city (n=259), a town (n = 160) or a rural (n = 84) school (total n = 503, no response = 5). Table 11 presents a summary of the results of MHL, TRQ and SSR by all three teaching areas.

Table 11:
MHL, TRQ and SSR, by Teaching Area

Which area are you working?		MHL_Score (final)	TRQ_Score (final)	SSR_Score (final)
City	Mean	131.54	104.86	16.96
	N	259	259	259
	Std. Deviation	13.547	11.832	3.191
	% of Total N	51.5%	51.5%	51.5%
	Median	133.00	104.00	17.00
Town	Mean	130.29	103.19	16.66
	N	160	160	160
	Std. Deviation	12.694	10.501	3.061
	% of Total N	31.8%	31.8%	31.8%
	Median	132.00	103.00	17.00
Rural	Mean	131.29	104.42	17.46
	N	84	84	84
	Std. Deviation	11.641	12.172	2.902
	% of Total N	16.7%	16.7%	16.7%
	Median	132.50	103.50	17.00
Total	Mean	131.10	104.25	16.95
	N	503	503	503
	Std. Deviation	12.964	11.486	3.109
	% of Total N	100.0%	100.0%	100.0%
	Median	132.00	104.00	17.00

For this analysis, city respondents were considered 'urban' (n = 259) while both town and rural respondents were considered 'non-urban' (n = 244). Aggregating Rural and Town into one group (>= 2 in Table 12) generated the following MHL means and standard deviations:

Table 12:
Mean, Number and Standard Deviation of Sample Groups by Teaching Area

	Which area are you working?	N	Mean	Std. Deviation	Std. Error Mean
TRQ_Score (final)	>= 2	244	103.61	11.095	.710
	< 2	259	104.86	11.832	.735

An independent samples t-test was conducted to assess whether or not there was a statistically significant difference in the mean of MHL between urban and non-urban teachers. The Levene's Test for equality of variances suggests that the variance of the two groups are statistically significantly different ($p = 0.041$, measured against $p < 0.05$) and thus non-equal variances are assumed.

Table 13:
Independent Samples Levene's Test, Assessing MHL Score by Teaching Area

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
MHL_Score (final)	Equal variances assumed	4.203	.041	-.779	501
	Equal variances not assumed			-.781	500.403

As per the results of Tables 13 and 14, there is no statistically significant difference between the mean MHL score of urban and non-urban teachers (two-sided $p = 0.435$).

Table 14:
Independent Samples t-test for Equality of Means

		t-test for Equality of Means			
		Significance			
		One-Sided p	Two-Sided p	Mean Difference	Std. Error Difference
MHL_Score (final)	Equal variances assumed	.218	.436	-.901	1.157
	Equal variances not assumed	.218	.435	-.901	1.154

In assessing whether the relationship between MHL and teachers' resiliency was affected by the area that a teacher taught in, a linear regression model was again used, splitting the sample into the same urban and non-urban groups (the results from these regressions are presented in Tables 15 and 16). Under both groups, the explanatory power and direction of TRQ on MHL remains strongly significant regardless of teaching area.

Table 15:
Regression of TRQ on MHL, for Urban Teachers Only

		Unstandardized Coefficients		Standardized Coefficients			Correlations
Model		B	Std. Error	Beta	t	Sig.	Zero-order
1	(Constant)	93.595	7.150		13.090	<.001	
	TRQ_Score (final)	.362	.068	.316	5.340	<.001	.316

Table 16:
Regression of TRQ on MHL, for Non-Urban Teachers Only

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations
		B	Std. Error	Beta			Zero-order
1	(Constant)	100.760	7.187		14.020	<.001	
	TRQ_Score (final)	.288	.069	.260	4.181	<.001	.260

3.7 RQ5: Does the relationship between MHL and teachers' resilience differ when controlling for years of teaching experience?

Three tests were run to investigate whether years of teaching experience impacted (a) the level of MHL, (b) the level of teachers' resiliency and (c) whether the relationship between MHL and teachers' resilience (TRQ) differed between experience levels. Table 17 presents a summary of the results of MHL, TRQ and SSR by all teaching experience categories.

Table 17:
MHL, TRQ and SSR, by Teaching Experience

Total years of teaching?		MHL_Score (final)	TRQ_Score (final)	SSR_Score (final)
<5	Mean	129.58	102.29	17.58
	N	45	45	45
	Std. Deviation	17.596	11.644	2.589
	% of Total N	9.0%	9.0%	9.0%
	Median	135.00	102.00	18.00
5-10	Mean	129.12	102.68	16.82
	N	130	130	130
	Std. Deviation	15.563	11.464	3.295
	% of Total N	25.9%	25.9%	25.9%
	Median	132.50	103.00	17.00
11-20	Mean	131.74	103.37	16.44
	N	142	142	142
	Std. Deviation	10.208	10.215	3.102
	% of Total N	28.3%	28.3%	28.3%
	Median	133.00	103.00	17.00
20-30	Mean	132.01	105.92	17.20
	N	143	143	143
	Std. Deviation	11.529	11.173	2.789
	% of Total N	28.5%	28.5%	28.5%
	Median	132.00	106.00	17.00
30+	Mean	133.45	109.10	17.60
	N	42	42	42
	Std. Deviation	10.895	14.339	3.839
	% of Total N	8.4%	8.4%	8.4%
	Median	134.50	109.50	18.00
Total	Mean	131.09	104.30	16.95
	N	502	502	502
	Std. Deviation	12.973	11.458	3.109
	% of Total N	100.0%	100.0%	100.0%
	Median	132.00	104.00	17.00

For this analysis, experience was analysed between those that had less than 10 years of teaching experience (n = 175) relative to those with greater than 10 years experience (n = 327). Aggregating the experience groups generated the following MHL means and standard deviations:

Table 18:
MHL Mean and Standard Deviation of Sample Groups by Teaching Experience

	Total years of teaching?	N	Mean	Std. Deviation	Std. Error Mean
MHL_Score (final)	>= 3	327	132.08	10.871	.601
	< 3	175	129.23	16.059	1.214

An independent samples t-test was conducted to assess whether or not there was a statistically significant difference in the mean of MHL between experience groups. The Levene's Test for equality of variances demonstrated that the variance of the two groups is statistically significantly different ($p < 0.001$) and thus non-equal variances are assumed (refer to Table 19).

Table 19:
Independent Samples Levene's Test, Assessing MHL Score by Teaching Area

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
MHL_Score (final)	Equal variances assumed	39.049	<.001	2.350	500
	Equal variances not assumed			2.098	261.423

As per the results of Tables 19 and 20, there is a statistically significant difference between the means of the two groups where teachers with <10 years experience have statistically significantly lower MHL on average (two-sided $p = 0.037$).

Table 20:
Independent Samples t-test for Equality of MHL Means

		t-test for Equality of Means			
		Significance			
		One-Sided p	Two-Sided p	Mean Difference	Std. Error Difference
MHL_Score (final)	Equal variances assumed	.010	.019	2.842	1.210
	Equal variances not assumed	.018	.037	2.842	1.355

Table 21 summarises the aggregate teacher resiliency (TRQ) means and standard deviations by teaching experience groups:

Table 21:
TRQ Mean and Standard Deviation of Sample Groups by Teaching Experience

	Total years of teaching?	N	Mean	Std. Deviation	Std. Error Mean
TRQ_Score (final)	>= 3	327	105.22	11.358	.628
	< 3	175	102.58	11.478	.868

As with MHL, an independent samples t-test was conducted to assess whether or not there was a statistically significant difference in the mean of teachers' resilience (TRQ) between experience groups. The Levene's Test for equality of variances demonstrated that there was no statistically significantly different in the variance of the two groups ($p < 0.833$) and thus equal variances are assumed.

Table 22:
Independent Samples Levene's Test, Assessing TRQ score by Teaching Area

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
TRQ_Score (final)	Equal variances assumed	.045	.833	2.472	500
	Equal variances not assumed			2.465	352.497

Asper the results of Tables 22 and 23, there is a statistically significant difference between the means of the two groups where teachers with <10 years experience have statistically significantly lower TRQ scores on average (two-sided $p = 0.014$).

Table 23:
Independent Samples t-test for Equality of TRQ Means

		t-test for Equality of Means			
		Significance			
		One-Sided p	Two-Sided p	Mean Difference	Std. Error Difference
TRQ_Score (final)	Equal variances assumed	.007	.014	2.640	1.068
	Equal variances not assumed	.007	.014	2.640	1.071

In assessing whether the relationship between MHL and teachers' resiliency was affected by teacher experience a linear regression model was again used, splitting the sample into the same experience groups applied above. The results from these regressions are presented in Tables 24 and 25. While the steepness (i.e., the TRQ coefficient) and level of the constant are notably different between teaching experience groups, the explanatory power and direction of TRQ on MHL remains strongly significant in both models.

Table 24:
Regression of TRQ on MHL, for Teachers with Less than 10 Years Experience

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations
		B	Std. Error	Beta			Zero-order
1	(Constant)	83.181	10.399		7.999	<.001	
	TRQ_Score (final)	.449	.101	.321	4.456	<.001	.321

Table 25:
Regression of TRQ on MHL, for Teachers with At Least 10 Years Experience

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations
		B	Std. Error	Beta			Zero-order
1	(Constant)	104.969	5.411		19.398	<.001	
	TRQ_Score (final)	.258	.051	.269	5.039	<.001	.269

3.8 H1: Years teaching experience will have a positive relationship with MHL and teacher's resilience.

Per the above analysis, this hypothesis was confirmed by the statistically significant difference in the means of both MHL and TRQ for teaching experience groups with more experienced teachers having higher MHL and teacher resilience, on average.

3.9 H2: Relatedly, mental health literacy and perceived support will have a positive relationship with teachers' resilience.

The following correlation matrix (Table 26) demonstrates that all three variables are indeed positively correlated with one another, albeit only weakly so. As demonstrated under RQ2 and RQ3, TRQ is also statistically significant in explaining positive variations in MHL. While TRQ is positively correlated, and has a positive coefficient in RQ3, the variable is not statistically significant when included alongside TRQ. However, SSR is statistically significant at explaining MHL when TRQ is excluded from the model ($p < 0.001$).

Table 26:
Correlation Matrix between MHL, TRQ and SSR

		MHL_Score (final)	TRQ_Score (final)	SSR_Score (final)
Pearson Correlation	MHL_Score (final)	1.000	.295	.170
	TRQ_Score (final)	.295	1.000	.361
	SSR_Score (final)	.170	.361	1.000

To investigate whether changes in perceived level of support would explain movements in resiliency, a linear regression was applied with SSR (support) as the independent variable and TRQ (resiliency) as the dependent variable. Again, both the constant and the coefficient on the independent variable were statistically significant, suggesting that the level of perceived support did positively explain the level of resiliency ($p < 0.001$) alongside the simple correlation of 0.361.

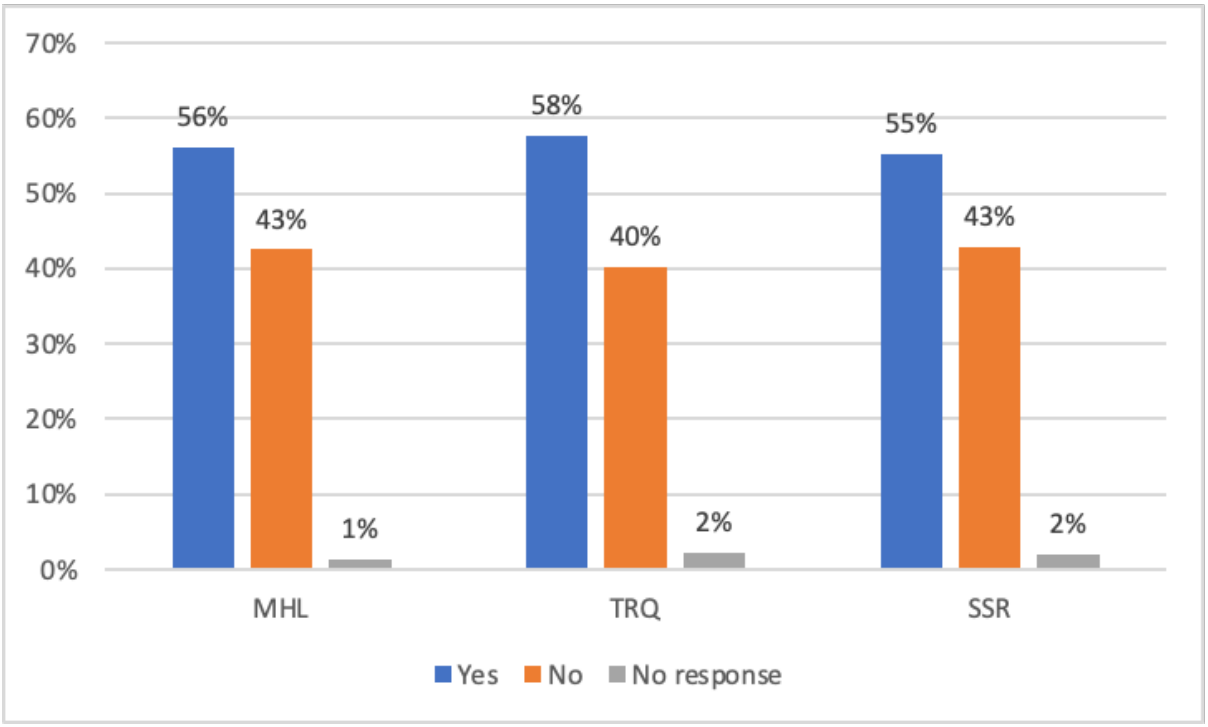
3.10 Exploratory Thematic Analysis

Analysis of the open-ended qualitative questions also produced high level themes and sub-themes that complement the quantitative measures (the detailed construct of the qualitative codebook for each theme is included in Appendix E). The frequencies of each theme have been calculated to help indicate the understanding of participants' thoughts. It also reports the most commonly held accounts and having the frequency numbers also adds to the trustworthiness of findings.

3.10.1 COVID-19 and mental health literacy

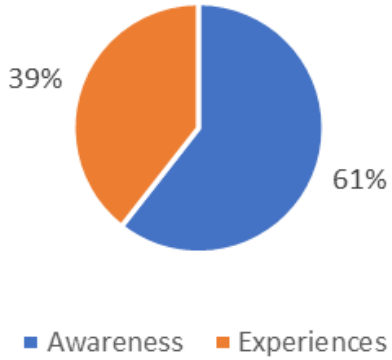
Overall 56% of participants (that responded to Covid_2) thought that COVID-19 had impacted their MHL while 43% felt it had not impacted their own MHL (refer to Figure 6).

Figure 6:
Proportion of respondents who felt COVID-19 had impacted their mental health literacy (MHL), resiliency (TRQ) or level of support (SSR)



When participants were asked why they thought COVID-19 had impacted (or not) on their own MHL (Covid_3) the themes that came up were around the types of experiences that impacted MHL, and MH awareness through COVID-19 that impacted participants MHL. Participants reported that COVID had impacted their MHL through experiences in the classroom and in general, and that awareness of MHL has been increased through the Media / Society, within school and through increased self-awareness.

Figure 7:
Breakdown of respondents who felt COVID-19 had impacted their MHL



These types of responses have included:

- *"More widespread information about it in general media - more students having problems with anxiety. More parents having issues with mental health and anxiety."*
- *"Programmes on TV from psychologists such as Nigel Latta and others on how to cope therefore developing awareness"*
- *"The lockdowns enabled me to deep dive into my own mental health, and this has supported me in becoming aware of the impacts trauma has on people".*
- *"Seen an increase in anxiety of children and families."*
- *"Even simple things like getting their children to school regularly is not happening how it used to."*

Personal experiences of MH responses were more evenly balanced; 52% reported MHL being impacted from MH personal experience through COVID-19 versus 48% felt that their MHL was impacted due to personal MH experiences outside of COVID-19. However 65% overall of Participants' experiences (including classroom, personal and general) of MH knowledge was reported to have been impacted by MH experiences through COVID-19. Particular responses impacted by COVID-19 included:

- *"The fallout of it all. My son became suicidal....so I went into overdrive and have educated myself."*
- *"Because my mental health was affected by covid"*

Impacts outside of COVID-19:

- *"No not really, I have a family history of mental health issues"*
- *"I had an understanding of mental health challenges that people face prior to COVID 19 because family members have struggles"*

75% of participants' responses reported that their overall awareness of MHL had increased through COVID-19.

1.10.2 COVID-19 and Teacher Resilience

Overall, 58% of participants felt that COVID-19 had impacted on their own teacher resilience (TR) while 40% felt COVID-19 had not impacted their own TR (refer Figure 6). When participants were asked why they thought COVID-19 had impacted or not on their own TR (TRQ_Covid_text) the themes that came up were types of *Pressures*, types of *Effect* and *Experiences*. The *Pressures* theme mentioned pressures were from COVID-19 in different situations (school, general, media/society and self) which impacted on the participants' teacher resilience. 27% of responses mentioned these pressures (which go beyond the role as teacher, and blur into social work and other professional roles) in their responses; for example:

- *"It's been hard. We haven't had a choice but to adapt quickly to changing situations and be at work even when we're unwell due to staffing shortages"*
- *"I have not enjoyed the demands of teaching under Covid conditions-we have a double workload, stressed children and high absenteeism but are still expected to reach teaching goals, report to parents and explain progression. Parents appear to be more demanding, vocal and needy. I feel a large part of our job is social work and we are expected to cope with a lot without support."*

57% of participants responses discussed the *type of effect* COVID-19 has had on their own resilience as a teacher. These were coded as affected negatively, affected positively or unaffected by COVID-19. Overall the type of effect was fairly evenly distributed with 27% of responses reporting that their TR was negatively impacted which included responses such as:

- *"Reduced my resilience. I have lost some positivity and optimism."*

35% of responses TR were unaffected by COVID-19, for example:

- *"I think that Covid has made some things easier and other things harder. Overall, the resilience, etc. has been neutral"*

38% of responses TR was affected positively by COVID-19 for example:

- *"I have learned to be more flexible and adjust to daily changes"*

3.10.3 COVID-19 and the perceived level of support

Overall 55% of participants (that responded to SSR_Covid) felt that COVID-19 had impacted how much they feel they had/had not been supported to care for the children in their classroom (refer to Figure 6). When participants were asked to respond to why they thought COVID-19 had impacted (or not) on their perceived support to care for the children in their classroom (SSR_Covid_text) the themes that came up were the *Pressures* of COVID-19 (68% of responses) and those who took *Responsibility* of either providing support or not providing support through COVID-19 (32% of responses). Pressures of COVID-19 reflected systemic, school, general pressures, or no changes of pressure, or none at all. Responsibility responses came from community, systemic, self, school and general issues.

Examples of Pressure themed responses:

- *"Lots of support feels like it has been taken away due to lots of children needing support/ changed break times/ contact tracing etc"*
- *"Increased demands because of the ongoing uncertainty in the world has put unprecedented demands on teachers and Schools"*
- *"It has made getting support harder especially with children not being able to see specialists in person."*
- *"It has put everyone under many more pressures that we have not had to deal with before"*

Examples of Responsibility themed responses:

- *"Covid has made me hyper aware of patterns in behaviour and sickness."*
- *"I think there is more empathy from the community around mental health struggles."*
- *"School principal has very strong views on wellbeing for all and makes it his priority before and after COVID."*

Participants also highlighted what different schools/communities were doing to take responsibility or share with others due to COVID-19. This built new connections and supports between systems, or strengthened existing ones.

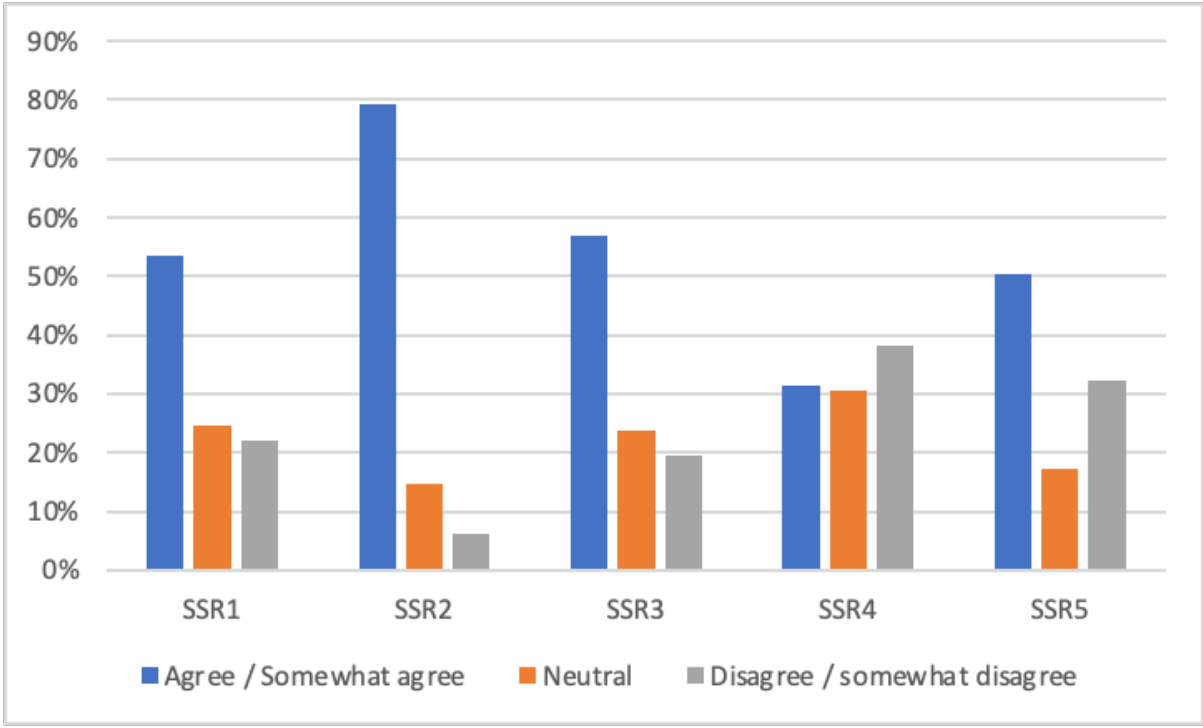
Examples of responses:

- *"Not seeing your children daily raised concerns for myself so I wanted to reach out to them further and check in."*
- *"Short term funding was available for teacher aide hours to support anxious students"*
- *"I think it certainly highlighted that mental illness is highly likely for anyone in the circumstance and our school really acknowledged that tending to emotional needs was paramount."*
- *"ELP services promoted to staff and PD around Mitey"*
- *"School and whānau have been very supportive with regards to covid. We had to have hybrid learning - Principal did not hesitate to do this and parents very supportive. As a team leader I check on colleagues and Principal/AP check on me. Received a care package when sick with covid recently."*
- *"I think in many ways it helped build connections and relationships between home and School"*

3.10.4 Perceived level of support qualitative items

Participants who chose to respond to the open-ended responses for SSR were able to expand on their reasons for choosing the rating for the corresponding quantitative SSR item (see figure 8).

Figure 8:
Quantitative responses to SSR items



SSR1 showed that 271 (53%) participants agreed or somewhat agreed that mental distress was the most challenging challenge in their classroom (refer to Figure 8). SSR_1text participants expanded on why they felt that mental distress was or was not the most challenging challenge that they as a teacher currently deal with. The themes that arose were 16% pointing to other challenges than mental distress, 19% responses were on contributing factors to mental distress and symptoms of mental distress in their classrooms, and 14% of responses discussed the systemic issues of dealing with mental distress in the classroom, types of mental distress disorders and the impacts of having mental distress in the classroom. Interestingly participants who responded that other challenges in the classroom were more challenging (coded "unrelated behaviours" in the classroom) actually discussed common symptoms or contributing factors to mental distress, although they identified them as 'different' to mental distress. Some of these responses included:

- *"I have a significant number of behavioural issues that are not related to Mental Health and they are far more challenging than the mental health issues I deal with."*

- *"I have 4 students who are heavily dyslexic (two of these students also have ADHD and dyscalculia not mental distress). Just managing a range of diverse learning needs is really the biggest challenge that I face in the classroom the majority of the time."*
- *"I haven't experienced mental distress that has been more challenging to deal with than other behaviours. Difficultly managing emotions sure, but not to the extent it was the most challenging."*
- *"Learning concerns are more challenging."*
- *"Other behavioural needs that are challenging"*

For SSR2 402 (79%) participants agreed or somewhat agreed that they felt they were supporting students experiencing mental distress in their classroom (refer to Figure 8). When asked whether teachers felt that they were supporting the children with mental distress in their class themselves, the themes that came up were *teacher role*, *impacts* and *support systems*. The impacts of mental distress in the classroom was discussed in regards to the teacher and the other children, while support systems included internal or external supports the teacher had or that were lacking. 84% of responses showed that participants identified that the teacher role played a part in being important for supporting students with mental distress by their characteristics, relationships with students, and/or expertise. For example:

- *"Understand and empathise with students who are finding things difficult and there to support wellbeing."*
- *"Knowing our children & their personal situations are key. Children know they can talk to me. Surrounded by love & care. Have programs to support mental health."*
- *"As an educator I am very aware and place a lot of importance on a safe and secure and happy learning environment."*
- *"Don't have the knowledge or support to fully help those children "*
- *"I do my best with the knowledge and tools I have to help the student but I often feel I never give enough and this personally draining on my own wellbeing."*
- *"I try to support them but I don't know if I'm doing the right thing."*

289 participants responded on SSR3 that they agreed or somewhat agreed they felt supported by internal support for mental distress in the classroom. However, only 159 (31%)

felt that they somewhat agreed or agreed they had external support for mental distress in the class (refer to Figure 8). For SSR3 and SSR4 participants were asked to expand on whether they felt supported or not with regards to managing children experiencing mental distress in the classroom by internal or external supports. Common themes arose from both items which were whether they felt supported or unsupported by these systems. There was a relatively balanced support internally within schools (according to the responses), with 49% responding to feeling supported and 51% unsupported. To those that responded to feeling unsupported, they highlighted the need for practical and specialised support for students to be supported by management positions within the school:

- *"Not many people have the experience of this or find it important"*
- *"I think the school support is good for the highly visible students but not for the quiet ones who can slip under the radar."*
- *"Management not interested"*
- *"Very little support for children who do not have diagnosed conditions but still suffering- eg anger issues, ODD behaviours, overwhelmed situations"*
- *"There are not enough TAs and not enough time in the day to get to every child who is struggling every time."*
- *"I am not feeling supported by this. I am not convinced that my school knows how best to support these students (lack of training and understanding)."*
- *"My colleagues are sympathetic but there is little practical support that can be offered."*

With responses to external support systems, 24% of participants responses discussing the 'expertise' of external systems whom they have been supported or not supported by and 76% of responses discussed 'general' external system issues of; accessibility, efficiency, not useful support, not supported and supported. 62% of responses that fell under the theme of expertise recognised RTLBs as an external system that teachers have understanding of, or whom they have worked with before. Only 19% of responses referred to Educational/ Clinical/ Psychologists as agencies supporting or not supporting students. 40% of responses under the theme 'general' discussed the huge issue of accessibility to outside agencies for students in their class. Alongside this, the efficiency issue (referring to the long wait times for external

support services), was raised by 19% of responses and 19% discussed not feeling that the support they had received was useful to them or their students. This resulted in gaps in services that teachers felt they had to fill, without the training or expertise to do so.

- *"We have good access to RTLB but there is little access to any professionals for assessments or advice."*
- *"The benchmark to get support is ridiculous and if you are lucky enough to get someone to come in they do a million observations and have very little ways to help either - they are very reluctant to provide Teacher Aide support. anymore and usually end up suggesting strategies that give teachers more work and don't actually provide a positive result."*
- *"Not easy to access unless cases are very severe"*
- *"I feel as if Ed Psychs want my support in filling out forms more than they support me. I often don't even receive a copy of their report. RTLBs are always good value, though."*
- *"Psychologists yes please but so thin on the ground. I feel like I'm taking educated guesses with my students."*
- *"These services have limited funding. The people do an amazing job however there is not enough of them or enough funding for them to meet all the needs"*
- *"There is just no immediate support available. The waiting lists for Clinical psychologists are at up to 18 months. RTLB and other outside agencies are under-resourced."*
- *"Things can take too long with external agencies."*
- *"By the time you get to these agencies, we have often tried a lot of things they suggest."*
- *"It takes waaaaaaay to long to get a referral to outside agencies, and even if you do manage to get someone, the child has to be really really really 'bad' to get any support."*
- *"Only by chance because the waiting list for these resources is very long as they are stretched"*
- *"The support is available but not always useful"*

SSR5 focused on how often teachers were using self-care to support themselves when working with children with mental distress (refer to Figure 8). 256 (50%) of participants used self-care daily or weekly compared to 164 (32%) of participants who use self-care annually or monthly. Participants expanded on SSR5 responses, and these fell under the themes of their 'views' of self-care, 'reasons' for self-care and 'examples' of self-care that they do. 47% of responses viewed their self-care as 'not prioritised' while 81% 'prioritised it'. Respondents who were not prioritising self-care mentioned their own 'values' of always putting others first, for example:

- *"I know I should but there are other priorities and others who need support"*
- *"It's not really talked about. Even at the really good school I am at now the focus is always on the children. No-one ever checks in on the teacher with regards to how they are feeling when dealing with children's mental distress."*
- *"I continue to push my needs to the bottom of the list. Which leave me feeling exhausted and empty"*

When responding with 'reasons' for self-care, responses either discussed having boundaries in place/or not, their hauora and how it is affected, and the job demands of teaching students with mental distress. Examples of self-care fell into the Te Whare Tapa Whā model of wellbeing 'physical, mental, spiritual and social' aspects.

Te Whare Tapa Whā examples:

- *I try to use a positive mantras and meditate daily to help keep my feelings flowing and keep myself grounded.*
- *Breathing and relaxation / talking it through with colleagues*
- *I talk with my colleagues, discuss ideas to help, or just vent. I also keep fit, and make my fitness a priority over anything else.*
- *Time out for me, exercise music spa, baking family time*
- *I prioritize exercise and sleep*

Other examples of responses which include those that do prioritise self-care or do not reflect practical barriers around time pressures and other commitments:

- *"I know I must look after my own needs first to effectively manage the needs of the students in my class."*
- *"I work part time so that I have balance with my young family and my work (which I love)"*
- *"All my energy goes into thinking about what I can do for them rather than worrying about myself, except when I have physical injuries."*
- *"It's a struggle to prioritise myself and to find the time to look after myself. My students wellbeing is the most important thing, and my work load is ridiculous. Time for myself is not easy to find."*

SSR6 asked participants for their thoughts on what support would benefit them the most as a teacher managing children with mental distress in the classroom. The only theme emerging addressed the types of support the teachers would want. 44% of responses discussed internal support being the most beneficial, 24% professional development, and 30% wanted supported from external support agencies. Responses addressing "internal support" ideas included:

- *"Every class having a MoE full time funded classroom assistant - another adult that can step in and take the class while the teacher goes out with the student or can take the student out/give the student individual attention."*
- *"A counsellor full time in every school."*
- *"More timely external support for children and whānau in the safe setting of school"*

Responses addressing "professional development" ideas included:

- *"Ongoing PD - signs of mental distress, strategies to support students, in-class support by professionals for identified students"*
- *"The tools to understand the different child mental illnesses and how best to support them and their families."*
- *"More training. I need a counsellors' degree as well. More immediate support in schools"*
- *"I would like to see all teachers trained in stress management, effective listening, and conflict resolution, for themselves and for students."*

- *"Training on how to recognise disorders, what to do and what not to do to help these children, what advice to give to parents/caregivers/families."*
- *"Programmes and PD for teachers to help guide us how to best support these children! There is no training for this in the degree teachers currently take."*
- *"I would like a course to help with developing basic counselling skills as I feel we are often the first line of defence*
- *"Having new teachers have this in their course of study"*

Responses addressing "external support" ideas included:

- *"external agencies who can come in and help, programmes that are effective and just not surface, support in homes (because this is where it needs to be for the greatest impact)"*
- *"Easy access to outside support without having to jump through hoops, fill in endless forms and wait for funding rounds. Streamlined support as soon as the mental distress is seen"*
- *"Outside agencies being able to respond much quicker. E.g., clinical psychologists."*
- *"A psychologist assigned to every school with regular sessions for children who need it. Teachers are not trained in this area and we just keep fumbling our way through."*
- *"Also learn more from psychologist regarding issues and ideas of how to support"*
- *"More professional supports"*
- *"Have help more quickly when a need is established"*

3.11 Summary of results

The thematic analysis explored qualitative responses from participants who chose to respond to these items. It raised awareness of key themes that participants felt was important to expand and justify their answers to the quantitative responses. Overall, of those who responded, over half felt that COVID-19 had impacted on their own MHL, perceived support levels and teacher resilience. Teachers emphasised the importance of their relationship with students, creating the environment for them to feel safe, but also the need for more knowledge to support mental distress. Self-reflecting the teachers wanted to share their own perspectives of what support would be of benefit to them in managing mental distress in the classroom. The teachers highlighted the breadth of the teacher's role in the classroom,

expanding from the teacher as an educator to also being a counsellor and social worker. This was partly out of necessity, given the gaps in external services and funding and access, necessitating them needing to take on additional roles. Alongside this, teachers talked about how they are able to prioritise self-care, as well as the barriers that prevent this.

The next chapter - the discussion - will look at the implications and application of these findings, along with potential next steps for future research.

4. Discussion

4.1 Interpretating the quantitative results

This study investigated New Zealand primary school teachers' MHL, resilience and perceived support when dealing with students experiencing mental distress. Mental distress is an identified challenge for teachers especially where there is no external support from agencies. This study gave a voice for primary teachers in New Zealand to share their thoughts, feelings and observations on this topic. This study is the first in New Zealand to examine primary teachers' baseline levels of MHL, teacher resilience and perceived levels of support as well as analysing any relationships between these constructs. The results showed that that there is a positive – and statistically significant – relationship between New Zealand primary teachers' MHL and resilience. This is consistent with literature that points to MHL and teacher resilience as multidimensional constructs (Mansfield et al., 2016; O'Connor et al., 2014); results were analysed with that in mind.

There is considerable agreement amongst the academic community focused on MH, and specifically MH *outcomes*, that MHL is vital for identifying and seeking support for those undergoing mental distress (Altweck et al., 2015; Bjørnsen et al., 2017; Clough et al., 2018; Daniszewski, 2013; Furnham et al., 2011; Jorm, 2012; Singh et al., 2022; Spiker & Hammer, 2019). In many ways, teachers are uniquely placed – due to the time commitment, direct view of learning progress, ability to observe social behaviours and by having a degree of objectivity to a child and their relationships with children – to observe and identify changes or challenges with a student's MH. For this reason, gathering the data on teachers' MHL and resilience helps get a better understanding of how they need to be supported to enhance future outcomes with students experiencing mental distress.

Overall, there were 888 participants who responded to the survey, demonstrating that there is a keen interest in this research topic. However, of that total number, only 508 of the participants completed enough of the survey to qualify to be included in the final data analysis. The sample set of participants who were recruited (and ultimately analysed) reflected a wide and diverse set of primary teachers from across New Zealand. The sample included: primary teachers from across all regions of New Zealand, with roughly an equal mix of urban and rural locations; teachers from both private and public schools; a wide range

of years teaching experience; a broadly representative mix of deciles between 1-10 (based on socio-demographic information of location of each school on 1-10); and finally, a wide breadth of teacher qualifications and held specific teaching roles within primary education. In all, the sample demonstrated representativeness similar to the Kamel et al. (2020) study in Saudi Arabia, albeit was strengthened because of the wide range of teacher locations and the qualitative items that were assessed as part of the current study.

Research Question One (RQ1) explored the level of MHL knowledge amongst NZ primary teachers and whether there were any obvious gaps. The mean MHL score of New Zealand teachers on the MHL scale was 131.1. With a maximum score of 160 and minimum of 35 (i.e., midpoint score of 97.5), the result demonstrates that New Zealand teachers have higher than average MHL knowledge based on this measure. This mean result is comparable to Clough et al. (2018) where Australian university students recorded a MHL scale mean of 132.4. During development and testing of the MHLS (O'Connor & Casey, 2015), the community sample had a mean score of 127.38 which is slightly lower than this studies average score. Broadly speaking, this headline result is a positive finding – suggesting that, on average, New Zealand primary teachers have relatively high levels of MHL and are aware of many of the distress signals for children experiencing mental distress.

The results also identified that the most common 'knowledge gaps' for New Zealand primary teachers' MHL focused on the areas of help seeking, the propensity for various mental distresses to manifest more in different genders and the role (or responsibility) of the psychologist. The identified gaps are not necessarily surprising as they aligned with the themes and comments collected through the qualitative results. In particular, teachers strongly felt that they did not have the expertise or training in MH and also did not have enough support from external agencies. This is most relevant to the gap from the MHLS of knowing what the responsibility of the role of the psychologist involves. These findings suggest that there is a lack of knowledge about (and experience with) how different agencies support mental distress (i.e., a psychologist's role when working with clients). This is supported by Johns (2017) who notes the extensively documented lack of resources provided by the New Zealand government to support teachers in primary schools.

The COVID-19 pandemic – through workforce burnout and increased episodes of mental distress – seems to have highlighted many of these shortcomings as well as

accelerated a societal trend towards more open discussion about the state of our own MH. While a lack of teachers (compounded by high rates of attrition, demographics and open borders) appears to be pushing the Ministry of Education towards seeking greater support in these areas, it is not clear how (or when) any additional support may be realistically provided. Nevertheless, the broader societal trend towards more open MH discussion is an interesting dynamic which is increasingly making parents aware (and vocal) about the state of their child's MH. Whereas previously a child's distress may have been characterised as 'bad behaviour' or a 'learning difficulty', parents are increasingly expecting schools (and teachers) to be more nuanced and tailored in teaching a child undergoing mental distress (or experiencing learning difficulties more generally). As the 'call for more action' comes from a wider group (outside of teachers alone) – this may ultimately have a greater influence on whether greater support is granted to teachers in this important area of professional development.

Reaching out for support was also a gap for teachers; this aligns with findings of current literature which recognise stigma of MH as a barrier in seeking support for a child from parents or schools and who lack the psychoeducation around this to change attitudes around MH (Tully et al., 2019).

When reviewing the demographic gender differences of MHL scores, female teachers (n = 449, mean 132.6) had higher levels of MHL than males (n = 46, mean 117.3). Notwithstanding the large skew in the sample size of each group, this result aligns with the findings from Gulliver et al., (2019) and Swami (2012) which found that females had higher levels of MHL. This is likely due to the way in which the genders identify and perceive mental distress differently. For example, males commonly do not identify symptoms of mental distress as an individual 'disorder' but identify it as a consequence or reaction to an external cause rather than relating it to MH separately (Singh et al., 2022). Thus, females then are more likely to identify mental distress (within the individual child) and seek the help to provide the support for it than males (on average).

Research Question Two (RQ2) examined the relationship between MHL and teacher resilience. The current study aligns with the use of the MHLS and TRQ (teacher resilience) scales used which have been used separately to determine the overall MHL and teacher resilience scores. However, the difference in this study is that it uses both scales to examine

the relationship between the two constructs. Remembering O'Connor (2014) discussed the ambiguity when defining MHL as a multi-dimensional construct, it is important to take this into account when analysing the results of the MHLS scores in this study. The current study discussed these concerns in the literature review. It does add to the MHL literature on a different population of New Zealand primary teachers while providing this population with baseline data on this construct. Up until now, the MHLS had not been validated within New Zealand or primary teacher populations (O'Connor & Casey, 2015). The TRQ had also not been measured in New Zealand, so again this study extends this literature by including validation of the MTRS on New Zealand primary teachers' populations and their total TRQ scores. This adds to the growing literature of teachers' resilience and helps to further validate the psychometric properties of using the MTRS scale given that there has been limited research using psychometric instruments for teacher resilience in the literature (Peixoto et al., 2020).

Teacher resilience is another multi-dimensional construct, so results should be interpreted with this in mind (Mansfield & Wosnitza, 2015). The overall teacher resilience score of New Zealand primary teachers on the MTRS scale was 104.2; this is above the midpoint score of 78 (the total maximum score being 130 and minimum 26). Findings confirmed the first hypothesis; that there is a small positive relationship between New Zealand primary teachers MHL and teacher resilience. Therefore, the more information a teacher had about MH the more likely they were to have the resilience to deal with mental distress in the classroom. This shows the importance of having teachers prepared with sufficient levels of MHL in order to support them in a profession with high emotional demands and expectations (Kangas-Dick & O'Shaughnessy, 2020). Yet this is not part of teacher training, or a standard part of professional development.

These findings add new literature to this topic by studying the relationship between a teacher's MHL and teacher resilience as until now these two separate scales had only ever been reviewed individually. The MTRS scale that was used to measure teachers' resilience incorporated the dimensions to measure the protective factors teachers have in their profession: emotional aspects, social aspects and motivational aspects (Mansfield et al., 2016). At face value, all the factors of teachers' resilience are important to have when dealing with others experiencing mental distress; specifically, the supportive relationships with students and staff to seek the support they are needing.

Research Question Three (RQ3) controlled for perceived levels of support (SSR) to assess whether this impacted (or changed) the relationship between MHL and teacher resilience. The results of the regression demonstrated that SSR was not a significant determinant of MHL when also including teacher resilience as an independent variable; thus the findings were non-significant. This could have been contributed to the unreliable nature of the SSR scale and unconfirmed validity of the scale (which is addressed in more detail under Limitations of the study below). However, within the results if a participant had higher perceived support levels it did not necessarily mean that it would reflect how much MHL knowledge or resilience they had as a teacher. A potential reason for this may be that teachers who perceived themselves to have high levels of support require that support *because* they are less resilient or have demonstrated low levels of MHL - and that is why they need (or are receiving) that support. The constructs are too ambiguous to derive meaningful results; however, considering the qualitative responses to the SSR helps gauge insight into what supports teachers have or need. There are clearly cases where high MHL responders suggest low support for the volume of mental distress in the classroom.

Research Question Four (RQ4) sought to evaluate whether the relationship between MHL and TR was impacted by whether the teachers were teaching in rural or urban locations. The findings were surprisingly different to those from previous studies of teachers' resilience levels which showed that teachers in urban environments had an increased level of MHL and TR than those in non-urban areas (Brouskeli et al., 2018; 12/01/23 7:40:00 PM. This current study found participants teaching in the city, towns and rural areas all had comparable MHL and TR scores which stayed statistically consistent between the two variables no matter the location of the participant. As a result, New Zealand primary teachers have similar MHL and TR scores regardless of where they teach. Unsurprisingly then, there was also no change in the relationship between MHL and TR when controlling for teaching location.

Future research would be worthwhile to investigate whether this could be attributable to the increased prevalence of MH awareness across New Zealand post the COVID-19 pandemic (and therefore comes through as a 'one-off" spike in MHL and/or resilience) or whether there is a sustained level of nationwide awareness or support via the New Zealand education system being relatively evenly spread. It would also be valuable to more critically evaluate the level and availability of support for teachers around the country to support the

mental distress of their students. Some relevant findings came through the thematic analysis of qualitative responses in this area, for example 40% of responses to SSR_4 “I have been highly supported from outside agencies (e.g., Educational/ Clinical psychologists, RTLB) who provide support for children experiencing mental distress” commented on the lack of support and availability, however further research is required.

Research Question Five (RQ5) investigated whether years of teaching experience would impact MHL and TR levels of teachers. The results demonstrated that teachers with the more years of experience recorded statistically significant higher levels of both MHL and TR (when dissecting the sample into two groups - greater and less than 10 years of teaching). Despite these differences, there was no major impact on the relationship between MHL and TR when controlling for years of teaching experience. The higher levels of MHL and TR observed between groups aligned with the findings from Beltman et al. (2011) who looked at teachers’ resilience increasing with years of experience. The Beltman et al. review of the literature mentioned that years teaching experience increases resilience of teachers via the prolonged handling (and challenges) of behaviour management – this could equally be drawn as a conclusion from the current study. However, the current study differed from Brouskeli et al. (2018) who found years teaching experience did *not* significantly change levels of teacher resilience. It is important to keep in mind these studies had differing samples of teachers from different countries and areas of teaching (tertiary as well as primary). The finding of this research adds to the literature on this topic in both MHL and teacher resilience given that previous literature has focused on each construct separately.

Both hypotheses were generally supported by the results of the study. Hypothesis One (H1) predicted that years teaching experience would have a positive relationship with MHL and teacher resilience. The results did confirm that the more years teaching experience primary teachers have the higher their MHL and TR scores were (on average). This aligns with the literature on teacher resilience, which suggests that resilience is gained through challenges over the life span or teaching career (Fantilli & McDougall, 2009). It adds new findings that through experience – much like teacher resilience – MHL also increases through years of teaching in the classroom. This could be from having more students over the years experiencing different types of mental distress (e.g., both internalising and externalising behaviours to manage); from this experience teachers gain the tools to support students with different stressors; this builds confidence in their own self-efficacy over time and as a result,

increases a teacher's psychological capital as the years of experience compound (Soykan et al., 2019). It might also be the case that teachers who do not develop resilience leave the education profession.

Hypothesis Two (H2) predicted that MHL and SSR would have a positive relationship with teacher resilience. This was only partially confirmed by the results whereby there was a weak, positive correlation between all three constructs, but no strong statistically significant relationships between SSR and other two variables when controlling for resilience (or MHL). The results showed that the level of perceived support for teachers did not explain the level of resiliency amongst teachers. Compounding the challenges to interpret these results, the survey was also marginally under-powered and the reliability of the SSR construct was weak. These limitations are explored in more detail in the Limitations section below.

The interesting findings of the current study build on previous research in the individual construct areas and add new literature demonstrating that years of teaching plays a role in explaining MHL and teacher resilience. They support and replicate findings from a number of other studies which have demonstrated levels of teacher resilience and MHL across different populations (Beltman et al., 2011; Clough et al., 2018; Day & Hong, 2016; Gorczynski et al., 2017; Gu, 2018; Jung et al., 2016; Mansfield et al., 2020; Morgan, 2011; Peixoto et al., 2018; Ratnayake & Hyde, 2019; Singh et al., 2022; Yonezawa et al., 2011). Nevertheless, it is challenging to compare these studies to each other as this is the first study to collectively look at all three constructs and do so within a New Zealand context. Regardless, the overall findings from this study provide a starting point for baseline data available on New Zealand primary teacher's MHL, teacher resilience and voice of their perceived level of support.

4.2 Interpreting the qualitative results

Alongside the quantitative analysis, the qualitative questions provided valuable perspective and insights to support the results. Despite being 'optional', roughly 70% of respondents provided additional information and depth to their quantitative results by including comments. Overall, a clear theme was that most participants felt mental distress was the biggest challenge in the classroom. This aligns with Beltman et al. (2011) where

teachers identified classroom context (disruptive students) – particularly behaviour management – as being one of the most identified challenges which affect the teacher's own resilience.

Interestingly, when asked whether COVID-19 had impacted their own MHL, teacher resilience and levels of perceived support over half of the respondents felt that it had. With regard to MHL, the main theme (over 60%) of respondents' comments talked to *awareness*. COVID-19 and the pandemic put the world into upheaval starting in early 2020 with copious lockdowns and added external pressures to all individuals in New Zealand (not just teachers) (Officer et al., 2022). Previous literature discusses the impacts of external challenges which can affect an individual's resilience (Tait, 2008).

Without any other available baseline data, we are unable to analyse whether the impact from COVID-19 resulted in an *increase* (or decrease) to teachers' MHL and teacher resilience scores. However, it stands to reason that the due to the degree of upheaval – both to personal and professional lives (e.g., conducting day-to-day (often virtual) teaching) – the pandemic almost certainly *increased* both measures. This conclusion is supported by the anecdotal comments on MHL from respondents. 56% agreed that COVID-19 had contributed to their knowledge of MH. The theme in their corresponded comments where spread between *general* exposure (33%), *media / society* (25%), *self-reflection* (26%) and only 16% related to *school*. Similarly, when describing their experiences with MH and COVID-19, the majority (56%) viewed this through their *personal experiences*, rather than in a *school* context (only 33%). These results are perhaps not surprising. The "Be Kind" campaign – a cornerstone of the New Zealand Government's initial response to the pandemic in 2020 – provided a concise, ever-present and coordinated focus on one's wellbeing, and by association, one's MH. This media campaign – along with the ensuing lockdown – was also nationwide (in comparison to some of countries where the pandemic response was more regional). This might also explain, to some extent, why urban and rural populations displayed very little difference in the survey constructs and results.

The qualitative responses to the perceived level of support provided several interesting themes. In short, the overwhelming majority of teachers (almost 80%) felt that they themselves were highly supportive of the students in their class with mental distress. Many teachers identified key characteristics which help them respond to the distress. This

aligns with the overall MHL scores as Rosetto et al. (2016) suggest that having the MHL knowledge gives people more confidence in knowing how to respond or support in a targeted way.

However, only 58% felt that they (as teachers) were highly supported by their schools, 32% felt well supported by outside agencies and 50% regularly used self-care to look after themselves. This raises interesting insights into the pressure that teachers face and the degree to which mental distress actively contributes to the rates of teacher burnout. The themes from the qualitative responses mirrored these findings with a strong emphasis on teachers wishing they could "do more" and that many are "trying their best" with the resources, time and skills that they have. Of the teachers that discussed the support they receive of outside agencies, more the 60% of comments related to RTLB resources with only 19% for Educational or Clinical Psychologists. The leading sub-themes relating to outside agencies comments were *accessibility issues* (40% of comments), *efficiency issues* (19%) and *not useful support* (19%). Only 14% of comments demonstrated that teachers felt *supported* by these agency resources and this led to them feeling they need to fill those gaps.

These findings align with the current literature of the notable lack of support from the Government with providing this support to primary teachers (Johns, 2017). This is important when looking at the MHL of teachers in New Zealand, which is on the higher side of average (when looking at their overall scores). As Gulliver et al. (2010) describes, the better the MHL the more likely a teacher is to seek support for the child suffering from mental distress. This suggests that teachers are identifying distress but are most likely to be stopping short of seeking out the support from outside agencies due to awareness of stretched services, lack of accessibility and efficiency of these services. Therefore, within the child's development in New Zealand, if external supports are difficult (or impossible) to access for early intervention the child is at risk of having poorer outcomes (Department of the Prime Minister and Cabinet, 2019). This remains a critical area of importance to address – both at a policy level as well as via future research – to delve deeper into extending work on what can be done to increase and accelerate access for tamariki seeking external support for MH. The Department of the Prime Minister and Cabinet (2019) report also highlighted the importance of gauging how adults are supporting children experiencing mental distress in the school environment. The current study has contributed to gathering some of this information by having the participants complete three constructs and share their thoughts on what support they are currently receiving and what they need to provide better outcomes for their students.

The relatively strong participation and engagement rates (at least initially) to start the survey and provide comments suggests that this topic resonates and is viewed as important by primary teachers in New Zealand. The breadth of locations, experience and deciles from across New Zealand also implies that this view is not limited to narrow or specific subset of teachers. Instead, it indicates that a large portion of teachers around the country value MHL and resilience and are willing to invest their own time to have their voices be heard in a way that may influence and support systematic change. Related to the above, the heightened awareness to MH and resiliency issues from the COVID-19 pandemic may also have been a factor in increasing their willingness to participate.

When asked about what they needed for future support and resources (SSR 6), the qualitative responses provided a split view on needing greater internal support (44%), greater opportunities for professional development (24%) and greater accessibility to external support through outside agencies (30%). There was a strong theme throughout the comments that this support needed to come through in a more efficient timeframe – regardless of the support provided.

The unique SSR scale was created by the researcher to measure perceived levels of support with mental distress in the classroom and gain insight into the specific areas / types of support that are available to New Zealand primary teachers. Other literature has previously used scales to measure perceived support as the construct such as the Multi-dimensional scale of perceived social support (Zimet et al., 1988). This construct measures social aspects versus the unique questions targeted specifically at teachers' perceived support levels of support for mental distress in the classroom. It also used a combination of qualitative and quantitative items to allow for expansion on response choices from participants. Interestingly and reassuringly, within the comments on perceived levels of support and their willingness to engage in self-care, teachers commented on identifying both 'externalising' and 'internalising' disorders (such as anxiety and trauma) when asked to expand on the mental distress in their classrooms on the COVID-19 and SSR open ended items; this differs to Splett et al. (2019) who mentions that internalising disorders are less likely to be noticed.

4.3 Strengths of this research and its contribution to current literature

The uniqueness of this research provides thorough information on primary school teachers dealing with mental distress in New Zealand classrooms. It adds updated data to the current literature on NZ teachers' resilience and is the first study to analyse this against MHL. The study also examines the impact of perceived support and teaching experience on resilience and MHL. Finally, it provides insights into teachers' perspectives of the impacts of COVID-19 and their perceived levels of support for mental distress.

The structure and design of this research differed from the extant literature due to its comprehensive design. The study included a targeted sample of primary and intermediate teachers only (i.e., no secondary teachers), included multiple measures used and a mix of quantitative and qualitative data analysis techniques. The results differ from the literature because of exploratory nature of this study's research questions and hypotheses. Other studies focused on the use of one measure with participants and kept the constructs topics (MHLS or TRQ, not the impact of one on the other).

The results of the thematic analysis align with Beltman et al. (2011) findings that teachers did not feel confident at using the skills or strategies to manage diverse behaviours. The teachers' qualitative responses in this study also addressed the lack of tools to support student's mental distress whilst feeling unsupported by external mental distress support agencies, and feeling the need to fill those gaps, despite not having the training or expertise. The combination of lack of support and resiliency in the early years of teaching could be a driving factor for these teachers to leave the profession within their early career. Considering this finding, it is worthwhile to incorporate more tools and access to services and agencies to support a teacher's MHL and practical ways to implement into the classroom confidently to support students early in a teacher's career to help retain them in the education profession.

Another strength of this research was the researcher herself has an education background and is an experienced primary teacher with 10 years of teaching in New Zealand and the United States. Through her teaching experience and psychology studies she recognised that this area of research was lacking. It was identified that while MHL knowledge might have been nascent, formal education and training in this area was severely lacking in New Zealand. As a result, there were clear gaps facing teachers for the appropriate

tools to support mental distress in the classroom. During the recruitment of survey participants, the researcher was able to build on previous connections and make new connections to help attract participants to contribute. In doing so, the researcher shared her background and was able to establish common ground with them. The high response rates could reflect that the teachers felt 'safer' or more open to participate; having the knowledge that the researcher could empathise, relate, and understand the current environment of teaching.

As relates to the Bronfenbrenner's model (Bronfenbrenner, 1979), this study has confirmed the importance of the teachers role and other systems of the model interactions. These interactions affect and contribute to the development of the child and themselves (Harvey et al., 2016). Through the results, New Zealand primary teachers clearly recognised and signalled the importance of building positive relationships with their students. It was also clear that teachers saw this as a way to help identify the different needs facing individual students and to then try taking action to support these needs (Daniszewski, 2013; Splett et al., 2019; Yamaguchi et al., 2020). However, it is clear the current meso system interactions with outside support agencies is a huge barrier for teachers in New Zealand. The lack of accessibility and efficiency of these agencies prevents a working relationship with teachers to provide support for students with mental distress. In this regard, this puts large amounts of responsibility on the teacher alone for managing students with mental distress as well as the rest of the classroom. Alongside this some teachers face a lack of internal support for mental distress such as teacher aides, counsellors, large classroom sizes and limited classroom release. Overall, it is extremely important to highlight the conditions that New Zealand primary teachers are expected to work under; adding to more classroom challenges for the teacher whose own resiliency capacity must be relied upon even though no formal training is provided in this area.

4.4 Limitations

After reviewing the findings of this study, it is important to consider the limitations of this research.

A limitation to this study was that the final sample size was marginally underpowered by 20 participants. The powered sample size recommended by G*Power was 528. After

applying the data exclusion rules, only 508 participants could be included from the total of 888 that had responded to the survey. With this in mind, the results are hard to definitively extrapolate and to draw meaningful conclusions for the population of New Zealand primary school teachers under study (Nayak, 2010). In regard to the results, it is not likely that the difference of 20 additional participants would fundamentally change the results of the statistical analysis and outcomes of the study (especially if these were randomly selected, as you would expect). It is merely a limitation based on the 'rule'; however, if the study were to be replicated it would be worth making sure that at least the full set of 528 participants (or the equivalent powered sample size) was used to gain more accurate and explanatory findings (Clayson et al., 2019).

Along with the size of the sample, the representativeness of the sample also has some limitations. Within the sample that was analysed, the number of men and Māori participants were significantly lower to female and Pakeha ethnicity participants. This does align with the fact that there are significantly more female and Pakeha teachers in New Zealand teaching (Ministry of Education, 2022). For this study, however, the ethnicity of participants was to only be described and reported and not analysed. This was to prevent any misinterpretation and protect vulnerable groups of people within the profession. Cultural supervision was sought to ensure sensitivity towards the principles of Te Tiriti o Waitangi. The researcher considered ethical considerations prior to carrying out the research and tried to address the fact that this study was preliminary and future recommendations needed to consider further integration of Māori worldviews.

Another limitation to the sample is to consider who might have been drawn to participate in this study. Considering that it was a voluntary survey, participants who have experienced mental distress; work in education; are passionate about this research topic or have over-representative experience with mental distress many have been more willing to participate. All of the above may have skewed the results to show higher levels of MHL and/or resilience. A way that the researcher tried to minimise this from happening was by personally e-mailing *all* of the primary schools' leaders listed online. This relied on the leaders of various schools to have shared the research link with their staff (which is obviously out of the researcher's control). Another limitation to the sample was access to the survey – teachers who may not have access to computers and/or the internet to complete the survey in their own time outside of work hours were prevented from participating.

Although two of the three main variables used within the survey had been tested prior to the data collection for validity and reliability, the third SSR variable was not. The researcher recognises that the SSR measure is not a reliable scale. The researcher wanted to create a tailored set of questions to find insight into how supported teachers feel when dealing with children with mental distress in the New Zealand context and specifically address some of the support channels available to New Zealand teachers.

The low reliability of this scale could be due to the lack of items within the scale itself, and that the items are not related enough to one another (Nimon et al., 2012). For example, SSR1 assessed whether *"A child's mental distress is the most challenging classroom challenge I currently deal with."* This is highly situational and dependent on many other factors that a teacher may face (classroom size, resources, parent resistance or support, workload, etc.). As a result, while an answer of "strongly agree" or "strongly disagree" may be strongly correlated to how supported a teacher feels from outside agencies (SSR4), it is unlikely to be highly correlated to how willing (or not) a teacher is to use self-care (SSR5). Nevertheless, the responses to SSR1 (and in particular the qualitative comments) provided valuable insights into how widespread the struggles are facing teachers from students' mental distress.

Validity was also not tested against these scales prior to the study being carried out. It would be recommended to future researchers to develop a reliable and valid SSR scale to minimise inflated standard errors and/or biased estimates of results (Leung, 2015). To do thi,s the items within the SSR would need to be changed and developed as needed. Since this is a significant limitation to some of the results, scores on the SSR should be interpreted critically and conclusions that are drawn are not necessarily consistent.

The content of the measures used in this study (MHLS, MTRS and SSR) needs to be addressed from a cultural context. All of the scales were developed by researchers internationally where their backgrounds are from a MH, Western, and biomedical worldview (Altweck et al., 2015). Psychometrics and information within the measures do not encompass indigenous worldviews, where MH is viewed holistically and through a collective. Considering teachers in this study are of diverse ethnicities the items on the measures may not align with their own personal experiences of MH. As this study has not considered

integrating the different types of worldviews by using these measures it has been the upmost importance of the researcher to try and be cautious around generalisations of results (Pitama et al., 2007). This is to protect vulnerable groups; and was considered in the researcher's mind when reporting findings.

4.5 Feasibility

The feasibility of this study is discussed for future researchers wanting to replicate or extend on this research. Overall, the study was very straightforward, low cost, accessible and inclusive to reach a wide range of (qualifying) participants. Some challenges of carrying out this research arose throughout the data collection process. As addressed earlier, the high interest of this topic was demonstrated through the large participation numbers. However, during data collection it was difficult to ensure that all participants completed all three main measures (MHL, teacher resilience and perceived support). Because of the nature and ethics of this study, items were not compulsory on these measures. If they had been compulsory, fewer participants would have been excluded. It is difficult to determine if there would have been fully completed surveys with this change or whether it was because participants found the length of the survey too long and became fatigued. It was observed that generally participants dropped off by the third measure (TRQ). Several respondents also contacted the researcher noting "I did not complete the items that I did not know because I did not want to 'skew' the results". This could be a result of the immense pressure teachers feel to 'get things right' or 'do the right thing' (McCallum, 2021). Nevertheless, it would be recommended to make the three quantitative measures compulsory on the survey for participants to respond. As a result, it could then save time during the data preparation stage and result in a larger sample size. Items should be critically reviewed to see if they all remain necessary for inclusion to help create a shorter survey to address the fatigue that some participants may have experienced and to encourage others to participate who are short on time. This is key to address as teachers already have a high workload so anything 'extra' might not be prioritised.

4.6 Policy implications and recommendations for further research

Based on the results of the study, MHL and teacher resilience increase with teaching experience if they stay in the profession. However, such an outcome is, in part, because there is very little (or no) formal training in MHL widely available for teachers – especially as they

start their careers. Given that MHL is recognised as an important determinant that can help teachers recognise and support students experiencing mental distress, it is recommended to provide MHL professional development to teachers with less teaching experience to help their resilience and might increase the chance they stay in the profession. This could be provided by internal or external education support providers or made compulsory at university to becoming a qualified primary teacher.

As well as being practically applied, research could be designed with the use of an intervention (i.e., a short training course) to assess the efficacy of different training materials for teachers and the marginal impact of formal training relative to 'on the job' upskilling (they also learn by watching others through the apprenticeship/mentor model) they currently have. Similarly, multiple baseline design studies could be designed where university teaching students' MHL is assessed at the beginning of their studies, then at intermittent intervals thereafter (e.g., after the compulsory MHL papers have been completed or as part of becoming registered) to assess the changes and trends in MHL.

To address the gaps of teachers' MHL in New Zealand more research would be valuable to explore teachers' own MH and how their wellbeing is being supported with interventions to implement change of societal stigma around MH. Jorm et al. (2010) emphasises the importance of teachers undergoing MH interventions to help reduce stigmatising attitudes and an increase in confidence at helping students in the class. It would also be valuable to assess the extent, breath and success of different MHL programmes being run across schools, regions and ages (if any are being taught to students) and validate the effectiveness of these programmes for potentially wider adoption.

While it is somewhat a 'blue sky' aspiration – to better understand the structural factors contributing to teacher success, burnout, MH and other performance indicators – a longitudinal study could be designed to follow a set of teaching students through their training up until ~10 years of teaching experience. As part of this process, researchers would be able to monitor the participants' MHL and teaching resilience with considerably deeper insights to those captured here and overlay this against the broader longitudinal data being captured. It is this researcher's view that teachers are a fundamental asset to the long-term success of our country – the stronger, more effectively and more engaging our cohort of teachers are, the more educated are our children, the stronger our future workforce, the more

engaged our civil society and the more vibrant, safe and inclusive our collective community. The gradual, but evident, erosion of teaching as a preferred career prospect for our best and brightest youth is a genuine concern that we will only know the impact from once it is too late. To this end, the issue is both multifaceted and complex – as well as simple issues like pay and workload which are often front of mind, so too are more complex factors like the satisfaction that comes from this career and challenges such as child MH; the accelerating impact of technology; the need for an evolving curriculum; and rising income inequity impacting educational outcomes.

Even if not conducted via a longitudinal study, it would be interesting to further investigate the literature around what timeframe teachers are leaving the profession and the relationship with their own teacher resilience, MHL and perceived support. This could then be addressed by providing MHL interventions prior to the teachers leaving the profession to help retain teachers and support them with the knowledge to help better understand mental distress. However, in saying this overall New Zealand primary teachers have a high average score of MHL. It would be worthwhile to look more closely at the gaps in primary teachers' MHL (which was partially addressed in RQ1). Creating MHL interventions which focus on specific stigmas of child MH would help boost this gap in MHL for teachers and possibly help create more MH awareness in schools. The gaps would focus on the different types of distress (i.e., externalizing and internalizing) and prevalence rates amongst males and females in New Zealand, the psychologists role and ethical considerations they have around confidentiality and the stigma around disclosing MH concerns. In particular this would look at 'normalising' the step of seeking support for MH still the question and barrier of accessing services that are underfunded and understaffed; and trying to further break down the societal New Zealand cultural tendency to 'harden up' to emotional wellbeing.

From a statistical perspective, building on this analysis by ensuring the MHLS and MTRS are statistically valid within New Zealand would be valuable and was not conducted as part of this research, which instead relied on the validity of these measures as assessed on other populations. The replicability of this study would likely require someone with an educational background. Similar to the Kaupapa Māori worldview of lived experiences – because this is an educational topic for teachers – it is important that it is led by teachers who understand the feasibility, job demands and expectations that come with balancing the workload and managing children. This is to empower and attract participants to feel heard

and ensure no assumptions are made about their own lived experiences of teaching and supporting students experiencing mental distress. It is recommended that if this study were to be replicated (or carried out across a different population), the SSR scale (measuring perceived levels of support) would need to be redeveloped into a reliable and valid scale to ensure it produces more accurate and useful results.

Utilising these preliminary results while attempting to address the limitation of lack of worldview considerations of MH is important. It is suggested that applying this study through an indigenous MH worldview would provide insight into different cultural groups of teachers within New Zealand. The results could be less pathologising and be more applied to the different populations of teachers and students experiencing mental distress. The research could also be carried out in immersion schools (e.g., Kōhanga Reo) in an ethical and appropriate way that provides insight into MHL, teacher resilience and perceived views of support of teachers working in these settings. The research would then be benefitting a range of people by being inclusive to a wider range of the population. The perceived level of support in particular would be an interesting area of research given that these schools tend to be smaller and often have a stronger sense of community wrapped around them (Fargas-Malet & Bagley, 2022; Latham et al., 2014).

Applying this area of research into different stages of education would also be of benefit (e.g., early childhood or secondary). Within New Zealand early childhood education is also an area where teachers work with the same children for majority of the day; thus, being key role models to their students. They also play a role in helping address and seek support for developmental wellbeing of their students at a time when these tamariki are rapidly expanding their emotional skills relevant to resilience and MH. It would be valuable to know what support they have and would like to have in helping support students experiencing mental distress. Having a representative sample of data for this cohort of teachers would enable a comparison of their results to the primary teachers in this study to see if (and how closely) the education system aligns the two different groups of teachers. This value of this research is reinforced when taking into account the crucial first 1,000 days of a child's brain development and the malleability of the child's brain (Scott, 2020); if teachers in early childhood settings are given the tools to effectively cater for students experiencing distress it could improve outcomes even more significantly. This would provide more actionable and preventative change to positive outcomes for students.

To build on the high response rate of qualitative items on perceived support, qualitative interviews with primary teachers would be beneficial to gain more insight into their own experiences of students with mental distress in their classrooms and what practical ideas they might have to support students with mental distress. Similarly, it could be used to get greater detail on the contributing factors to burnout and high demands in relation to mental distress in the classroom when feeling unsupported. Delving deeper into conversations around self-care with teachers would also be beneficial to provide insight into how to improve teacher wellbeing to prevent burnout or leaving the profession.

Finally, a lot of the participants suggested that they themselves are actively supporting students with mental distress; however, they would like (and need) to have more access to support from external agencies. An important aspect to this would be ensuring the availability in a timelier manner and for teachers to receive training which gives them tools and applicable knowledge to help manage the mental distress in the classroom until such support can be provided. Responding to this is no simple task with a single solution. Instead, it would require support from the Government to provide more funding into educational resources as well as a greater coordination across the clinical sector in order to address the shortage of MH professionals (through migration incentives and training institutions); providing all primary schools with greater access to 'experts' such as counsellors in schools; and, tertiary providers scaling up their ability to provide more applicable programmes into the teaching qualifications in New Zealand to best support aspiring trainee teachers in the classroom as well as broadening professional development in schools for teachers MHL.

4.7 Conclusion - take home messages

In conclusion, the results of the current study provide baseline data that New Zealand primary school teachers have comparable to other sample populations' mental health literacy levels and corresponding teachers' resilience. These levels of MHL and resiliency are found across the country (both rurally and in urban settings) but do vary materiality based on years of experience. COVID-19 had a genuine effect on teachers' level of MHL and resilience but given that this is baseline data no detailed analysis of this impact can be measured.

The findings give support to the need for additional research on different populations using the MTRS and MHLS psychometric scales. This study confirms that this area of research is important to teachers with high levels of engagement with the study despite its limitations of statistical power for results. Further studies with a powered sample size, qualitative interviews, multiple base line design research, and /or longitudinal studies would build on this research and help provide targeted support for primary teachers in classrooms to help manage students' mental distress. It is important that the perceived support scale (SSR) is revised for reliability and validity to bring more accurate results to this area of research. As teachers provide a crucial role in supporting and caring for tamariki; it is imperative that teachers' voices are heard and responded to in order to support the future wellbeing and outcomes of tamariki in Aotearoa.

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6. Appendices

Appendix A: Sample Size Power Analysis

Sample size power analysis from G*Power
[1] -- Saturday, March 12, 2022 -- 12:19:58
t tests - Linear multiple regression: Fixed model, single regression coefficient

Analysis:	A priori: Compute required sample size			
Input:	Tail(s)	=	Two	
	Effect size f^2	=	.02	
	α err prob	=	0.05	
	Power (1-β err prob)	=	0.9	
	Number of predictors	=	2	
Output:	Noncentrality parameter δ	=	3.2496154	
	Critical t	=	1.9644929	
	Df	=	525	
	Total sample size	=	528	
	Actual power	=	0.9003768	

Appendix B: Information Sheet

INFORMATION SHEET

Kia Ora,

I am Jess Lawson, an experienced Primary kaiako who is currently studying towards my Master of Science in Psychology. Through my experience teaching I gained insight into the vast and diverse psychological needs of students in the classroom as well as the multiple roles I had as a kaiako. Reflecting on that, I am conducting a study to hear from Primary teachers and their feelings towards mental health knowledge, attitudes, beliefs, supports and resiliency in the classroom. This research will help us to better understand what supports are needed for teachers own self-care and to assist them to care for their students in the classroom; this is important in retaining teachers in the profession whilst providing better mental health comes for students in Aotearoa.

We want to invite registered New Zealand Primary teachers who are or have been teaching in the last five years to share their thoughts and experiences.

Ngā mihi,
Jess

What will participation look like?
If you decide to participate, please continue on with the survey. At the beginning we will ask you to complete a question giving your consent. Please feel free to ask us any questions about the project and/or to consult with people you trust before you decide to participate.

Participation is ***completely voluntary*** – if you do not want to participate, you do not have to. You can also choose to stop participating at any time before or during the survey.

What are the benefits of participating?
We hope you will enjoy participating in the survey and reflecting on your own views of mental health and resilience. This project may also help future teachers have more support in and outside the classroom.

You will also go into the draw to receive a $40 Prezzy Card voucher to thank you for your time.

What are the risks of participating and how are they being managed?
Risks to participation are minimal; you are welcome to share as much or as little as you want in response to questions and to not answer questions that make you feel uncomfortable. There is the potential for you to feel upset discussing your experiences if they were challenging for you. Should any distress arise for you, there is also a list of resources and places to seek support at the end of this form.

What will be done with my information?
Analysed data may be used in any of the following ways:
- Contribute towards the analysis for my Master's thesis
- Provide inputs for academic publications

- Academic and/or community presentations
- Policy briefings
- Knowledge translation outputs (e.g. blog posts, infographics, webinars, etc.)

Any identifiable information you input will be deleted and turned into an anonymous ID code in any outputs from the research. Your contact details for the prize draw will be kept separate from your survey data.

Participant's Rights
You are under no obligation to accept this invitation. You have the right to decline to answer any particular question or to withdraw from the survey at any time once you have begun.

Project Contacts
If you have any questions about the research, please contact:

Student Researcher: Jessicca Lawson, <jess17lawson@gmail.com>

Supervisor: Dr Kirsty Ross, Lecturer, School of Psychology, College of Humanities & Social Sciences, Massey University, Palmerston North Campus
Phone +64 69517968 Email K.J.Ross@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 - Ethics, telephone 06 3569099 ext 85271, email humanethics@massey.ac.nz.

Support Resources

A full list of mental health crisis teams is available here:
https://www.health.govt.nz/your-health/services-and-support/health-care-services/mental-health-services/crisis-assessment-teams

Lifeline
0800 543 354 (0800 LIFELINE)
or free text 4357 (HELP) 24/7

1737 Need to Talk?
Free call or text 1737 for support from a trained counsellor

Depression Helpline
0800 111 757 or text 4202

Anxiety Helpline
0800 269 4389 (0800 Anxiety)

Healthline
0800 611 166

Teacher Wellbeing. Resources
https://teachingcouncil.nz/resource-centre/teacher-wellbeing/#toolkits

Appendix C: Digital Advertisement

Appendix D: Survey

Jessica Lawson_2022

Survey Flow

Block: Information page (1 Question)
Standard: Screening (4 Questions)

Branch: New Branch
If
If I am a fully registered teacher in New Zealand. Yes Is Not Selected
Or I have taught in the last five years or am currently teaching in New Zealand Yes Is Not Selected

EndSurvey: Advanced

Standard: Support Services (1 Question)
Standard: Consent (2 Questions)

Branch: New Branch
If
If I have read and understood the information sheet for this study and consent to collection of my r... Yes Is Not Selected

EndSurvey: Advanced

Standard: Mental Health Literacy Questions (MHL) (21 Questions)
Standard: Covid questions (3 Questions)
Standard: Support Self-Report Questions (SSR) (15 Questions)
Standard: Teacher's Resilience Questions (TRQ) (8 Questions)
Standard: Demographics (9 Questions)

Page Break

InfoPg

Teachers' mental health literacy and resiliency

Information Sheet

Kia Ora,

I am Jess Lawson, an experienced Primary kaiako who is currently studying towards my Master of Science in Psychology. Through my experience teaching I gained insight into the vast and diverse psychological needs of students in the classroom as well as the multiple roles I had as a kaiako. Reflecting on that, I am conducting a study to hear from primary teachers and their feelings towards mental health knowledge, attitudes, beliefs, supports and resiliency in the classroom. This research will help us to better understand what supports are needed for teachers' own self-care and to assist them to care for their students in the classroom; this is important in retaining teachers in the profession whilst providing better mental health outcomes for students in Aotearoa.

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Ngā mihi,
Jess

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If you decide to participate, please continue on with the survey. At the beginning we will ask you to complete a question giving your consent. Please feel free to ask us any questions about the project and/or to consult with people you trust before you decide to participate.

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What are the benefits of participating?

We hope you will enjoy participating in the survey and reflecting on your own views of mental health and resilience. This project may also help future teachers have more support in and outside the classroom.

You will also go into the draw to receive a $40 Giftpay card (ten to be won) to thank you for your time.

What are the risks of participating and how are they being managed?

Risks to participation are minimal; you are welcome to share as much or as little as you want in response to questions and to not answer questions that make you feel uncomfortable. There is the potential for you to feel upset discussing your experiences if they were challenging for you. Should any distress arise for you, there is also a list of resources and places to seek support at the end of this form.

What will be done with my information?

Analysed data may be used in any of the following ways:

- Contribute towards the analysis for my Master's thesis

- Provide inputs for academic publications
- Academic and/or community presentations
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- Knowledge translation outputs (e.g., blog posts, infographics, webinars, etc.)

Any identifiable information you input will be deleted and turned into an anonymous ID code in any outputs from the research. Your contact details for the prize draw will be kept separate from your survey data.

Participant's Rights

You are under no obligation to accept this invitation. You have the right to decline to answer any particular question or to withdraw from the survey at any time once you have begun.

Contact information

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

Researcher
Jessicca Lawson
School of Psychology
Massey University
Palmerston North
New Zealand
Email: jess17lawson@gmail.com

Supervisor
Dr Kirsty Ross
School of Psychology
Massey University
Palmerston North
New Zealand
+64 6 951-7968
K.J.Ross@massey.ac.nz
Massey University School of Psychology – Te Kura Hinengaro Tangata
Palmerston North, New Zealand
T +64 6 3569-099 ext 85071 : W psychology.massey.ac.nz

This research 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 above 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.

End of Block: Information page

Start of Block: Screening

Consent_inf

Teachers' Voice on Mental Health Literacy, Supports and Resilience

Thank you for taking the time to complete this questionnaire. This questionnaire examines and gives voice to primary teachers' perspectives on their mental health literacy, supports and resilience in Aotearoa. The questionnaire has been designed to be completed by Registered New Zealand Primary Teachers. Data collected from this questionnaire is confidential. Further information can be found in the information sheet on the previous page (click the Back button to view); please read this before continuing with the questionnaire.

The questionnaire will take 10-15 minutes to complete.

Page Break

Screen_hdr

Eligibility Criteria Questions

Screen_1 I am a fully registered teacher in New Zealand.

- Yes (1)
- No (2)

Screen_2 I have taught in the last five years or am currently teaching in New Zealand

- Yes (1)
- No (2)

End of Block: Screening

Start of Block: Support Services

Support

Support Resources

A full list of mental health crisis teams is available here: https://www.health.govt.nz/your-health/services-and-support/health-care-services/mental-health-services/crisis-assessment-teams **Lifeline** 0800 543 354 (0800 LIFELINE) or free text 4357 (HELP) 24/7 **1737 Need to Talk?** Free call or text 1737 for support from a trained counsellor **Depression Helpline** 0800 111 757 or text 4202 **Anxiety Helpline**

0800 269 4389 (0800 Anxiety) **Healthline** 0800 611 166 **Teacher Wellbeing. Resources** https://teachingcouncil.nz/resource-centre/teacher-wellbeing/#toolkits

End of Block: Support Services

Start of Block: Consent

Consent_hdr Respondent Consent

Consent I have read and understand the information sheet provided and agree to participate in the study under the terms laid out in the information sheet.
(Please click on the 'Yes' choice if you wish to proceed.)

- ○ Yes (1)
- ○ No (2)

End of Block: Consent

Start of Block: Mental Health Literacy Questions (MHL)

MHL_hdr Mental Health Literacy Questions

MHL_inf The purpose of these questions is to gain an understanding of your knowledge of various aspects to do with mental health.
When responding, we are interested in your degree of knowledge.
Therefore when choosing your response, consider that: Very unlikely = I am certain that it is NOT likely Unlikely = I think it is unlikely but am not certain Likely = I think it is likely but am not certain Very Likely = I am certain that it IS very likely

MHL_1 If someone became extremely nervous or anxious in one or more situations with other people (e.g., a party) or performance situations (e.g., presenting at a meeting) in which they were afraid of being evaluated by others and that they would act in a way that was

humiliating or feel embarrassed, then to what extent do you think it is likely they have **Social Phobia**?

- ○ Very unlikely (1)
- ○ Unlikely (2)
- ○ Likely (3)
- ○ Very Likely (4)

MHL_2 If someone experienced excessive worry about a number of events or activities where this level of concern was not warranted, had difficulty controlling this worry and had physical symptoms such as having tense muscles and feeling fatigued then to what extent do you think it is likely they have **Generalised Anxiety Disorder**?

- ○ Very unlikely (1)
- ○ Unlikely (2)
- ○ Likely (3)
- ○ Very Likely (4)

Page Break

MHL_3 If someone experienced a low mood for two or more weeks, had a loss of pleasure or interest in their normal activities and experienced changes in their appetite and sleep then to what extent do you think it is likely they have **Major Depressive Disorder**?

- ○ Very unlikely (1)
- ○ Unlikely (2)
- ○ Likely (3)
- ○ Very Likely (4)

MHL_4 To what extent do you think it is likely that **Personality Disorders** are a category of mental illness?

- Very unlikely (1)
- Unlikely (2)
- Likely (3)
- Very Likely (4)

MHL_5 To what extent do you think it is likely that **Persistent Depressive Disorder** is a disorder?

- Very unlikely (1)
- Unlikely (2)
- Likely (3)
- Very Likely (4)

Page Break

MHL_6 To what extent do you think it is likely that the diagnosis of **Agoraphobia** includes anxiety about situations where escape may be difficult or embarrassing?

- Very unlikely (1)
- Unlikely (2)
- Likely (3)
- Very Likely (4)

MHL_7 To what extent do you think it is likely that the diagnosis of **Bipolar Disorder** includes experiencing periods of elevated (i.e., high) and periods of depressed (i.e., low) mood?

- Very unlikely (1)
- Unlikely (2)
- Likely (3)
- Very Likely (4)

MHL_8 To what extent do you think it is likely that the diagnosis of **Substance Use Disorder** includes physical and psychological tolerance of the drug (i.e., require more of the drug to get the same effect)?

- Very unlikely (1)
- Unlikely (2)
- Likely (3)
- Very Likely (4)

Page Break

MHL_9 To what extent do you think it is likely that in general in New Zealand, **women are MORE likely to experience a mental illness of any kind compared to men**?

- Very unlikely (1)
- Unlikely (2)
- Likely (3)
- Very Likely (4)

MHL_10 To what extent do you think it is likely that in general, in New Zealand, **men are MORE likely to experience an anxiety disorder compared to women**?

- ○ Very unlikely (1)
- ○ Unlikely (2)
- ○ Likely (3)
- ○ Very Likely (4)

Page Break

MHL_inf2 When choosing your response, consider that: Very Unhelpful = I am certain that it is NOT helpful Unhelpful = I think it is unhelpful but am not certain Helpful = I think it is helpful but am not certain Very Helpful = I am certain that it IS very helpful

MHL_11 To what extent do you think it would be helpful for someone to **improve their quality of sleep** if they were having difficulties managing their emotions (e.g., becoming very anxious or depressed)?

- ○ Very unhelpful (1)
- ○ Unhelpful (2)
- ○ Helpful (3)
- ○ Very helpful (4)

MHL_12 To what extent do you think it would be helpful for someone to **avoid all activities or situations that made them feel anxious** if they were having difficulties managing their emotions?

- ○ Very unhelpful (1)
- ○ Unhelpful (2)
- ○ Helpful (3)
- ○ Very helpful (4)

Page Break

MHL_inf3 When choosing your response, consider that: Very unlikely = I am certain that it is NOT likely Unlikely = I think it is unlikely but am not certain Likely = I think it is likely but am not certain Very Likely = I am certain that it IS very likely

MHL_13 To what extent do you think it is likely that **Cognitive Behaviour Therapy (CBT)** is a therapy based on challenging negative thoughts and increasing helpful behaviours?

- ○ Very unlikely (1)
- ○ Unlikely (2)
- ○ Likely (3)
- ○ Very Likely (4)

Page Break

MHLa Mental health professionals are bound by confidentiality; however there are certain conditions under which this does not apply.

To what extent do you think it is likely that the following is a condition that would allow a mental health professional to **break confidentiality**:

	Very unlikely (1)	Unlikely (2)	Likely (3)	Very Likely (4)
If you are at immediate risk of harm to yourself or others (MHL_14)	○	○	○	○
If your problem is not life-threatening and they want to assist others to better support you (MHL_15)	○	○	○	○

MHLb Please indicate to what extent you agree with the following statements:

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
I am confident that I know where to seek information about mental illness (MHL_16)	○	○	○	○	○
I am confident using the computer or telephone to seek information about mental illness (MHL_17)	○	○	○	○	○
I am confident attending face to face appointments to seek information about mental illness (e.g., seeing the GP) (MHL_18)	○	○	○	○	○
I am confident I have access to resources (e.g., GP, internet, friends) that I can use to seek information about mental illness (MHL_19)	○	○	○	○	○

MHLc Please indicate to what extent you agree with the following statements:

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
People with a mental illness could snap out if it if they wanted (MHL_20)	○	○	○	○	○
A mental illness is a sign of personal weakness (MHL_21)	○	○	○	○	○
A mental illness is not a real medical illness (MHL_22)	○	○	○	○	○
People with a mental illness are dangerous (MHL_23)	○	○	○	○	○
It is best to avoid people with a mental illness so that you don't develop this problem (MHL_24)	○	○	○	○	○
If I had a mental illness I would not tell anyone (MHL_25)	○	○	○	○	○
Seeing a mental health professional means you are not strong enough to manage your own difficulties (MHL_26)	○	○	○	○	○
If I had a mental illness, I would not seek help from a mental health professional (MHL_27)	○	○	○	○	○
I believe treatment for a mental illness, provided by a mental health professional, would not be effective (MHL_28)	○	○	○	○	○

MHLd Please indicate to what extent you agree with the following statements:

	Definitely unwilling (1)	Probably unwilling (2)	Neither unwilling nor willing (3)	Probably willing (4)	Definitely willing (5)
How willing would you be to move next door to someone with a mental illness? (MHL_29)	○	○	○	○	○
How willing would you be to spend an evening socialising with someone with a mental illness? (MHL_30)	○	○	○	○	○
How willing would you be to make friends with someone with a mental illness? (MHL_31)	○	○	○	○	○
How willing would you be to have someone with a mental illness start working closely with you on a job? (MHL_32)	○	○	○	○	○
How willing would you be to have someone with a mental illness marry into your family? (MHL_33)	○	○	○	○	○
How willing would you be to vote for a politician if you knew they had suffered a mental illness? (MHL_34)	○	○	○	○	○
How willing would you be to employ someone if you knew they had a mental illness? (MHL_35)	○	○	○	○	○

End of Block: Mental Health Literacy Questions (MHL)

Start of Block: Covid questions

Covid_1 Have you been teaching in the past two years?

- ○ Yes (1)
- ○ No (2)

Skip To: End of Block If Have you been teaching in the past two years? = No

Page Break

Covid_2 Do you feel that COVID-19 has contributed towards your knowledge of mental health?

- ○ Yes (1)
- ○ No (2)

Covid_3 Why?

_____

_____

_____

_____

_____

End of Block: Covid questions

Start of Block: Support Self-Report Questions (SSR)

SSR_hdr Support Self-Report Questions

SSR_inf The purpose of these questions is to gain an understanding of your feelings about various issues to do with mental health support as a teacher. When responding, we are interested in your level of agreement with the statements. Feel free to expand on your answers in the dropdown open text boxes.

SSR_1 A child's mental distress is the most challenging classroom challenge I currently deal with.

- Strongly disagree (1)
- Disagree (2)
- Neither agree nor disagree (3)
- Agree (4)
- Strongly agree (5)

SSR_1text Please expand on your answer.

_____

_____

_____

_____

_____

SSR_2 Children in my class experiencing mental distress are highly supported by myself as the teacher.

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

SSR_2text Please expand on your answer.

_____

_____

_____

_____

_____

SSR_3 I am highly supported by my school with regards to managing children experiencing mental distress in the classroom.

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

SSR_text3 Please expand on your answer.

_____

_____

_____

_____

_____

Page Break

SSR_4 I have been highly supported from outside agencies (e.g., Educational/ Clinical psychologists, RTLB) who provide support for children experiencing mental distress.

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

SSR_4text Please expand on your answer.

_____

_____

_____

_____

_____

Page Break

SSR_5 How often do you feel that you use self-care to look after yourself when dealing with children's mental distress?

- ○ Never (1)
- ○ Annually (2)
- ○ Monthly (3)
- ○ Weekly (4)
- ○ Daily (5)

SSR_5text Please expand on your answer.

_____

_____

_____

_____

_____

Page Break

SSR_6 What support would you like to see that would benefit you as a teacher to cater for the needs of students with mental distress?

_____

_____

_____

_____

_____

Page Break

Display This Question:

If Have you been teaching in the past two years? = Yes

SSR_Covid Do you feel that COVID19 has contributed towards how much you feel you have/ have not been supported to care for the children in your classroom?

- ○ Yes (1)
- ○ No (2)

Display This Question:

If Have you been teaching in the past two years? = Yes

SSR_Covid_text Why?

_____

_____

_____

_____

_____

End of Block: Support Self-Report Questions (SSR)

Start of Block: Teacher's Resilience Questions (TRQ)

TRQ_hdr Teacher's Resilience Questions

TRQ_inf The purpose of these questions is to gain an understanding of how often you report using different aspects to enhance your resilience. When responding, we are interested in what you do to support your resilience.

Therefore when choosing your response, consider that: Never = I am certain that I never do this Rarely = I rarely do this but never not do this Sometimes = I sometimes do this more than rarely Often = I often do this but not all the time Always= I ALWAYS do this

TRQa How well do each of the following statements describe you?

	Strongly agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly disagree (1)
At school I can be flexible when situations change (TRQ_1)	○	○	○	○	○
I can quickly adapt to new situations at school (TRQ_2)	○	○	○	○	○
I am well organised in my school work (TRQ_3)	○	○	○	○	○
I reflect on my teaching and learning to make future plans (TRQ_4)	○	○	○	○	○
When something goes wrong at school I don't take it too personally (TRQ_5)	○	○	○	○	○
After reflection, I can usually find the funny side of challenging school situations (TRQ_6)	○	○	○	○	○
When I feel upset or angry at school I can manage to stay calm (TRQ_7)	○	○	○	○	○

TRQb How well do each of the following statements describe you?

	Strongly agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly disagree (1)
I balance my role as a teacher with other dimensions in my life (TRQ_8)	○	○	○	○	○
I am generally optimistic at school (TRQ_9)	○	○	○	○	○
At school I focus on building my strengths more than focusing on my limitations (TRQ_10)	○	○	○	○	○
When I make mistakes at school I see these as learning opportunities (TRQ_11)	○	○	○	○	○
In my role as a teacher I set goals and work towards achieving them (TRQ_12)	○	○	○	○	○
I have realistic expectations of myself as a teacher (TRQ_13)	○	○	○	○	○
I believe that if I put my mind to something at school I can be successful (TRQ_14)	○	○	○	○	○

TRQc How well do each of the following statements describe you?

	Strongly agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly disagree (1)
I am good at maintaining my motivation and enthusiasm when things get challenging at school (TRQ_15)	○	○	○	○	○
I enjoy learning when I am at work (TRQ_16)	○	○	○	○	○
I like challenges in my work (TRQ_17)	○	○	○	○	○
I am persistent in my work (TRQ_18)	○	○	○	○	○
I believe that I have control over my work life (TRQ_19)	○	○	○	○	○
It’s important to me that I put in effort to do my job well (TRQ_20)	○	○	○	○	○

TRQd How well do each of the following statements describe you?

	Strongly agree (5)	Agree (4)	Neutral (3)	Disagree (2)	Strongly disagree (1)
When I am unsure of something I seek help from colleagues (TRQ_21)	○	○	○	○	○
I am good at building relationships in new school environments (TRQ_22)	○	○	○	○	○
In my role as a teacher, I am a good communicator (TRQ_23)	○	○	○	○	○
In my work I can look at a situation a number of ways to find a solution (TRQ_24)	○	○	○	○	○
At work I can view situations from other people's perspectives (TRQ_25)	○	○	○	○	○
When I am at work I can generally resolve conflicts with others (TRQ_26)	○	○	○	○	○

Display This Question:

If Have you been teaching in the past two years? = Yes

TRQ_Covid Do you feel that COVID19 has contributed towards your levels of resilience?

- ○ Yes (1)
- ○ No (2)

Display This Question:

If Have you been teaching in the past two years? = Yes

TRQ_Covid_text Why?

_____

_____

_____

_____

_____

End of Block: Teacher's Resilience Questions (TRQ)

Start of Block: Demographics

Dem_hdr Demographic details

Qual Qualification/s?
If your answer includes more than one, please indicate which one you consider to be your highest qualification)

- ☐ B. Ed. (1)
- ☐ Bachelor of Teaching (2)
- ☐ Double degree (3)
- ☐ Grad diploma in tchg (4)
- ☐ Graduate Diploma of Teaching (5)
- ☐ Masters (6)
- ☐ Other (please specify) (7)

_____

Teach_Pos Current position? *If your answer includes more than one role, please indicate which one you consider to be your primary role*

- ○ Not teaching (1)
- ○ Classroom teacher (2)
- ○ Team Leader (3)
- ○ SENCO leader (4)
- ○ Assistant Principal (5)
- ○ Deputy Principal (6)
- ○ Principal (7)
- ○ Other please specify: (8) _____

Page Break

Teach_area Which area are you working?

- ○ City (1)
- ○ Town (2)
- ○ Rural (3)

Decile Decile of School?

▼ 1 (1) ... 10 (10)

Teaching_yrs Total years of teaching?

- ○ (1)
- ○ 5-10 (2)
- ○ 11-20 (3)
- ○ 20-30 (4)
- ○ 30+ (5)

Page Break

Gender What is your gender?

- ○ Female (1)
- ○ Male (2)
- ○ Other (please specify) (3) _____

Age Age?

- ○ 20-30 (1)
- ○ 31-40 (2)
- ○ 41-50 (3)
- ○ 51-60 (4)
- ○ 61-70 (5)
- ○ 71+ (6)

Draw If you would like to go into the draw to win a $40 Giftpay card (ten to be won), please select the 'Prize draw' option, 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 (1)
- ○ Exit (2)

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

- ○ Asian (1)
- ○ Māori (2)
- ○ Pākehā NZ (3)
- ○ Pasifika (4)
- ○ Other (Please specify) (5) _____

End of Block: Demographics

Appendix E: Coding Scheme Codebook

Coding Scheme Codebook for Thematic Analysis of Open-ended response items in survey:

Any Code with N/A is for any answer that is not relevant or providing new information for the item answered.

Covid_3: Coding Scheme for Participants responses to why they feel COVID has/has not affected their MHL knowledge

Theme: Types of Experiences of affecting MHL with/without COVID

Codes	Criteria
Classroom	A general comment about their own class MH or teaching that has affected their MH and COVID
Personal	A comment on their own experience with MH ie family, self or friends mental distress, own professional development or expertise on the MH.
General	Does not explicitly differentiate between class or personal experience of COVID and MH.

Theme: Types of awareness made on MHL during COVID

Codes	Criteria
Media/Society	A general comment about how the media has or has not changed awareness of MH knowledge from COVID. Ie: news/ social media/ advertising/ politics, external pressures
School	A general comment about how the school has or has not changed awareness of MH knowledge from COVID. Ie: school wellbeing programmees/ leadership/ resources
Self reflection	A general comment about how the participants own awareness of MH knowledge has/ has not changed from COVID. Ie: noticing others/ noticing their own

	thoughts/opinions
General	A general comment about awareness of MH from outside sources from COVID Ie: information/ resources

SSR_Covid_text: Coding scheme for Participants responses to their feelings/thoughts on if/if not the impact of COVID has changed the support provided to teachers to care for the children in their classroom

Theme: Feeling of pressure due to COVID on classroom support

Codes	Criteria
No Change	Support has not changed in the classroom with COVID pressure
None	No support in the classroom with COVID pressure
School	School under pressure with COVID affects in classroom
Systemic	Systems under pressure with COVID affects support in classroom ie under resourced,
General	General pressure with COVID on classroom support

Theme: Thoughts of who is responsible for the impacts in the mental distress of the classroom with COVID

Codes	Criteria
Self	The teacher responsible for the impacts of mental distress in classroom through COVID
School	School is responsible for mental distress in classroom through COVID ie principal leeading wellbeing, supportive

	to TR. Ie:
Self	A general comment about how the participants own pressureof COVID has/ has not changed their TR. Ie: don't want to let others down
General	A general comment about pressures of COVID contributing to TR Ie: changes

Theme: Type of affect on teachers own TR due to COVID

Codes	Criteria
Affected Negatively	A general comment about how participants thoughts/feelings on their TR has been affected negatively from COVID: Ie: exhausted, less positive, out of control, pushed to limits
Affected Positively	A general comment about how participants thoughts/feelings on their TR has been affected positively from COVID: Ie: adaptable, flexible
Unaffected	A general comment about how participants thoghts/feelings on their TR has been unaffected from COVID: Ie: Has not changed

SSR_1text: Coding Scheme for participants responses expanding on whether a child's mental distress is the most challenging challenge in their classroom

Theme: Other classroom challenges

Codes	Criteria
Teacher wellbeing	A general comment about teacher wellbeing being the most difficult challenge ie stress,

	anxious, pressures, expectations, multiple roles
General	A general comment about challenges more difficult than mental distress that is unrelated ie: physical environment of their classroom, student attendance
Unrelated behaviours	A comment on the challenge of difficult behaviors of children in the class (where the teacher has identified these behaviors apart from mental distress and has not recognised or does not understand this) ie: physical meltdowns, adhd, asd, disruptive, unfocused, learning and intellectual disorders, 'high needs'.

Theme: Identified contributing or symptoms to the mental distress classroom challenge

Codes	Criteria
Contributing	A general comment of what contributes to the mental distress: Truancy, overconnention with social media, homelife, society
Symptoms	A general comment about different symptoms that are shown with mental distress: Attitude, lack of resiliency, academic ability, wellbeing, relationships

Theme: Types of Mental distress disorders in the classroom

Codes	Criteria
Internalising	A general comment about the internalising mental distress in the classroom identified by teacher ie anxiety, depression, trauma.
Externalising	A general comment about the externalising mental distress in the classroom identified by teacher ie adhd, asd, disruptive.
General	A general comment of mental distress being

	in the classroom by the teacher without differentiating what it is.

Theme: Impacts because of the mental distress

Codes	Criteria
Teacher	A comment about how the mental distress has impacted the teacher ie: their wellbeing, the teacher role, the teacher-studuent ratio
Children	A comment about how the mental distress has impacted the children in the class ie: relationships, disruption, physical

Theme: Systemic issues that affect the support of mental distress

Codes	Criteria
No Support	A comment about how different systems are not supporting the mental distress ie: under resourced, under funded, rules of education, no specialised MH training.
Supported	A comment about how different systems are supporting mental distress

SSR_2text: Coding Scheme for participants responses expanding on whether children experiencing mental distress in their classroom are supported by the teacher

Theme: The teacher's own role in supporting mental distress

Codes	Criteria
Expertise	A comment about how teacher expertise supports mental distress in the classroom. Ie: not mh trained, trained in mh, individualised programmes, resourceful
Characteristics	A comment about how the teacher has certain characteristics they use to support the mental distress: empathy, collaborative, supportive,

	unsupportive, builds relationships, committed

Theme: Impacts because of the mental distress

Codes	Criteria
Teacher	A comment about how the mental distress has impacted the teacher ie: their wellbeing, the teacher role, the teacher-student ratio
Children	A comment about how the mental distress has impacted the children in the class ie: relationships, disruption, physical

Theme: Support systems that help the teacher with mental distress

Codes	Criteria
Internal	A comment about what supports are needed for the teacher in the classroom ie: Teacher release
External	A comment about what support is needed from outside agencies for the teacher ie: Accessibility to the agencies, Experts (RTLB, psychologists etc), family and community

SSR_3text: Coding Scheme for participants responses expanding on whether they as teachers are supported by their school with managing the children experiencing mental distress in their classroom

Theme: Impacts because of the mental distress

Codes	Criteria
Teacher	A comment about how the mental distress has impacted the teacher ie: their wellbeing, the teacher role, the teacher-studuent ratio

Theme: Internal Systems 'support' for teachers

Codes	Criteria
Supported	A comment of how the internal symptoms are supporting teachers ie collaboration, resourcefulness, expertise, individualised, empathetic, relationships, committed, classroom release
Unsupported	A comment of how the internal symptoms are not supporting teachers ie inaccessibility, inefficiency, lack of experts, broadframework, lack of teacher aides, classroom ratio, not a priority, lack of training in mh, no release.

SSR_4text: Coding Scheme for participants responses expanding on whether they as teachers are supported by outside agencies with managing the children experiencing mental distress in their classroom

Theme: Expertise of external 'support' for teachers

Codes	Criteria
RTLB	A comment about the expertise of the RTLB to the teacher
Educational/Clinical Psychologists`	A comment about the expertise of the psychologist to the teacher
Other agencies	A comment about the expertise of other agencies to the teacher: ie oranga tamariki, counsellor, CAMHS , mana ake, moe, PHN, Rtlit, social worker, SWIS, VNT, paediatrician, occupational therapist

Theme: General level of external system support for teachers

Codes	Criteria
Not useful support	A comment about how the external support has not been useful to the teacher.

Accessibility	A comment about how the external support lacks accessibility: ie criteria, funding, under resourced
Efficiency	A comment about how the external support is not efficient: ie waitlists, extensive wait times
Not supported	A comment about how the teacher is not supported by external systems
Supported	A comment about the level of support to the teacher from external systems

SSR_5text:Coding Scheme for participants responses expanding on whether they as teachers are using self care to look after themselves wheen with the children experiencing mental distress in their classroom

Theme: Teacher own view of self care

Codes	Criteria
Prioritised	A comment about how self care is a priority: ie prioritised, balanced work/life, self aware, emotional load
Not prioritised	A comment about how self care is not prioritised: ie not a priority, unbalanced work/life, own self awareness, emotional load
No understanding	A comment about not understanding what self care is.
Value	A comment about their own values which shape their view on self-care ie: others come first, I come last

Theme: Teacher own reason for self care or no self care

Codes	Criteria
Hauora	A comment about how self care affects their own wellbeing ie self awareness
Boundaries/ No boundaries	A comment about using self care as a boundary or no boundaries ie taking emotions

	home with them, keeping work and life separate, turning off when getting home, unable to turn off
Job demands	A comment about how self care is important or can't be prioritised due to the job demands ie: multiple roles, expectations, emotional load, burnout, challenging children

Theme: Examples of self care used

Codes	Criteria
Physical	A comment about how physical wellbeing is achieved through self care ie running, walking, sports
Mental	A comment about how mental wellbeing is achieved through self care ie therapy, self awareness, journals
Spritual	A comment about how spiritual wellbeing is achieved through self care ie faith, meditation
Social	A comment about how social wellbeing is achieved through self care ie friends, family

SSR_6: Coding Scheme for participants responses sharing what support would benefit them as teachers in catering for the needs of students with mental distress

Theme: Types of support to benefit teachers

Codes	Criteria
Internal Support Systems	A comment about internal support systems can support teachers better ie: release time, ratio of kids, professional supervision, self-care support, teacher aides and experts on staff
External Support Systems	A comment about how external support systems can support teachers ie: accessible and efficient expert support, adjusting societal

Community	Community is responsible for mental distress in classroom through COVID
Systemic	Systemic issues are responsible for mental distress in classroom through COVID ie under resourced, political rules
General	COVID in general is responsible for mental distress in classroom

TRQ_Covid_text: Coding Scheme for Participants responses to why they feel COVID has/has contributed to their Teachers' Resilience

Theme: Experiences of teachers resilience and COVID

Codes	Criteria
Classroom	A general comment about their own TR and COVID experience within the classroom or school setting
Personal	A general comment about their own personal experience contributing to their TR from COVID
General	Does not explicitly differentiate between class or personal experience contributing to TR but comments on their experience from COVID.

Theme: Pressures due to COVID on TR

Codes	Criteria
Media/Society	A general comment about how the media/society pressure of COVID has or has not contributed to TR Ie: news/ social media/ advertising/ politics
School	A general comment about how the school pressure of COVID has or has not contributed

	expectations of teachers
Professional development	A comment about how professional development can support teachers ie: Counselling, university training in MH, psychical MH resources, MH training

Appendix F: Item Reliability Statistics for MHL

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
MHL1: If someone became extremely nervous or anxious in one or more situations with other people (e.g., a party) or performance situations (e.g., presenting at a meeting) in which they were afraid of being evaluated by others and that they would act in a	128.14	164.911	.172	.896
MHL2: If someone experienced excessive worry about a number of events or activities where this level of concern was not warranted, had difficulty controlling this worry and had physical symptoms such as having tense muscles and feeling fatigued then to wh	127.83	162.446	.343	.894
MHL3: If someone experienced a low mood for two or more weeks, had a loss of pleasure or interest in their normal activities and experienced changes in their appetite and sleep then to what extent do you think it is likely they have Major Depressive Diso	128.22	164.078	.216	.896
MHL4: To what extent do you think it is likely that Personality Disorders are a category of mental illness?	127.78	163.195	.272	.895
MHL5: To what extent do you think it is likely that Persistent Depressive Disorder is a disorder?	127.73	163.301	.288	.895
MHL6: To what extent do you think it is likely that the diagnosis of Agoraphobia includes anxiety about situations where escape may be difficult or embarrassing?	127.90	162.928	.283	.895

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
MHL7: To what extent do you think it is likely that the diagnosis of Bipolar Disorder includes experiencing periods of elevated (i.e., high) and periods of depressed (i.e., low) mood?	127.47	161.985	.407	.893
MHL8: To what extent do you think it is likely that the diagnosis of Substance Use Disorder includes physical and psychological tolerance of the drug (i.e., require more of the drug to get the same effect)?	127.63	163.903	.261	.895
MHL9: To what extent do you think it is likely that in general in New Zealand, women are MORE likely to experience a mental illness of any kind compared to men?	128.60	167.116	.026	.899
MHL10: To what extent do you think it is likely that in general, in New Zealand, men are MORE likely to experience an anxiety disorder compared to women?	128.47	166.324	.079	.898
MHL11: To what extent do you think it would be helpful for someone to improve their quality of sleep if they were having difficulties managing their emotions (e.g., becoming very anxious or depressed)?	127.65	162.974	.264	.895
MHL12: To what extent do you think it would be helpful for someone to avoid all activities or situations that made them feel anxious if they were having difficulties managing their emotions?	128.32	163.519	.238	.896
MHL13: To what extent do you think it is likely that Cognitive Behaviour Therapy (CBT) is a therapy based on challenging negative thoughts and increasing helpful behaviours?	127.82	163.874	.265	.895

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
MHL14: Mental health professionals are bound by confidentiality; however there are certain conditions under which this does not apply. To what extent do you think it is likely that the following is a condition that would allow a mental health professio	127.40	161.957	.379	.894
MHL15: Mental health professionals are bound by confidentiality; however there are certain conditions under which this does not apply. To what extent do you think it is likely that the following is a condition that would allow a mental health professio	128.11	161.732	.283	.895
MHL16: I am confident that I know where to seek information about mental illness	127.08	158.567	.417	.893
MHL17: I am confident using the computer or telephone to seek information about mental illness	126.87	158.844	.412	.893
MHL18: I am confident attending face to face appointments to seek information about mental illness (e.g., seeing the GP)	127.17	157.124	.403	.893
MHL 19: I am confident I have access to resources (e.g., GP, internet, friends) that I can use to seek information about mental illness	126.90	158.980	.417	.893
MHL20: People with a mental illness could snap out if it if they wanted	126.52	156.984	.549	.891
MHL21: A mental illness is a sign of personal weakness	126.46	155.669	.612	.890
MHL22: A mental illness is not a real medical illness	126.42	157.115	.572	.891
MHL23: People with a mental illness are dangerous	127.26	157.562	.412	.893
MHL24: It is best to avoid people with a mental illness so that you don't develop this problem	126.42	157.257	.597	.890
MHL25: If I had a mental illness I would not tell anyone	127.53	157.204	.389	.894
MHL26: Seeing a mental health professional means you are not strong enough to manage your own difficulties	126.59	155.063	.592	.890

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
MHL27: If I had a mental illness, I would not seek help from a mental health professional	126.94	155.547	.471	.892
MHL28: I believe treatment for a mental illness, provided by a mental health professional, would not be effective	126.86	155.673	.537	.891
MHL29: How willing would you be to move next door to someone with a mental illness?	127.32	154.371	.544	.891
MHL30: How willing would you be to spend an evening socialising with someone with a mental illness?	126.83	154.521	.630	.889
MHL31: How willing would you be to make friends with someone with a mental illness?	126.85	154.213	.654	.889
MHL32: How willing would you be to have someone with a mental illness start working closely with you on a job?	127.06	151.917	.658	.888
MHL33: How willing would you be to have someone with a mental illness marry into your family?	127.15	152.748	.605	.889
MHL34: How willing would you be to vote for a politician if you knew they had suffered a mental illness?	127.31	152.380	.569	.890
MHL35: How willing would you be to employ someone if you knew they had a mental illness?	127.28	153.072	.590	.890

Reliability

Appendix G: Item Reliability Statistics for TRQ

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
TRQ1: At school I can be flexible when situations change	99.82	123.798	.502	.906
TRQ2: I can quickly adapt to new situations at school	99.95	122.572	.549	.905
TRQ3: I am well organised in my school work	100.06	124.931	.369	.908
TRQ4: I reflect on my teaching and learning to make future plans	99.84	124.028	.484	.906
TRQ5: When something goes wrong at school I don't take it too personally	101.07	121.445	.425	.908
TRQ6: After reflection, I can usually find the funny side of challenging school situations	100.52	120.463	.509	.906
TRQ7: When I feel upset or angry at school I can manage to stay calm	100.38	123.123	.442	.907
TRQ8: I balance my role as a teacher with other dimensions in my life	101.00	121.164	.380	.910
TRQ9: I am generally optimistic at school	100.25	120.177	.659	.903
TRQ10: At school I focus on building my strengths more than focusing on my limitations	100.39	120.680	.592	.904
TRQ11: When I make mistakes at school I see these as learning opportunities	100.26	120.459	.635	.903
TRQ12: In my role as a teacher I set goals and work towards achieving them	100.17	124.021	.441	.907
TRQ13: I have realistic expectations of myself as a teacher	100.68	119.827	.488	.907
TRQ14: I believe that if I put my mind to something at school I can be successful	100.12	121.842	.611	.904
TRQ15: I am good at maintaining my motivation and enthusiasm when things get challenging at school	100.48	119.090	.648	.903
TRQ16: I enjoy learning when I am at work	99.93	123.054	.588	.905
TRQ17: I like challenges in my work	100.31	121.858	.549	.905
TRQ18: I am persistent in my work	99.97	123.792	.577	.905
TRQ19: I believe that I have control over my work life	100.86	119.625	.502	.906
TRQ20: It's important to me that I put in effort to do my job well	99.74	125.998	.428	.907

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
TRQ21: When I am unsure of something I seek help from colleagues	99.83	125.161	.459	.907
TRQ22: I am good at building relationships in new school environments	100.11	123.787	.460	.907
TRQ23: In my role as a teacher, I am a good communicator	100.00	123.464	.551	.905
TRQ24: In my work I can look at a situation a number of ways to find a solution	100.02	123.538	.535	.906
TRQ25: At work I can view situations from other people's perspectives	100.06	124.992	.461	.907
TRQ26: When I am at work I can generally resolve conflicts with others	100.23	123.196	.527	.906