Exploring Pasifika Mental Health Literacy in Aotearoa New Zealand

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Abstract

Exploring Pasifika Mental Health Literacy in Aotearoa New Zealand is a mixed methods research project led by Sarah Kapeli, an Aotearoa-born Tongan researcher whose research is underpinned by Pacific knowledges, understandings, and worldviews. Section 1 provides an overview of Pasifika mental health in Aotearoa New Zealand and how it has evolved over time. It also identifies areas of opportunity across research and strongly recommends the role of education, particularly mental health literacy, as a way towards enhancing Pacific mental health and wellbeing outcomes. Section 2 draws upon survey data from the New Zealand Attitudes and Values Study. Each study presented in this section explores an innovative approach to Pacific research by connecting Pacific concepts with Western survey measures. Demonstrating how to (re)claim sovereignty over our Pacific data and how this can be carried into the future of Pacific research, particularly around Pasifika mental health literacy.

Section 3 presents findings from the Pasifika Mental Health in Aotearoa (PMHA) project, a two-phased project that included the PMHA survey (first phase) and the PMHA e-talanoa (second phase). The PMHA survey explored the understandings, experiences, and attitudes around mental health literacy for Pasifika in Aotearoa New Zealand – key facets of mental health literacy as explored in existing research literature. From this, the PMHA report was developed and includes a descriptive overview of the survey findings. The PMHA survey also included two vignettes – a Pacific man experiencing depression, and a Pacific woman experiencing anxiety. Participant responses to the vignettes reflected the gender of the character presented in the vignette. The patterns of the responses to the vignette characters guided the direction of the PMHA e-talanoa, which explored common themes that participants discussed in regard to their perceptions of the vignette characters.

Overall, this doctoral research project has provided a steppingstone towards defining Pasifika mental health literacy and developing a Pasifika mental health literacy framework for Pasifika in Aotearoa New Zealand – that has the potential to enable, mediate, and advocate for our Pasifika communities through the cogs of legislation, policy, and practice informed by research.

Dedications

To my Grandpa on my Dad's side, Kapeli Kautai.

To my Great Grandma on my Mum's side, Sarah Ann Hoban.

For the blessing of your names, your mana, your legacy.

To my Dad, Taloa Kapeli.

To my Mum, Judith Ann Kapeli.

For raising me to believe that anything was possible.

To my husband, Sione Lisiate Finau.

For making everything possible.

To my son, Taven Joseph Kapeli Finau.

To my daughter, Jude Mele Kapeli Finau.

For showing me that nothing is impossible.

To our Pasifika communities.

For you. For us. For all.

Nothing about us, without us.

Mālō ‘aupito / Acknowledgements

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General overview

The general overview provides a layout of this thesis as presented across four sections:

1. Section 1 comprises an overall introduction, including a research article (first research document), *Understanding Pasifika mental health in New Zealand – A review of the literature*.
2. Section 2 comprises an analysis of existing data from the New Zealand Attitudes and Values Study including a research article (second research document), *Higher levels of social support predict lower psychological distress for Pacific peoples living in Aotearoa New Zealand* and a second research article (third research document), *A Latent Profile Analysis of Pacific health values*.
3. Section 3 comprises an analysis of Pasifika mental health literacy data collected as part of the doctoral research project including a research report (fourth research document), *Pasifika mental health in Aotearoa New Zealand – Findings from the Pasifika Mental Health in Aotearoa survey* and a research chapter (fifth research document), *Pasifika perceptions of Pacific men and women and its interrelationship with mental health in Aotearoa New Zealand*.
4. Section 4 comprises an overall discussion, including implications and future directions, strengths and limitations, and final comments.

The thesis includes five research documents where four of these have been prepared for publication and are either published, under review or ready for submission. Publication has been prioritised towards open-access journals or open-access platforms. As a Pacific researcher, I am interested in research communication with our communities. One way of achieving this is through engagement with journals or platforms that focus on and are openly

accessible to our Pacific communities. Such communication channels tend to maintain contact and engagement with our Pacific communities, thus, driving a greater impact across our communities. Each research document gives context around the communities of Aotearoa New Zealand (NZ) as well as a specific overview of our Pacific communities. Therefore, the introduction of each research document may seem repetitive because each should be able to read as a standalone piece. Between each research document, bridging comments are offered to link and integrate the research documents across the wider thesis.

I also use a combination of Te Reo Māori (the Māori language), Lea Faka-Tonga (the Tongan language), and other Indigenous Pacific languages to articulate various terms and concepts throughout the thesis. I do this to privilege our Indigenous Māori and Pacific perspectives. I provide English translations following the use of Indigenous terms and concepts when they first appear throughout the thesis. Though, I have chosen not to provide a translation of the welcoming fakafe'iloaki (introductions) as to not detract from its mana (power). I have also chosen not to provide a glossary as a way toward centralising our Indigenous Māori and Pacific perspectives. English translations should also not be regarded explicitly, as Indigenous terms and concepts cannot be captured or understood fully by an English equivalent.

SECTION 1

Welcome

Bula Vinaka, Fakaalofa lahi atu, Fakatalofa atu, Kia orana, Mālō e lelei, Mālō nī, Talofa lava, Tēnā koutou katoa and warmest Pacific greetings.

Tēnā koutou katoa.

Ko Waitakere ngā maunga o tāku timatanga.

Ko Waitematā te moana o tāku tipuranga.

Nō Tāmaki ahau.

Ko Kautai tōku whānau.

Ko Sarah Ann Kapeli tōku ingoa.

Ngā mihi nui kia koutou.

Fakatau kihe ‘Otua Mafimafi.

Fakatapu kia Hou’eiki.

Mo ha’a Matāpule.

Fakatapu kihe tu’u kimu’a kae ‘uma’ā ‘a e tu’u kimui.

Kae ‘atā mo au keu fai ha lea.

Ko hoku hingoá ko Sarah Ann Kapeli.

Ko ‘eku Tamaí ko Taloa Kapeli mei Lapaha, Tongatapu.

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Pea ‘oku ou mali kia Sione Lisiate Finau mei Te’ekiu mo Folaha, Tongatapu.

‘Oku toko ua ‘eku fanau ko ‘enau hingoá ko Taven Joseph pea mo Jude Mele.

Tauange tāpuekina kimoutolu ‘ehe ‘Eiki.

Leveleva e malanga tu’a’ofa atu. `

Firstly, as a Polynesian cousin, I want to recognise and prioritise support in the distinct considerations afforded to Tangata Whenua, our Indigenous Māori of Aotearoa NZ, and honour articles of Te Tiriti o te Waitangi (The Treaty of Waitangi). As Pacific peoples in Aotearoa it is important that we put that first. I acknowledge my introductions in Te Reo Māori (the Māori language) and Lea Faka-Tonga (the Tongan language), as a first-generation Aotearoa NZ born Tongan who identifies with Tongan and British ancestry. It is also important to locate myself and the position from which I write from. I write from a Tongan perspective, and beyond that, a Tongan perspective that is shaped through my living in Aotearoa NZ. I write from a Pasifika perspective, as a child of the 1970s migration that saw many Pacific peoples migrate to Aotearoa NZ, including my Father. I write from a Tongan-Pālagi perspective, as a daughter of a Tongan Father and a Pālagi Mother.

It is important that you know all of this about me. In the Tongan culture, fakafe'iloaki (to introduce oneself) is part of what we do in both formal and informal settings. Sharing in this way transcends the words that you hear or read, rather, it provides an opportunity for us to explore our connection with one another. We cannot work together if we do not know one another. This is vital in our Pacific cultures, in our Tongan culture where values of faka'apa'apa (acknowledging and returning respect), tauhi vā (keeping the relationship ongoing, alive and well), and 'ofa (love, care and kindness) honour that connection and commitment to one another. I have lost count of the number of times where my fakafe'iloaki and sharing of my whakapapa (genealogy) and tupu'anga (ancestry) has fostered a connection with students, colleagues and/or peers. Many a time this has also uncovered familiar kinship ties. These connections are special and continue to show me that fostering tauhi vā is not only important, it is vital in sustaining all things.

This thesis reflects a cumulation of connections. Not just the connections made throughout my doctoral research journey, but those of my tupu'anga and tukufakaholo (descendants). So, although this thesis is written by me, it represents much more than me.

This thesis is more than its pages and the work it holds.

This thesis is a sea of writing that tells a story.

This thesis honours and uplifts our Pacific voices.

This thesis encapsulates a Pacific way of knowing and being.

This thesis transcends conventional research approaches.

This thesis combines academic and personal prose, which is reflective of me as a Pacific researcher and as a Pacific storyteller.

This thesis is by Pasifika, for Pasifika – nothing about us, without us.

This thesis is all of these things and more.

And as I reflect upon my doctoral research journey, I too have been (re)shaped. A journey that has not only allowed me to honour our fonua (people and land), but to give back to our fonua – Tokoni ki ha taha 'oku fiemau'u ho'o tokoni (a Tongan proverb meaning to use our gifts to serve others). On that note, I bring this welcome to a close with the words of Epeli Hau'ofa:

> Oceania is vast, Oceania is expanding, Oceania is hospitable and generous, Oceania is humanity rising from the depths of brine and regions of fire deeper still, Oceania is us. We are the sea, we are the ocean, we must wake up to this ancient truth and together use it to overturn all hegemonic views that aim ultimately to confine us again, physically and psychologically, in the tiny spaces which we have resisted accepting as our sole appointed place, and from which we have recently liberated ourselves. We must not allow anyone to belittle us again, and take away our freedom. (Hau'ofa, 1994, p. 160)

Overall Introduction

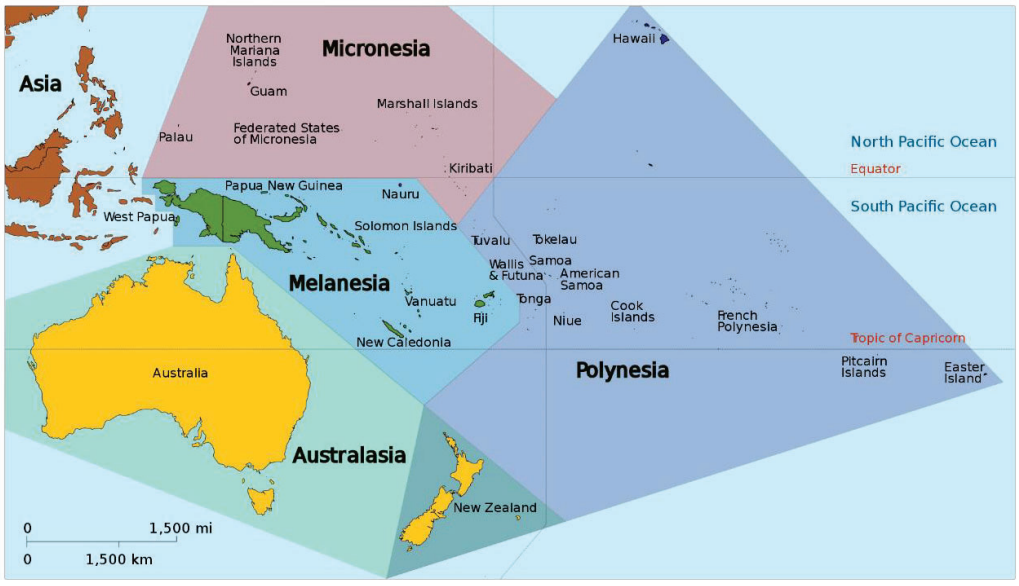
Pacific peoples in Aotearoa NZ

Current Pacific population

Pacific peoples or *Pasifika* are terms used to describe a population group in Aotearoa NZ who identify with Pacific Island ancestry or heritage. The Pacific Islands span across Te Moana Nui a Kiwa (the Pacific Ocean), covering over 800,000 square kilometres through the regions of Micronesia, Melanesia, and Polynesia. Please see Figure 1 for an overview of each region and their respective Pacific Island nations (Cruickshanks, 2014). As a neighbouring country of the Pacific Islands, Aotearoa NZ is home to a large population of Pacific peoples. Alongside the major population groups of Aotearoa NZ, including European (70.2%), Māori (16.5%), Asian (15.1%), Middle Eastern/Latin American/African (1.5%), and other ethnicities (1.2%), Pacific peoples are the fourth largest ethnic group comprising 8.1% (381,642 people) of the total population (Statistics NZ, 2018a).

Figure 1

Map illustrating Oceania: Australasia, Polynesia, Micronesia, and Melanesia



Note. Map created by Cruickshanks (2014)

Our Pacific population is also representative of over 19 Pacific Island nations, please see Table 1 for an overview of our Pacific population (Statistics NZ, 2018a). In Aotearoa NZ, we collectively refer to our Pacific population using umbrella terms including Pacific peoples, Pasifika, Polynesians, and Pacific Islanders. Whilst these umbrella terms can be useful when making large scale comparisons, the futility of such terms was recently highlighted during the Royal Commission of Inquiry into Abuse in Care's Public hearing with our Pacific community, *Tulou – Our Pacific Voices: Tatala e Pulonga* (Tulou = excuse me; showing courtesy when coming within another's personal space; Tatala e Pulonga = lifting the dark cloud). In this inquiry, Taufa (2021) stated "[umbrella terms are futile] when applied to actual people and groups of people who consider themselves not Pacific or Polynesian, but Sāmoan, Tongan, Fijian, Cook Islander and so on".

However, for the purposes of this doctoral research project, I focused on Pacific peoples as a collective population group. I acknowledge that in doing so, I have overlooked the diversity and nuances of each Pacific ethnicity, which is a limitation that has been outlined in each piece of Pacific focused research that follows. In turn, I use the common umbrella terms of *Pacific peoples* and *Pasifika* interchangeably throughout this thesis, to refer to our Pacific population in Aotearoa NZ. Pacific research largely draws upon Pacific peoples as a collective group and therefore this research may be more transferrable across existing research, policy and other social or economic reports that adopt a collective Pacific population approach. Despite this, I recognise that a conventional one size fits all approach does not in fact fit all, and that collective Pacific population approaches are not appropriate for all Pacific peoples. It is my hope that this doctoral research inspires our Pacific research community whilst signalling the need for more ethnic specific Pacific research that continues to explore and highlight the diversity of our Pacific communities.

Table 1

Pacific population of Aotearoa NZ as at 2018 Census

Pacific Island ethnicity	Population count	Percentage of Pacific population (%)
Sāmoan	182,721	47.9
Tongan	82,389	21.6
Cook Island Māori	80,532	21.1
Niuean	30,867	8.1
Fijian	19,722	5.2
Tokelauan	8,676	2.3
Tuvaluan	4,653	1.2
Kiribati	3,225	0.8
Tahitian	1,737	0.5
Papua New Guinean	1,131	0.3
Ni Vanuatu	990	0.3
Rotuman	981	0.3
Indigenous Australian	795	0.2
Solomon Islander	777	0.2
Hawaiian	429	0.1
Pitcairn Islander	216	0.1
Nauruan	135	0.04
Pacific peoples not elsewhere classified	336	0.1
Pacific peoples not further defined	2,724	0.7

Note. Data collected from Statistics NZ (2018a)

Pacific migration

Aotearoa NZ was long mythologised as the *land of milk and honey* – an expression that originates from the Bible where God instructs Moses to lead his people to a promised land flowing with milk and honey, in turn alluding to a land of joy and abundant fertility (English Standard Version Bible, 2001, Exodus 3:8). Like a lot of the children of the migration, our parents held strong to their Christian faith and came to Aotearoa NZ in search of a better life for themselves, their families, and the generations to come – "a promised land of natural abundance and endless opportunity" (Bell et al., 2017). This large wave of migration therefore resulted in the presence of Pacific peoples in Aotearoa NZ and has significantly grown over time. At the time of the 1945 Census, Pacific peoples comprised 0.1% of the total population, growing to 2.1% by the 1976 Census, 6.9% by the 2006 Census

and 7.4% by the 2013 Census. Now comprising 8.1% of the population, Pacific peoples are expected to make up over 10% of the total population of Aotearoa NZ by 2038 (Statistics NZ & Ministry of Pacific Island Affairs et al., 2010; Statistics NZ, 2018b).

There have been four waves of migration from the Pacific to Aotearoa NZ. The first wave of migration occurred around 1300 Common Era (CE) when Eastern Pacific peoples voyaged across the Pacific and settled in Aotearoa NZ as Tangata Whenua (Indigenous Māori people of Aotearoa NZ). The second wave of migration occurred approximately150 years ago, around 1870 during the European colonisation of the Pacific where many Pacific peoples migrated to Aotearoa NZ as missionaries, teachers, sailors, and whalers. The third wave of migration occurred around 1940 and included Pacific peoples who were able to migrate freely to Aotearoa NZ due to their service under the colonial government. The fourth wave of migration occurred across the 1960s and 1970s and is probably the most familiar and commonly referred to migration wave for many of our Pacific peoples today (Naepi, 2018). My Father's migration around this time is also what has led to my family and I being part of the Pasifika community in Aotearoa NZ. This migration was largely driven by the economic needs of Aotearoa NZ where Pacific peoples were encouraged by the NZ government to come and work in agriculture, manufacturing, and other labour roles. However, the downturn of the economy in the 1970s resulted in a significant decrease in the demand for labour which essentially resulted in Pacific peoples no longer being required to prop up the labour workforce. In fact, this change in economy lead to negative and harmful views being formed towards the Pacific communities in NZ. Pacific peoples were now seen more as a threat by 'taking jobs that belonged to New Zealanders'. Consequently, Pacific peoples found themselves amid an unsafe social and political climate where they were heavily targeted for deportation in what has been described as "the most blatantly racist attack on Pacific peoples by the New Zealand government in New Zealand's history" (Anae, 2020, Chapter 4).

Dawn raids

The NZ government took direct action towards Pacific Island *overstayers*, otherwise referred to as Pacific peoples who had stayed in NZ beyond the limits of their visa. A racialised agenda that targeted Pacific peoples through random police checks and dawn raids. Pacific peoples made up 86% of prosecutions despite the majority of overstayers being British and American – groups which only made up 5% of prosecutions in comparison (Beaglehole, 2015). The dawn raids were named after the literal raiding of Pacific homes by police officers in the early hours of the morning through force and carelessness in search of Pacific Island overstayers. Pacific peoples had to immediately produce passports to prove their legal status to reside in NZ or face detainment, prosecution and/or deportation to their respective Pacific nations.

At the time of this ongoing and inherently racist agenda, an activist group was formed in 1971, the Polynesian Panthers. The Polynesian Panthers were very active in supporting the Pacific community and challenging the institutional racism and discrimination that Pacific peoples faced during this time (Anae, 2020). The Polynesian Panthers also responded to the dawn raids by 'raiding' government ministers' homes, whilst not actually entering their homes, to highlight the inhumane act and lingering effects of the dawn raids. The Polynesian Panthers have been trailblazers for our Pacific communities in their fight for equity and justice. Most recently, they have successfully called for an apology for the dawn raids and its enduring impact on our Pacific communities (Anae, 2020).

Almost 50 years after the occurrence of the dawn raids, the NZ government made a formal apology. Prime Minister Jacinda Ardern, leader of the Labour Party said, "I stand on behalf of the New Zealand Government to offer a formal and unreserved apology to Pacific communities for the discriminatory implementation of the immigration laws of the 1970s that led to the events of the Dawn Raids" (Ardern, 2021). The dawn raids have taken, and

continue to have, a significant toll on our Pacific communities whereby entire families were torn apart. The trauma is still very real for many of our Pacific families and is felt intergenerationally – highlighting again, the importance of ongoing research and action focusing on Pacific psychologies and Pacific wellbeing.

Contemporary Pasifika in Aotearoa New Zealand

Migrating to the *land of milk and honey* did not turn out as our Pasifika once planned. Today it is evident that there are a range of socioeconomic factors reflecting decades of disparity across our Pacific communities, where Pacific peoples have been, and continue to be disproportionately affected in comparison with the general population of Aotearoa NZ. Pacific peoples earn less (median income of $19,700 versus $28,500 for the total NZ population), live in the most deprived areas (56% versus 11% of non-Māori/non-Pacific), experience higher unemployment rates, and lower qualification rates (Statistics NZ, 2018b). In terms of health, Pacific peoples also have lower life expectancies, higher obesity rates, are more likely to live in a crowded home, and have higher rates of mental distress and subsequent mental health challenges (Ministry of Health, 2021a). It is evident not just anecdotally but also statistically that the colonial influence across the Pacific and Aotearoa NZ continues to shape the histories and realities for our Pacific communities. Despite the structural oppression facing our Pacific communities, we have seen positive movement against the detrimental factors that we are overrepresented in. Over the years we have seen increases in educational achievement, a rise in employment rates, and improvements across health and wellbeing for our Pacific communities (Ministry for Pacific Peoples, 2016). However, it does not and cannot stop here. This is where Pacific research can play a vital role in supporting our Pacific communities to unleash and reach their full potential.

Our Pacific population in Aotearoa NZ are incredibly diverse, which is not just attributed to the myriad of Pacific ethnicities we represent, but across age groups, places of

birth, and cultural values to name a few. Our Pacific population is young (median age 23.4 years) and growing (expected to comprise 10% of the population by 2038). Our growth is now largely driven by natural increase rather than migration, which was a driving factor across the 1940s to 1960s. As such, we now see our Pacific peoples are predominantly born in Aotearoa NZ, with most living in Auckland and other urban areas (Statistics NZ, 2018b). With the ever growing and changing demographic of our Pacific population, Pacific centric research is increasingly important. To appropriately care for the health and wellbeing of our people, it is vital we ensure nothing about us (Pasifika) is developed, without us (Pasifika).

Pacific research

For almost two decades, Sanga (2004; Sanga & Reynolds, 2017) has challenged the naming and subsequent defining of *Pacific research*. Sanga (2004) highlights how Pacific research cannot simply be confined to a single thought and offers a philosophical way to its approach. In this way, Sanga and Reynolds (2017) describe Pacific research as a paradigm that honours Pacific knowledges, Pacific understandings, and Pacific values to serve Pacific peoples without appeasing Western research practice. Delineating Pacific research as a paradigm also recognises its unity and uniqueness across and within the Pacific. Whilst there is no clear definition of what Pacific research is, University of Otago (2011) has described it as research that pertains to knowledge and understanding for Pacific peoples and their environments. The Health Research Council of New Zealand (2014) stipulates that Pacific research should be derived from Pacific peoples and their worldviews, experiences and contexts whilst being responsive to changing Pacific contexts. Moreover, it is imperative that Pacific research should also be underpinned by Pacific cultural values and beliefs.

(De)colonisation has also heavily influenced the Pacific research paradigm. For Pacific peoples, colonisation denigrated our Pacific knowledges and gave non-Pacific peoples the authority to author or be ‘experts’ on the Pacific and its people (Naepi, 2019). In this way,

Pacific research has consistently used deficit focused research methodologies and language which in turn has framed Pacific peoples negatively through misguided understandings and representations. This has resulted in harmful economic and social practices. Ultimately, research is interlinked with power (Smith, 2004), as it creates knowledge about how the world can and should be understood (Naepi, 2019). Moving forward, decolonisation has seen Pacific scholars (re)claiming the Pacific research space. Pacific research approaches and methodologies are an active response to a research system that (continues to) undermine and decimate Pacific knowledges.

Looking beyond a colonial influence, it is important to acknowledge that Pacific research methods and Western research methods can be used together in an academically reliable and culturally responsive way (Enari, 2021). It can be argued that many of the Western knowledges we know and use today, have been influenced by Indigenous knowledge systems, and our (re)use of these Western systems is a step towards its (re)claim. Throughout this thesis, Pacific and Western research methods have been interwoven together, a task that has been challenging yet restorative. I say this because as a Pacific researcher, the Eurocentric framing that has overshadowed Pacific research, and in turn misrepresented our people has been incredibly difficult to grapple with. However, it has ignited a fire in my heart to create meaningful research that serves our people, through (re)constructing research frameworks to respond to the contemporary needs of our Pacific communities.

Pacific research methods

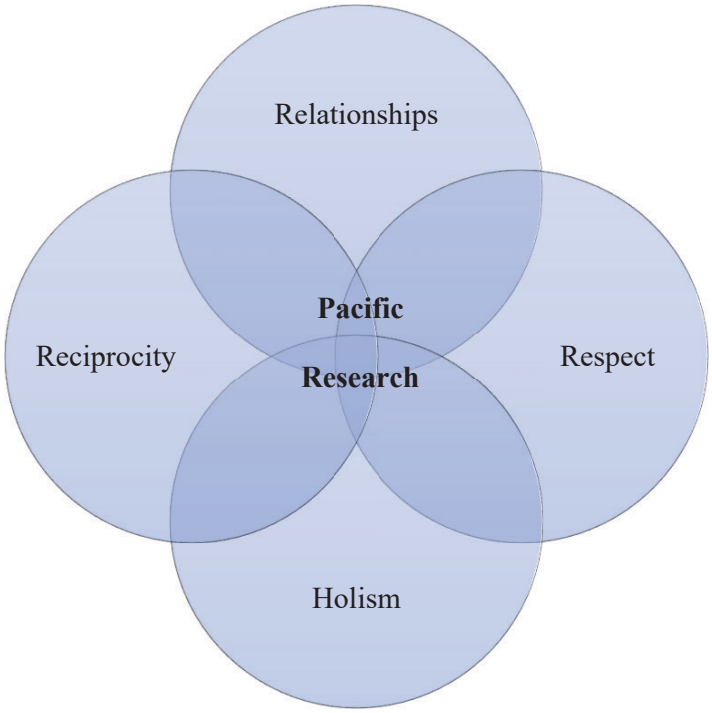
In Aotearoa NZ, Pacific research methods were initially developed from a pan-Pacific perspective due to the call from the state sector for Pacific research. For example, the Fonofale Model developed in the early 1990s is centred around the idea of a Sāmoan fale yet takes a collective Pacific approach to exploring Pasifika health in Aotearoa NZ (Ministry of Health, 2008; Suaalii-Sauni et al., 2009). As mentioned prior, I have also focused on Pacific

peoples as a collective population group for the purposes of this doctoral research project. With the ever-growing Pacific population, came an increasing need to provide culturally responsive and effective tools for our Pacific community. In the years to follow, Pacific research methods and frameworks that centred Pacific knowledges and worldviews became more prominent (Tu'itahi, 2009). Please see Section 2 for an overview of Pacific methods (Kapeli et al., 2021). For a more detailed overview of Pacific methodologies and research approaches, please see work carried out by Naepi (2019) and Tualaulelei & McFall-McCaffery (2019).

Pacific values and knowledges underpin many of the Pacific research approaches and methodologies that are used across research. Adapted from the Health Research Council of New Zealand (2014), Figure 2 illustrates how Pacific research approaches and methodologies are framed around the Pacific cultural values of relationships, respect, reciprocity, and holism. I take this opportunity to explore these four values and how they operate across research, particularly my own research. It is important to highlight that each of these values may operate differently across (i.e., individual Pacific ethnicities) and within (i.e., due to age group, gender, place of birth) different Pacific communities. However, the awareness and knowledge of the researcher can ensure that each value is honoured and respected appropriately when working alongside Pacific communities in research (Naepi, 2019).

Figure 2

Illustrating links between four important cultural values embedded across Pacific research



Relationships. Relationships are essential to Pacific research and should be developed and fostered in a respectful way. Such relationships may exist before, during and long after the research process. In my doctoral research project, relationship building has been an integral facet of the research process. In the Tongan culture, we recognise tauhi vā as a way of nurturing and maintaining relationships with one another. Similarly, in the wider Pacific community, vā is also used to describe a relational space that fosters connectedness with one another (Kapeli, Manuela, Milojev, et al., 2020). Growing up as part of the Tongan and wider Pasifika community, the essence of tauhi vā has been ingrained in me and therefore naturally underpins my research practice. When initially recruiting participants for the survey phase of my project, I received higher survey engagement and survey completion

rates when building upon existing relationships. Similarly, during the talanoa phase of my project, relationship building allowed for open and meaningful talanoa.

Respect. Respect is vital to collaborative work and sustaining relationships, which makes it a key value in the relationship between researchers and communities (Health Research Council of New Zealand, 2014). In the Tongan culture, we recognise faka'apa'apa as showing respect and courtesy (Funaki, 2005). As a child, I grew to understand respect through talangofua (obedience) to my parents and 'apasia (reverence) to my elders, the Church and God. Respect was not only about honouring the relationship but honouring the space they occupy. This includes being aware of who the person is, who their family is, their connection to the community, their contribution to the community, and how such aspects may guide interactions with them (Naepi, 2019). In my doctoral research project, it was important to respect the cultures and traditions of the different Pacific communities I worked alongside. I was also fortunate to be guided by a Pacific advisory team who hold extensive clinical, community, and research knowledge. My utmost respect for them and their work in the Pacific community is what made reaching out to them for their guidance an important part of my research.

Reciprocity. A reciprocal relationship is key in Pacific research. It works towards mutual benefit to create and sustain a harmonious relationship between researchers, participants, and the community to avoid exploitation (Health Research Council of New Zealand, 2014). In the Tongan culture, we recognise fefetongi'aki as reciprocity through me'a'ofa (gift of appreciation for one's contribution). In my doctoral research project, reciprocity during the talanoa phase involved the exchange of talanoa (from the participant to researcher) and me'a'ofa (from the researcher to the participant). It is important that both sides of the relationship benefit from the research. Furthermore, by ensuring that the research is freely accessible to the participants and their wider community. As mentioned prior, I

prioritise research dissemination in accessible ways such as open-access research journals and other open-access platforms.

Holism. A holistic approach is important as it reflects the way that many Pacific cultures frame their world (Health Research Council of New Zealand, 2014). In the Tongan culture, there is no direct translation of holism, as it is a way of being rather than an act. However, the best way to describe it is through the Fonua Ola model (as seen in Section 2; Kapeli et al., 2021). Fonua Ola represents holistic wellbeing of people and their environment through the balance of spiritual, mental, physical, economic, cultural, and ecological aspects of wellbeing (Tu'itahi, 2015). In my doctoral research project, taking a holistic approach meant being aware and working towards a balanced and integrated relationship of all aforementioned aspects of wellbeing. In other words, what is taken out, should be returned. In this way, the knowledge given by our Pacific communities will be replaced with benefits (e.g., me'a'ofa) as well as positive and useful outcomes (e.g., action focused research). In doing so, balance is restored and sustained.

Utility of Pacific research methods

I want to provide a brief overview of two Pacific research approaches that have become increasingly pertinent to the development of this doctoral research project: the Kakala Research Framework (KRF) and the Talanoa Research Framework (TRF). Each of these Pacific research approaches, are also discussed as part of Section 2 (Kapeli et al., 2021) and Section 3 (Pasifika perceptions of Pacific men and women and its interrelationship with mental health in Aotearoa NZ).

The KRF was developed by Koani Helu-Thaman (1997) and likens the making of a *kakala*, a Tongan flower garland, to the steps of a research project. The KRF has guided the development of this doctoral research project. I have outlined below the steps of the KRF in

Section 2, and as such, will explain how each step has been replicated through my doctoral research project:

Step 1, *Teu* means to prepare: I clarified the purpose of my research and its design to explore Pasifika Mental Health Literacy in Aotearoa NZ through adapting quantitative and qualitative research methods to respond to and support Pacific mental health and wellbeing.

Step 2, *Toli* means to pick: I selected appropriate methods and methodologies to guide data collection and its analysis. All of which are outlined in the research articles to follow.

Step 3, *Tui* means to thread: I analysed data and reported findings, all of which are provided in the research articles to follow. Here it was vital to analyse and report from my own worldview, as a Tongan woman, as a Pasifika woman. In doing so, it privileges our Pacific knowledges and understandings to ensure the research is culturally appropriate and effective.

Step 4, *Luva* means to give: I present findings and give back to our Pacific community. I have made it a priority to publish and present research findings that are accessible to our Pacific community. As you will see in the research articles to follow, I have published in open access journals and presented in research spaces that privilege Pacific and Indigenous activism and scholarship. It is important that the research I carry out alongside our Pacific communities remains connected to our Pacific communities and empowers our Pacific communities – nothing about us, without us.

Step 5, *Mālie* means pleasant: I reflect upon the relevancy and worthwhileness of the research. A step I have considered from the conception of this research project and will continue to consider as I move through my research career. As our Pacific communities continue to flourish, Pacific mental health will always be a relevant and worthwhile area of research, as it contributes to the overall health and wellbeing of our people.

Step 6, *Māfana* means warmth: I evaluate the research and consider its application and sustainability. A step that I will continue to consider throughout my research career to ensure our Pacific communities have the knowledge and the tools to not only survive but to thrive. Action focused research is a priority – research that drives positive social and economic change in our communities. With this in mind, I take wisdom from the late Epeli Hau'ofa (1990) who stated that our writing should be shared, and loudly, so that our Pacific voices will be heard and appreciated.

It is important to note that the KRF is not a linear or a progressive framework. For instance, Step 1 became more refined as I progressed through my doctoral studies and embedded myself more into the literature around Pacific mental health literacy and strengthened my research skills. Due to the nature of my research project, Steps 2, 3 and 4 were revisited numerous times as I navigated the collection, analysis, and dissemination of several smaller research projects as part of the overall doctoral research project. Steps 5 and 6 and part of Step 4 were also revisited numerous times and even now continue to evolve through sharing the research with our Pacific communities and thinking about how this research can be further applied or developed.

The TRF was developed by Timote Vaioleti (2006) and is a relaxing way to talk, discuss, and share ideas. Essentially *tala*, means to talk, and *noa*, means nothing. Thus, talanoa means to talk about nothing or nothing in particular. In this way, talanoa is an open way of dialogue. In Section 3, I discuss in greater detail how I utilised talanoa and engaged in e-talanoa to respond to the challenges of researching during the COVID-19 pandemic. It is also important to note that talanoa served as both a method (data collection) and methodology (lens of analysis) (see section 3 for detail). Talanoa is also an integral part of my research journey and not just the research project itself, and talanoa will continue to play a vital role in navigating my research career. This will include continuing the talanoa around Pacific

research and Pacific health and wellbeing more broadly with peers, colleagues, stakeholders, community leaders and members. This will ensure that talanoa will become an integral way by which we drive positive change across social, economic, and political fields of influence.

Pacific mixed methods research

There is no single approach to doing Pacific research. There are Pacific research methods and methodologies. There are Western methods and methodological research approaches applied to Pacific communities. There are ways of merging Pacific and Western research methods and methodological approaches for our Pacific communities. In this doctoral thesis, I provide evidence of all of these.

In Section 2 of this thesis, Study 1 utilised a cross-lagged regression model and Study 2 utilised a Latent Profile Analysis (LPA). These Western quantitative research approaches were filtered through a Pacific lens where I, as a Pacific researcher, ensured that the Pacific data was honoured and respected whilst providing research that was culturally relevant. In Section 3 of this thesis, Study 3 and 4 are based on research from the Pasifika Mental Health in Aotearoa (PMHA) project where I developed a survey (quantitative method) and followed up with e-talanoa sessions (qualitative method). In this instance, the survey informed the direction of the e-talanoa. A process commonly referred to in Western research paradigms as sequential mixed methods design. The PMHA survey vignette responses reflected the gender of the character presented in the vignette. Therefore, the e-talanoa sessions focused on exploring why participants described the vignette characters as they did.

Through adopting a mixed methods research approach for my doctoral research project, I have provided a unique and innovative contribution to Pacific research and the wider discipline of psychology. In addition, it has allowed me to develop a very distinctive skillset, not only as a quantitative or qualitative researcher, but as a researcher who can combine both methods in a purposeful way. A mixed methods approach employs both

quantitative and qualitative research methods and such an approach is not always possible due to time, financial resources, and a myriad of other factors. However, being part of a doctoral programme funded by a University of Auckland scholarship allowed me the time and financial resource to do so. In psychology, quantitative methods are a common form of inquiry and tend to be given more weight and prestige. However, quantitative research has not always operated in the best interests of our Pacific peoples. Across Pacific research, qualitative methods are predominantly used due to their meaningful inquiry with our Pacific communities. Additionally, Pacific research tends to draw upon Pacific qualitative methods (i.e., Talanoa) or applying a Pacific lens towards Western focussed qualitative methods. As discussed as part of Section 1 (see Kapeli, Manuela, & Sibley, 2020b), I recommend that quantitative and qualitative methods can be used together, through mixed methods approaches, to create valuable and meaningful unions in research – one which this doctoral research project aimed to achieve.

Pacific data sovereignty

In honouring our Pacific cultural values, an important and vital consideration of Pacific research is its sovereignty. Recently a Pacific Data Sovereignty (PDS) network was established to provide a unified voice and collective guardianship of data and information pertaining to Pacific peoples living in Aotearoa NZ (Moana Research, 2021). PDS is focused on:

1. Rights and responsibilities to determine the means of collection, access, analysis, management, dissemination of Pacific data.
2. The production of information from and/or about Pacific peoples is driven by Pacific epistemologies, Pacific cultural values, Pacific knowledges.

3. Pacific peoples understanding of what Pacific data already exists, its sources, access pathways, data management, the purpose of collection, how it was used and will be used in future.
4. Acknowledging the source of knowledge but recognises where data derives from.

It is also important to recognise that Pacific data is a taonga (treasured possession), which reflects and derives from our Pacific histories, our realities, and our future aspirations. Pacific data is any data and/or information in any format that is produced by Pacific peoples or about Pacific peoples, and/or their environments, and/or their resources. Pacific data should be conceptualised and understood from Pacific perspectives and within Pacific frameworks. Pacific data can include but is not limited to: land and geographical history, demographic and/or social (e.g. legal, health, education, service), traditional cultural data, archives, oral literature, ancestral knowledge tribal histories, personal narratives, lived experiences (Moana Research, 2021). Please see Section 3, Pasifika Mental Health in Aotearoa New Zealand: Findings from the Pasifika Mental Health in Aotearoa Survey, for additional commentary around PDS.

The importance of Pacific research

The power of Pacific research extends beyond the paradigm of Pacific research and far beyond this thesis. An infographic created by Leone Samu (2020), as seen in Figure 3, powerfully illustrates the importance of Pacific research and how in its honour and respect, it provides a vital contribution to making our worlds a better place.

Figure 3

Infographic illustrating the importance of Pacific research

Pacific research that builds upon Pacific ways of knowing, being and understanding is a crucial way toward reducing inequality and inequity for our Pacific communities. This demonstrates how research for our people, by our people is imminent in (re)claiming the

narrative of our Pacific communities. In this way, we aim to break down persisting negative stereotypes, as well as developing more purposeful and strengths-based approaches for our Pacific communities. It also provides an important platform for building Pacific research, capacity, capability, and leadership. To grow Pacific research, we need more Pacific researchers. We need more Pasifika telling our stories. I hope that this thesis and the work that stems from it, signals the importance of pursuing a career in research. Even more so, to consider the area of psychology as a career pathway and contributing to the emerging area of Pacific psychologies.

Pacific psychologies

The relevance of psychology for Pasifika can be highlighted by looking back at our ancient tupu'anga, who were skilled navigators and traversed uncharted waters by guidance from our fonua – the earth, the sun, the seas, and the skies. Our tupu'anga did this all to connect with each other. Epeli Hau'ofa is renowned for his authorship about our Pacific Moana-nui-a-Kiwa and regards our Oceania as a sea of Islands rather than Islands in the sea. Our Islands are not separated by oceans of water, the ocean connects us and is within us all (Hau'ofa, 1994). We see the reality of this connection through the impacts of the Hunga Tonga-Hunga Ha'apai volcanic eruption in Tonga on 15 January 2022. The eruption and subsequent tsunami was felt far and wide geographically – by neighbouring Island nations including Fiji and Hawai'i, other neighbouring Pacific countries including Aotearoa NZ and Australia, as well as the Americas and parts of Asia (Martin et al., 2022). When news of the Hunga Tonga-Hunga Ha'apai volcanic eruption broke, my family and I were overwhelmed with worry for our families in Tonga but found peace in prayer and our enduring faith. During this time, my family and I also visited Cathedral Cove (see Figure 4), on what was supposed to be low tide, but we instead were met with treacherous waters – the remnants of the volcanic eruption and tsunami.

The view of being connected through the ocean is best described through the concept of vā by Albert Wendt (1996, para. 14), “Vā is the space between, the between-ness, not empty space, not space that separates but space that relates, that holds separate entities and things together in the unity-in-all, the space that is context, giving meaning to things”. In this way it is about our vā, our connections, our relationships. All of which are sacred. Our connections are not just with one another, but with our families, our communities, our society, our environment, our ancestors, our worlds. Hunga Tonga-Huna Ha’apai was not just felt physically across shores, it was also felt emotionally and spiritually. We stive to nurture and sustain our connectedness for a balanced and holistic wellbeing. Thus, instead of being in a room of strangers or in a space that is divided by ethnicities or diverse experiences, our Pasifika worldview tells us that we are all connected in the vā – ‘ia teu le vā (a Sāmoan expression meaning to care for our relationships).

Figure 4

Image of my family at Cathedral Cove on 16 January 2022 during low tide where the remnants of Hunga Tonga-Hunga Ha’apai could be seen and felt in the ocean

Because Pacific psychologies are grounded upon connectedness. Its intentional plurality represents the diversity of our Pacific peoples and the diversity needed for our psychological approaches. Each Pacific ethnicity embodies their own unique worldviews, languages, traditions, culture, and values. We see our differences, yet we also see our similarities and how they are recognised and understood between each Pacific ethnicity. This in turn, also allows us to see our shared similarities with our Pasifika than non-Pasifika. We also have diverse experiences that maybe shaped through our upbringings or our multi-ethnic heritages. The experiences that we have, as Pasifika, shape our approaches in psychology, which overlap with our unique Pacific worldviews.

Pacific psychologies explore how Pacific knowledges and Pacific worldviews shape and are shaped by our Pacific peoples to make meaning of and respond to a broad range of areas relevant to psychology. Pacific psychologies cover an entire ocean filled with hundreds of different communities in relation with one another. Pacific psychologies allow me, allow us, as Pacific psychologists and Pacific researchers to carve out space in psychology for us and our people. Pacific psychologies are interdisciplinary, yet we need spaces, like Pacific psychologies, that inspire our tou tupu (younger generation) coming forth to (re)claim psychology.

Pacific psychologies have been (re)imagined by Manuela (2016) to cover three psychological areas of research:

1. Applying psychology to understand experiences, attitudes, and lived experiences facing Pacific peoples in Aotearoa NZ.
2. Developing and growing Pacific ethnic specific approaches to psychology.
3. Developing a multi-Pacific psychology that focuses on the knowledge and shared understandings and intersections of multiple Pacific groups.

As a Pacific psychology researcher, equity is a priority. Growing the Pacific academy is important in continuing to develop a space for our Pacific research and for Pacific psychologies. In this way, skilled navigators in the Pacific psychology space can work alongside our health and social services to address ethnic disparities, socioeconomic disadvantages, and equitable challenges to positively contribute to the outcomes of our Pacific communities. We can bring our connections from within our Pacific communities, as well as our own experiences, understandings, values, and languages. We can convey a Pacific ethic of duty and care within the space of Pacific psychologies that aligns with our cultural roots.

Psychology is relevant even though historically it might not have been seen as such for our Pacific communities. It is through Pacific psychologies that our communities will benefit from collective action and responsibility. This will look towards living in a culturally responsive space, engaging Pacific peoples around us to help in our work. We can only travel at the speed of trust. To our Pacific psychology knowledge holders, we can bridge the divide and walk in both worlds – Pacific and psychology. We see this often in the children of the migration, including myself, who walk in many worlds already. We have the potential to bring and develop culturally responsive research and applications by converging skills that integrate cultural knowledges. This is particularly important in mental health, where culturally based stigma around mental health challenges and seeking psychological support is rife in our Pacific communities.

Pacific mental health and mental health literacy

With the relatively poor mental health and wellbeing of our Pacific peoples, it is important that the talanoa about mental health and wellbeing continues within our Pacific communities. Pacific peoples experience higher rates of mental illness, mental distress, and suicidal behaviour. We are also less likely to engage with support services (Ataera-Minster &

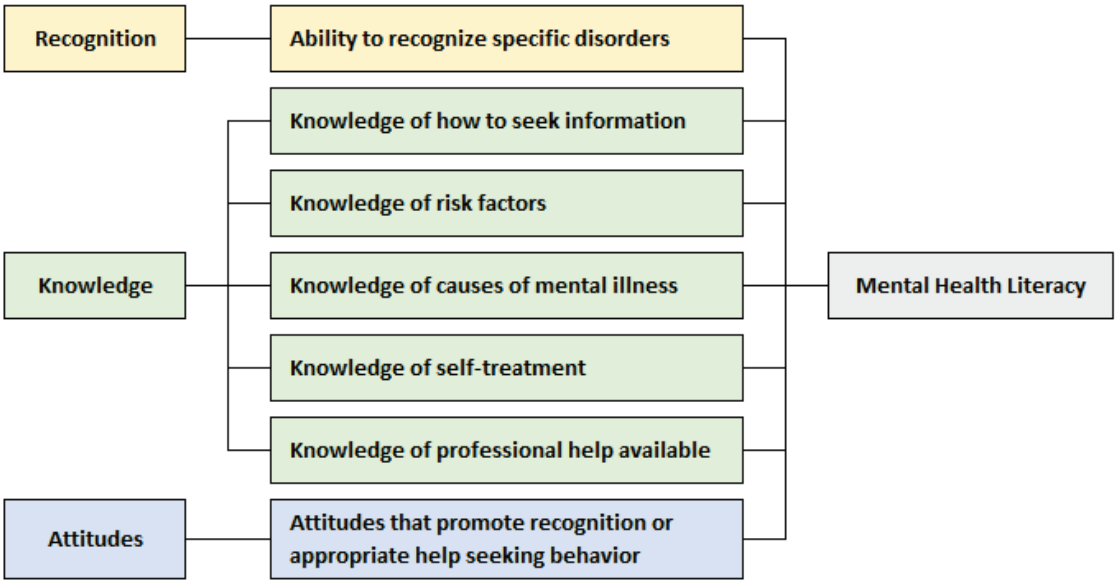
Trowland, 2018; Foliaki et al., 2006). More recently in the NZ Health Survey 2020/21, 15.7% of Pacific adults reported experiences of psychological distress, an increase from 9.8% in 2019/20 and also 1.4 times that of non-Pacific peoples (Ministry of Health, 2021a). A more detailed overview of Pacific mental health can be found as part of Section 1 in Kapeli, Manuela, & Sibley (2020b). To understand why these disparities in mental health exist, we really need to understand Pacific knowledge systems that our wellbeing derives from. Pacific cultures are inherently collective and relational with a holistic perspective of wellbeing. The conceptualisation of the balanced relationship underpins many of the Pacific models of health and wellbeing that have also been discussed.

Western psychology has largely been informed by a paradigm dominated by secular, scientific and empirical understanding of human behaviour. Historically it has not taken Indigenous worldviews into account and has overlooked its connection to society, collectivism, and cosmology. This contrast in worldviews, paradigms, pedagogies, and perspectives, has meant that navigating psychology, as Pasifika, has been challenging. When we look towards our mental health and wellbeing, we see these contrasting worldviews reflected at a community and societal level. This has contributed to the mistrust our Pacific communities have with mental health services. Further, the inability of our mental health services to effectively and safely engage with Pacific communities and their families which informs the reluctance to access help and get care when it is needed (Faleafa, 2020). Consequently, we see low and delayed access to mental health support services, leading to Pacific access occurring towards the crisis end of the mental health service continuum. The cost and burden of this to our families and communities is extremely high. This is why a focus on education, prevention, and early intervention is imperative for the future of our Pacific communities (Kapeli, Manuela, & Sibley, 2020b).

Knowing the history of Pacific mental health in Aotearoa NZ and its current landscape, I continue to have a burning desire to drive positive change in this area. Having an awareness of the impact of education, has led me to pursue a doctorate focused on exploring the mental health literacy of Pacific peoples in Aotearoa NZ. Mental Health Literacy (MHL) is a concept introduced by Jorm and colleagues (1997) and is defined as the knowledge and beliefs about mental health issues, which aid in their recognition, management or prevention. Importantly, MHL is not just concerned with knowledge around mental health and illness, it includes seven key attributes that constitute a MHL framework as seen in Figure 5.

Figure 5

Mental Health Literacy framework



Note. As seen in O'Connor et al. (2014).

Figure 6

A way forward in developing a Pacific Mental Health Literacy Framework

In Aotearoa NZ, there is limited research that examines public knowledge and beliefs around mental health. A key factor that I want to make clear about this research project is that it does not predetermine what should be mental health knowledge. Rather, it explores what our Pacific communities understand about mental health and in what ways mental health education can be enhanced. MHL is not a familiar concept with our Pasifika, but as a concept (Jorm et al., 1997) and framework (O'Connor et al., 2014), it is just one way to explore the variation of people's thoughts, attitudes, and knowledges around various aspects of mental health. In the context of this doctoral research project, I have adapted earlier MHL research to design a research project that explores MHL with our Pacific communities. Therefore, this research does not prescribe what Pasifika mental health literacy is or should be, but rather, it explores the efficacy of developing a Pacific MHL framework. See Figure 6.

Since the introduction of MHL in 1997, research in this area has grown and continues to demonstrate the positive links between MHL and mental health and wellbeing outcomes. However, Jorm (2000; 1997) has recognised the challenge in enhancing MHL and there is international evidence indicating that despite mental illness prevalence being high, help seeking behaviours are low (Jorm, 2012). Further, community MHL research around the world indicate that mental illness recognition is low (Bourget & Chenier, 2007; Cabassa, 2009; Kermode et al., 2010; Klineberg et al., 2011; Mathur Gaiha et al., 2014; Wang et al.,

2013). Although the research results differ greatly from country to country, a common theme is the under recognition of mental illness (Jorm, 2012). Research also highlights that the recognition of depression tends to be higher than other mental illnesses including anxiety disorders and schizophrenia. Interestingly, sometimes people do not identify mental illness using terms such as ‘depression’. Instead, terms such as ‘stress’ or ‘mental health problem’ are used, which can be seen to carry less stigma (Jorm, 2012). Additionally, the use of such terms has been linked with a reduced likelihood to seek help (Jorm et al., 2006).

Jorm (2012) facilitates a crucial conversation around empowering community mental health through enhancing MHL. Highlighting not only the importance of mental illness recognition but knowledge around help seeking and prevention. This includes the ability to provide mental health first aid, which refers to providing support to someone experiencing a mental health challenge or a mental health crisis situation until professional help can be sought or the crisis is resolved (Kitchener & Jorm, 2008). As well as the cultural nuances of MHL that can impact the aforementioned in addition to interventions, health promotional activities, mental health service delivery and education. This is particularly important to highlight as enhancing mental health literacy must incorporate approaches that are sensitive to and supportive of the local conceptualisations of mental health and associated challenges for the targeted population (Jimenez et al., 2012; Kermode et al., 2010; Miller et al., 2021).

These aspects are important to highlight as high prevalence of mental illness, low recognition of mental illness, low access to mental health services, and higher stigmatised attitudes towards mental illness are trends commonly seen among our Pacific communities in Aotearoa NZ. Although limited, some early indications of MHL research in Aotearoa NZ showed that 72% of Māori and 80% of non-Māori correctly identified depression (Marie et al., 2004). More recently in a study with adolescents, approximately 74% and 52% recognised depression and schizophrenia respectively. Additionally, almost half

recommended professional help but the majority suggested engaging with non-professional help (Tissera & Tairi, 2020). Another study with community pharmacists found 84% correctly identified depression (Rimal et al., 2022). Whilst there is no research exploring Pacific mental health under a MHL framework, there is a wealth of research that contributes to knowledge and awareness of Pacific mental health. The PMHA survey developed as part of this doctoral research project aimed to understand Pacific MHL and initial findings indicate that 42% of Pacific peoples identified depression and almost 52% identified anxiety. Please see Section 3 for a more detailed overview of Pacific MHL and PMHA survey findings.

Navigating the way forward

The next part of Section 1 includes a literature review of Pacific mental health research in NZ. The review identified five key areas of Pacific mental health research and the role that education, including MHL, can play in preventing further disparities in mental health outcomes among Pasifika in Aotearoa NZ. Following on from this in Section 2, I have included research drawing upon data from the NZAVS through two studies. Study 1 provides information around the impact of psychological distress over time for Pacific peoples. Study 2 provides information around Pacific cultural values and how they might inform Pacific people's perceptions around mental health. However, neither study provided information on recognition, knowledge, and attitudes around mental health – this is where MHL is relevant. Thus, Section 3 includes research from the PMHA survey and follow-up PMHA e-talanoa. This mixed methods approach delves into Pacific mental health literacy through exploring all facets of the MHL framework in a culturally respectful and responsive way. Lastly, Section 4 provides a light summary and deep discussion of each of the aforementioned pieces of research and its importance and relevance in the scope of mental health, mental health literacy, and our Pacific communities in Aotearoa NZ.

Bridging comments

Pacific mental health is a growing area in Aotearoa NZ that has seen significant change in recent years. Given the ever growing and changing demographic of Aotearoa NZ, especially among our Pacific communities, I started with a review of research around Pasifika mental health in Aotearoa NZ. This was vital to deepening my understanding of this area. It also helped in recalibrating my research compass toward navigating my research as a way of service to our Pacific communities. Therefore, the next part of Section One includes my first piece of research: *Understanding Pasifika mental health in New Zealand – A review of the literature.*

The literature review has been published in a peer-reviewed journal, indicated prior to its presentation in this thesis. As such, it is presented as it was published and represents the information that was available at the time of publication. It is important to note that during the time that the literature review was being carried out, the Government Inquiry into Mental Health and Addictions was underway. Further, He Ara Oranga – The Report of the Government Inquiry into Mental Health and Addictions, was presented to the government in November 2018 and publicly released in December 2018 (R. Paterson et al., 2018). The literature review is meant to be read as a standalone piece and so it was necessary to include context around Pacific peoples in Aotearoa NZ and Pacific mental health. Within the overall thesis this can make for repetitive reading, however, the review provides a unique contribution to Pacific research.

The literature review thematically identified areas of Pacific research. These areas of Pacific research highlight the opportunities within Pacific psychologies, especially across education, services, and community activities to address Pacific mental health disparities. These areas of Pacific research have also strongly shaped my teaching content and application, where I have been able to engage across disciplines to inform how Pacific

psychologies can better respond to the needs of our Pacific communities. A part of this is recognising the role that mental health literacy can play towards the betterment of our communities.

The research article that follows is a copy of a manuscript published in Mai Journal. Please see:

Kapeli, S. A., Manuela, S., & Sibley, C. G. (2020). Understanding Pasifika mental health in New Zealand: A review of the literature. *Mai Journal, 9*(3), 249-271.

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Understanding Pasifika Mental Health in New Zealand - A review of the literature

Abstract

Pasifika mental health continues to be a growing concern in New Zealand. This article reviews and presents research available online concerning the mental health of Pasifika in New Zealand. A comprehensive online literature search was conducted. In total, 967 online articles were identified, and 58 met the criteria to be included in the final review. The review identified overarching research themes related to Pacific mental health in New Zealand, specifically regarding mental health prevalence, mental health services, mental health perceptions, mental health prevention or intervention, and suicide. Further, this review explores the role that education, culturally appropriate services and engaging community activities can play in preventing further mental health disparity among Pasifika in New Zealand.

Preview on terminology

We use the terms *Pacific peoples* and *Pasifika* interchangeably to refer inclusively to a group of peoples in New Zealand that have ethnic roots from many Pacific nations. The terms do not imply homogeneity. Unless a research study specifically uses the term *mental illness* or *mental disorder*, the review uses the terms *mental distress* and *mental health issues/concerns* to broadly refer to diagnosis of a mental illness or any other challenges or experiences with mental health. The choice in terminology was made to shift the focus away from a deficit focused model of health, to those that are more consistent with Pacific views of health and wellbeing (Anae et al., 2002).

Introduction

Pasifika in New Zealand

Research pertaining to Pasifika in New Zealand (NZ) has greatly increased in more recent years, and there is a wealth of research that highlights the powerful levels of health and economic inequity between Pasifika and other ethnic groups in NZ (Ministry of Health, 2021a; Pacific Perspectives, 2019). When we look more closely at research concerning mental health in NZ, annually, we see 1 in 5 New Zealanders experience mental illness, compared with 1 in 4 Pasifika (Foliaki et al., 2006). Pasifika mental health status in NZ is well documented as having higher rates of mental illness, mental distress and suicidal behaviour in comparison to non-Pasifika counterparts (Ataera-Minster & Trowland, 2018; Foliaki et al., 2006). Given the current landscape of Pasifika mental health in NZ, this paper reviews existing research and identifies overarching themes concerning Pasifika mental health in NZ. This paper also unpacks the concept of mental health literacy, which is defined as the knowledge and beliefs about mental illness that aid their recognition, management or prevention (Jorm et al., 1997). A key implication from this review is the need to strengthen research concerning Pasifika mental health and mental health literacy in NZ.

Pasifika (or Pacific peoples) are a young, flourishing, and diverse group in NZ. While currently comprising just over 8% of the NZ population, Pasifika are expected to increase to 10% by 2038 (Statistics NZ, 2018b). There are many Pacific nations, but the four largest groups in NZ are Samoan (47.8%), Tongan, (21.6%), Cook Island Māori (21.1%) and Niuean (8.1%) (Statistics NZ, 2018b). Although members of the NZ Pasifika community are often positioned similarly, the various Pacific ethnic groups possess distinct cultural traditions and histories. This emphasises the need not only for more Pacific research in general but also for more Pacific ethnic specific research. Despite the diversity and complexities of Pacific

research, this paper focuses on Pasifika as a collective group more broadly. However, it is important to acknowledge that this type of collective approach can be limiting as it can overlook the value of each individual Pacific culture. Thus, we propose this paper as only a starting point, which can be used as a platform to advance research concerning mental health and mental health literacy for Pacific ethnic groups in NZ.

Pasifika Mental Health in NZ

NZ currently obtains mental health data from the Project for the Integration of Mental Health Data (PRIMHD). PRIMHD was initiated in 2008 and is a Ministry of Health (2021) national mental health and addiction information collection of service activity and outcomes data for health users. Prior to PRIMHD, data was collected within the Mental Health Information National Collection and stored in the Mental Health Data Warehouse, which was started in 2000. Before this, early records of mental health data were unreliable, more so for Pacific peoples. Up until 1999, inadequate ethnicity recording in official admissions led to inaccurate reporting of mental health service use among Pasifika. In 2006, Te Rau Hinengaro, the first national study on mental health in NZ, was rolled out (Oakley Browne et al., 2006). Prior to 2006, there was little reliable evidence about the mental health prevalence estimates of Pacific peoples. Te Rau Hinengaro, although a one-off study, changed this by providing a more accurate and recent snapshot of mental health prevalence for our Pasifika, as well as the use of health and other related services by Pasifika who experience mental health issues.

The recording of mental health statistics in NZ has significantly progressed, and allows us to paint a better picture of the mental health climate in NZ. It also allows us to determine mental health trends and the potential to drive positive change as a nation moving forward. Many surveys have now been introduced nationwide, providing rich datasets concerning the health and wellbeing of New Zealanders. Some of these surveys are the New

Zealand Mental Health Monitor (NZMHM); the Health and Lifestyles Survey (HLS); the New Zealand Health Survey and the New Zealand Attitudes and Values Survey.

Te Rau Hinengaro was the first and (remains the) largest mental health study in NZ, with responses from 12,992 New Zealanders, including 2,374 Pacific respondents. Te Rau Hinengaro found that almost half of the NZ population met the criteria for a mental illness at some point in their lives. Demographic patterns showed the likelihood of having experienced a mental illness at one point in their lifetime was highest for people who were younger, female, had lower education qualifications, had lower income and lived in areas of higher deprivation. Those of Māori or Pacific ethnicity were also disproportionately represented as having poorer mental health outcomes (Wells et al., 2006). These findings have remained relatively stable across time. The NZMHM was conducted for the first time in 2015 (previously known as the New Zealand Mental Health Survey) and is a nationally representative survey exploring overall mental health and wellbeing in NZ. The findings supported Te Rau Hinengaro findings that suggested females, younger age groups (25–44 years), and Māori and Pasifika experience higher levels of anxiety and depression (Hudson et al., 2017).

Research also suggests that cultural beliefs can influence many aspects of mental health, including how service users express their symptoms, their style of coping, their family and community supports, their understanding of mental health, and their willingness to seek treatment. Likewise, the cultures of the service provider and the service system can influence diagnosis, treatment and service delivery (Jimenez et al., 2012; U.S. Department of Health and Human Services, 2001). Previous work has demonstrated that Pacific mental health beliefs can differ from Western beliefs due to their contrasting perspectives regarding mental distress, cultural identity, and social and familial connection and obligation (Canfield & Cunningham, 2004; Culbertson, 1999; Hezel, 1994; Tiatia-Seath, 2014; Vaioleti, 2006; Vaka,

2014). Higher rates of mental distress among Pacific populations in NZ may reflect greater barriers to accessing mental health services, greater burden of economic inequity and cultural differences in mental health beliefs. Findings from the NZMHM indicate that 85% of NZ Europeans were more likely to say that they were able to identify anxiety and depression, compared with 69% of Māori and 51% of Pasifika (Hudson et al., 2017).

The evidence base concerning Pasifika mental health in NZ (lower recognition and service use) suggests that mental health literacy is lower for Pasifika than for non-Pasifika in NZ. With such a diverse and growing Pacific population in NZ, and the limited mental health literacy research in NZ available to draw upon, a focus on building Pasifika mental health literacy in research and practice could prove to be a positive way forward.

Aim of the review

Pasifika mental health continues to be a growing concern in NZ and understanding our history in order to move forward and drive positive change is important. More recently, online evidence-based research discussing mental health and Pacific peoples in NZ has risen. In supporting such research, the aim of this review is to (a) present online accessible research concerning Pasifika mental health in NZ; (b) identify broader overarching themes related to Pasifika mental health in NZ, which may be conducive to unpacking the concept of mental health literacy for our Pasifika; and (c) recommend future directions for strengthening research concerning Pasifika mental health and Pacific mental health literacy in NZ.

Methods

Search strategy

The search and selection for online articles included in this review were guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement (Moher et al., 2009). The following databases were used to search and select

online articles between January 1980 and April 2019: Google Scholar, Informit, PsycINFO and PubMed. At the time of the 1981 NZ Census, Pacific peoples made up approximately 3% of the population—and since then, the Pacific population has continued to grow (Statistics New Zealand and Ministry of Pacific Island Affairs, 2011). Although Pasifika have called NZ their home since as early as the 1940s (comprising 0.2% of the population at the time), the review begins from 1980 due to the growing prominence of Pasifika in both NZ and research from that time.

Care was taken when choosing search terms. For instance, the term "Pacific" not only describes an ethnic group in NZ; it also describes a region. There are also many derivatives of Pacific peoples, such as Pasifika, Pacific Islander and Polynesian. We were also mindful that there are many specific Pacific ethnic groups in NZ, such as Samoan, Tongan and Cook Island Māori, and such search terms would generate valuable research. However, as a starting point, we were interested in what was accessible from a collective perspective, as is often used in NZ. For these reasons, only the terms "Pacific", "Pacific Islander", "Pasifika", and "Polynesian" were used as search terms.

The term mental health can be best understood as our state of mind, and we all have mental health across a spectrum from poor to excellent (Health Promotion Agency, 2019). There are various derivatives of the term mental health, such as mental illness and mental disorder, which are often located in mental health research despite not aligning with the holistic and strengths-based views of Pasifika mental health (Anae et al., 2002). Another derivative of mental health is *wellbeing* (or *well-being*), which has been best described in the context of Aotearoa NZ when people are able to live fulfilling lives with purpose, meaning, and balance (Government of New Zealand, 2019). Due to its ambiguity and broader reference to overall health, the term wellbeing was excluded. The review also expanded its search to include *depression* and *anxiety* due to higher prevalence of these conditions across NZ

(Ministry of Health, 2021a) and specific focus within the larger research project (this review is part of the lead author's doctoral project). For these reasons, only the terms, "mental health", "mental illness", "mental disorder", "depression" and "anxiety" were used as search terms.

The term "New Zealand" was also included to limit the search to articles that are specific to data or discussions relevant to the population of NZ. The Pacific population is widespread internationally, so it was important to restrict the search to not include any Pacific mental health data from other countries. For example, the term *Asian Pacific Islander* is common in American literature and is a problematic term because it conflates diverse populations, as is the term *Asia-Pacific*, which again is inclusive of various countries and ethnicities who have varying experiences and challenges that are not specific to Pasifika in NZ.

The review focuses on articles related to Pasifika mental health in NZ that were accessible online and were found as part of the selection process. For the purposes of this review, no additional articles (independently searched or known) were added to supplement the results (be they online or offline). For a full overview of the type of search and search terms used within each search database, see Table 2.

Table 2

Overview of search database and search terms used

Search database	Search field(s) used	Search terms used
Google Scholar	Title of the article	"Pacific" AND "mental health" AND "New Zealand"
	Title of the article	"Pacific" OR "Pacific Islander" OR "Pacific peoples" OR "Pasifika" OR "Polynesian" AND "mental health" OR "mental illness" OR "mental disorder" OR "depression" OR "anxiety" AND "New Zealand"
Informit	Title of the article	"Pacific" OR "Pacific Islander" OR "Pacific peoples" OR "Pasifika" OR "Polynesian" AND "mental health" OR "mental illness" OR "mental disorder" OR "depression" OR "anxiety" AND "New Zealand"
	Abstract of the article	"Pacific" OR "Pacific Islander" OR "Pacific peoples" OR "Pasifika" OR "Polynesian" AND "mental health" OR "mental illness" OR "mental disorder" OR "depression" OR "anxiety" AND "New Zealand"
PsycINFO	Title and abstract of the article	"Pacific" OR "Pacific Islander" OR "Pacific peoples" OR "Pasifika" OR "Polynesian" AND "mental health" OR "mental illness" OR "mental disorder" OR "depression" OR "anxiety" AND "New Zealand"
PubMed	Title and abstract of the article	"Pacific" OR "Pacific Islander" OR "Pacific peoples" OR "Pasifika" OR "Polynesian" AND "mental health" OR "mental illness" OR "mental disorder" OR "depression" OR "anxiety" AND "New Zealand"

Selection process

To be included for the review, articles were required to be found through the specified online databases, available to view online (no paper-only articles were included) and relevant to mental health for Pacific peoples in NZ, including Pacific mental health data/prevalence; Pacific mental health services (user and provider); mental health perspectives by Pasifika or related to Pasifika mental health more generally, that is, Pasifika prevention or intervention strategies, or Pasifika self-harm or suicide.

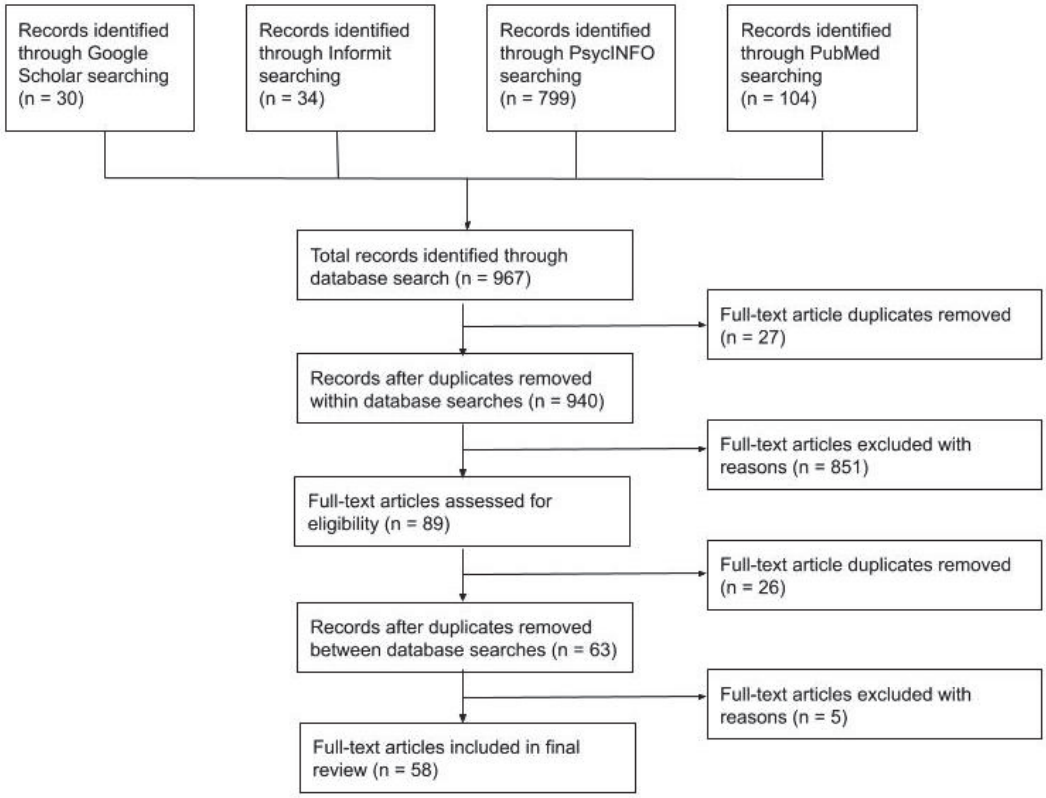
Results

Search results

When searching through Google Scholar, 30 results were returned. The search through Informit returned 34 results. The search through PsycINFO returned 799 results. The search through PubMed returned 104 results. In order to maintain consistency, all 967 online articles were reviewed initially by their title and abstract by the same person to determine their eligibility for the final review (see Figure 7). To be included, articles had to follow the selection process criteria and then all other articles were excluded for review. As mentioned previously, there is more literature on Pasifika mental health than what is included in this review. For the purposes of this review, the focus was on the articles identified through the online database searches that were available to view online only, to determine what was accessible given the terms used. Each study was assessed against its purpose, whether the purpose was achieved, how the researchers carried out the research and its significance within the realm of Pasifika mental health in NZ (see Table 3).

Figure 7

Flow diagram illustrating the study selection process



Literature selection

Initial screening of the titles and abstracts of the 30 results from Google Scholar indicated that 14 articles were duplicates and so were excluded from the review, and one was the recorded minutes from a meeting not specific to NZ so was also excluded from the review, leaving 15 full-text online articles to assess for further eligibility. Initial screening of the titles and abstracts of the 34 results from Informit found that 13 articles were duplicates, six articles were not Pacific specific and thus deemed irrelevant, one article was based on drug prescription and deemed irrelevant, and three articles were based on data outside of NZ. These 23 articles were excluded from the review, leaving 11 full-text online articles to assess for further eligibility. Of these 11, five articles were

not focused on Pacific peoples but did contain Pacific data, so were included for further review. After initial screening of the titles and abstracts of the 799 results from PsycINFO, 768 articles were excluded due to either not being Pacific specific, not specific to Pasifika in NZ or not related to mental health. This left 31 full-text online articles for further eligibility. Of these 31, 10 articles were not focused on Pacific peoples but did contain Pacific data, so were included for further review. After initial screening of the titles and abstracts of the 104 results from PubMed, 72 articles were excluded due to either not being Pacific specific, not specific to Pasifika in NZ, or not related to mental health. This left 32 full-text online articles for further eligibility. Of these 32, four articles were not focused on Pacific peoples but did contain Pacific data, so were included for further review.

When the results from all searches (89 full-text online articles) were combined, 26 additional duplicates were identified and were also removed from the review, leaving 63 full-text online articles to assess for further eligibility. Of these 63 full-text online articles, 20 were not focused on Pacific peoples but did contain data on Pacific peoples, and after further review of the articles, they were included for the review. After further review of all 63 full-text online articles, one article was unable to be located online, and four articles were deemed irrelevant based on the data provided, resulting in 58 full-text online articles being reviewed. Brief descriptions of each online article included in this review are provided in Table 3.

Table 3

Studies included in final review

Reference	Purpose of the research	How the research data was collected	Significance of the research on a sale of 1 (minor) to 10 (important)	What key theme does this research relate to
Abbott & Williams, 2006	To assess the prevalence and risk factors of postnatal depression for mothers of Pacific infants	Data extraction from Pacific Island Families Study (PIFS)	10	Mental illness prevalence
Agnew et al., 2004	To examine Pacific models used in mental health services	Pacific fono meetings	10	Mental health services
Ape-Esera et al., 2009	To scope the future needs of the NZ Pacific primary care workforce	Interviews	10	Mental health services
Apelu, 2008	To explore experiences of Pacific Community Mental Health Nurses (PCMH)	Interviews	8	Mental health services
Ataera-Minster & Trowland, 2018	To highlight key findings of mental health and wellbeing of Pacific peoples in NZ	Data extraction from the NZ Mental Health Monitor (NZMHM) and Health Lifestyles Survey (HLS)	10	Mental illness prevalence; Perceptions of mental health
Baxter et al., 2006	To compare ethnic groups 12-month prevalence of mental disorders and 12-month treatment contact	Data extraction from Te Rau Hinengaro (NZ mental health survey)	10	Mental illness prevalence
Beautrais et al., 2006	To describe prevalence and correlates of suicidal behaviour from 2003 to 2004	Data extraction from Te Rau Hinengaro (NZ mental health survey)	10	Suicide
Bécares & Atatoa-Carr, 2016	To determine experiences of discrimination pre and post birth for mother and partner, and its	Data extraction from the Growing Up in NZ Study (GUiNZ)	10	Mental health services; Mental illness prevalence

	effect on mother's prenatal and postnatal mental health			
Bridgman, 1997	To examine statistics for hospital admissions related to mental illness	Mental health data extracted from the Ministry of Health	10	Mental illness prevalence
Brunton et al., 2005	To investigate anxiety before, during and after psychiatrist testing in a Waikato breast cancer screening pilot	Data extraction from pilot developed survey	8	Mental health services; Mental illness prevalence
Bush et al., 2009	To examine statistics and perspectives on developing a child, adolescent and family mental health service (CAMHS)	Clinicians/researchers share own perspectives	10	Mental health services
Bush et al., 2005	To compare psychiatrist perspectives on the Western meaning of self with a Samoan view of self, and discuss the implications for the practice of psychiatry with Samoans in NZ	Focus group of psychiatrists	10	Mental health services
Butler et al., 2003	To describe reported problems with damp and cold housing and their association with maternal health	Data extraction from Pacific Island Families Study (PIFS)	10	Mental illness prevalence
Cowley-Malcolm et al., 2009	To determine the prevalence of disciplinary and nurturing parenting practices used with Pasifika children at 12 months, and the demographic, maternal and lifestyle factors associated parenting practices	Data extraction from Pacific Island Families Study (PIFS)	8	Mental illness prevalence
Currey, 2017	To develop a framework to identify factors that influence sustainability and success within Pasifika mental health	Talanoa (interviews)	8	Mental health services
Dash, 2015	Doctorate thesis exploring deliberate self-harm behaviours of Pasifika in NZ	Talanoa (interviews)	10	Mental health services
Dash et al., 2017	To explore perspectives from Pasifika professionals working in the areas of mental	Talanoa (interviews)	10	Mental health services

	health, addiction and social work in relation to self-harm behaviours			
Foliaki, 1997	To explore the impact that migration to NZ has on Tongan mental health	Researcher shares own review and perspective	10	Perceptions of mental health
Foliaki et al., 2006	To show 12-month prevalence of mental illness and 12-month treatment of Pasifika	Data extraction from Te Rau Hinengaro (NZ mental health survey)	10	Mental illness prevalence; Mental health services
Gao et al., 2007	To explore associations between the timing and persistence of mental psychological distress and child behaviour in a cohort of 2-year-old children	Data extraction from Pacific Island Families Study (PIFS)	10	Mental illness prevalence
Gao et al., 2010	To examine the association between maternal intimate partner violence (IPV) and postnatal depression (PND) 6 weeks postpartum	Data extraction from Pacific Island Families Study (PIFS)	10	Mental illness prevalence
Gao et al., 2010	To examine maternal IPV at 6 weeks and 24 months postpartum and associated maternal mental health in Pasifika families with 2-year-old children	Data extraction from Pacific Island Families Study (PIFS)	10	Mental illness prevalence
Goodyear-Smith et al., 2005	To determine ethnic differences in response, acceptance, and desire to address problems by the multi-item screen tool (MIST), which is a response to screening on lifestyle behaviours and mental health issues	MIST survey	7	Mental illness prevalence
Gunther, 2011	To discuss mental health from a nursing perspective	Clinician/researcher shares own perspectives	10	Mental illness prevalence; Mental health services
Han et al., 2015	To examine whether being an organiser of a community program improves personal agency and mental health outcomes among low-income Pasifika youth	Counties Manukau Health initiated a community organising campaign led and run by Pasifika youth; then used interviews,	10	Prevention/intervention

		focus groups, and pre-and-post campaign surveys		
Ioasa-Martin & Moore, 2012	A literature review exploring knowledge about adherence to antipsychotic medication for Samoan NZers	Literature review	9	Prevention/intervention
Kokaua et al., 2009	To show 12-month prevalence of mental illness and 12-month treatment contact of NZ-born vs Pasifika-born Pacific peoples in NZ	Data extraction from Te Rau Hinengaro (NZ mental health survey)	10	Mental illness prevalence; Mental health services
Kupa, 2009	To describe Te Vaka Atafaga, a Tokelauan health model	Researcher's perception and explanation of how the model was developed	10	Prevention/intervention; Perceptions of mental health
Loan et al., 2016	To describe depression in Tokelauans in NZ, to assist with diagnosis and treatment	Talanoa (interviews)	10	Perceptions of mental health
Lotoala et al., 2014	To explore how ethnicity affects health	Data extraction from the Health, Work & Retirement Survey	9	Mental illness prevalence
Marsters & Tiatia-Seath, 2019	To explore perceptions and experiences of emotions and mental wellbeing for Pasifika male rugby players	Interviews	10	Perceptions of mental health
Masoe & Bush, 2009	To describe the background of Pasifika infant mental health (a new field) and its importance for Pasifika in NZ	Researcher shares own perspective	10	Perception of mental health
Oakley Browne et al., 2006	To estimate the lifetime prevalence and projected lifetime risk at age 75 years of DSM disorders in NZ	Data extraction from Te Rau Hinengaro (NZ mental health survey)	10	Mental illness prevalence
Paterson et al., 2018	To examine Pasifika mothers and housing issues and its relation to psychological distress	Data extraction from Pacific Island Families Study (PIFS)	10	Mental illness prevalence

Paterson et al., 2014	To investigate the associations between individual, maternal, cultural and sociodemographic variables with depressive symptoms of Pasifika 9-year-old children	Data extraction from Pacific Island Families Study (PIFS)	10	Mental illness prevalence
Paterson et al., 2016	To examine the prevalence of psychological distress in Pasifika mothers and the socio-demographic and lifestyle factors associated with psychological distress	Data extraction from Pacific Island Families Study (PIFS)	10	Mental illness prevalence
Paterson et al., 2013	To examine (1) prevalence of behaviour problems at 2, 4 and 6 years of age; (2) relationships between maternal, cultural and sociodemographic factors with behavioural problems	Data extraction from Pacific Island Families Study (PIFS)	10	Mental illness prevalence
Pearson et al., 2013	To explore whether socioeconomically isolated and deprived areas experienced increased levels of anxiety/mental disorder treatment	Spatial isolation measure	10	Mental illness prevalence; MH services
Pernice & Brook, 1994	To investigate and compare mental health levels among refugees and immigrants living in NZ	Survey (including Hopkins Symptom Checklist-25)	10	Mental illness prevalence
Pernice & Brook, 1996	To investigate and compare mental health levels among refugees and immigrants living in NZ	Survey (including Hopkins Symptom Checklist-25)	10	Mental illness prevalence
Pernice & Brook, 1996	To investigate Sluzki's 1986 mental health model suggesting that migrants have an initial symptom-free and euphoric phase after arrival in the country of settlement, followed by a crisis stage	Survey (including Hopkins Symptom Checklist-25)	10	Mental illness prevalence
Peters, 2013	To outline mental health priorities for politicians	National office perspective	7	Prevention/intervention
Pickering, 2019	To investigate the relationship of problem gambling with mental health risk factors and	Data extraction from Pacific Island Families Study (PIFS)	9	Prevention/intervention

	how they impact upon the mental wellbeing of Pasifika women			
Scott et al., 2011	To investigate whether the presence of a chronic physical condition influences the likelihood of seeking treatment for a mental health problem	Data extraction from the NZ mental health survey	9	Mental illness prevalence; Mental health services
Simpson et al., 2003	To determine whether there are differences in the rates of major mental disorders between Māori and Pasifika	Interviews and survey	9	Mental illness prevalence
Stokes et al., 2018	To determine the prevalence of multi-morbidity and polypharmacy in a general practice	Cross-sectional data collection from medical records of a Dunedin general practice	7	Mental illness prevalence
Suaalii-Sauni et al., 2009	To explore Pasifika perceptions and experiences of the theory, practice and utilisation of Pasifika mental health services	Interviews and focus groups with service providers, mental health service users, and family members of mental health service users	10	Mental health services
Tamasese et al., 2005	(1) To develop an appropriate measure to investigate Samoan perspectives on mental health issues (2) To apply a measure to identify cultural values and understandings important in the care and treatment of Samoan people with mental health issues	Focus groups	10	Perceptions of mental health; Mental health services
Tautolo et al., 2009	To determine the prevalence of psychological distress among fathers during the first 6 years of their child's life	Data extraction from Pacific Island Families Study (PIFS)	9	Mental illness prevalence
Tiatia-Seath, 2014	To discuss the engagement of Pasifika in mental health services and Pasifika strategies for suicide prevention	Interviews with Samoans who had made a suicide attempt and/or suicide	9	Mental health services; Suicide

		ideation and engaged in a mental health service		
Tiatia & Coggan, 2001	To describe trends in Pasifika suicide data	A review of death registration data (intentional self-harm) from 1996 to 2013	9	Suicide
Tiatia-Seath et al., 2017b	To describe the trends in Pasifika suicide data	Data extraction from death registration data (indicating intentional self-harm) from 1996 to 2013	9	Mental illness prevalence; Suicide
Tutty & Goodyear-Smith, 2014	To examine a Chronic Care Management (CCM) programme for depression of Pasifika in a predominantly Pasifika practice	Audit of CCM depression programme used by Total Healthcare Otara (THO)	9	Mental health services
Underwood et al., 2017	To explore whether the risk factors differ for depression symptoms during pregnancy and/or post-birth	Data extraction from GUiNZ	10	Mental illness prevalence
Vaka et al., 2016	Using talanoa to explore Pasifika mental health through seven Tongan groups: youth, mental health service users, families of mental health service users, families without mental health service users, women, community leaders, men	Talanoa (interviews)	10	Perceptions of mental health
van Lier et al., 2017	To explore the association between home gardening and dietary behaviours, physical activity, mental health and social relationships among secondary school students	Data extraction from GUiNZ	10	Prevention/intervention
Waldie et al., 2015	To examine depression during pregnancy	Data extraction from GUiNZ	10	Mental illness prevalence
Wells et al., 2006	To estimate the prevalence and severity of anxiety, mood, substance and eating disorders	Data extraction from Te Rau Hinengaro (NZ mental health survey)	10	Mental illness prevalence

Description of the literature

After each article was reviewed, an overarching theme was determined (in some cases, an article had more than one theme). An in-depth look at each theme and associated research is presented in greater detail in this review. We appreciate that each research theme could be presented as a research paper on its own and encourage this in future research. Research themes were drawn upon using reflexive thematic analysis, taking both an inductive and deductive way of theme development (Braun & Clarke, n.d.). For further reading on thematic analysis, please see Braun and Clarke (n.d., 2013). Common core themes identified across all articles included (a) prevalence of Pasifika mental distress, (b) Pasifika mental health services, (c) Pasifika perceptions of mental health, (d) Pasifika mental health prevention and intervention and (e) Pasifika suicide.

Theme: Prevalence of Pasifika mental distress

There were 26 online articles (48%) that discussed the prevalence of Pasifika mental distress, indicating that a larger proportion of research has been developing around this theme. Prior to 2000, Pasifika were thought to have relatively low levels of mental distress (otherwise referred to as mental illness or mental disorder), which may in part be due to the unreliable health coding during this time. However, Te Rau Hinengaro found that Pasifika experienced mental distress at much higher rates than the overall NZ population (J. Baxter et al., 2006; Foliaki et al., 2006; Oakley Browne et al., 2006; Wells et al., 2006).

Since then, research examining a variety of areas within Pasifika mental health has painted much the same picture. Pasifika children are more likely to experience internalising (e.g. inhibition, withdrawal) and externalising problems (e.g. aggression, hyperactivity) if their mothers are experiencing psychological distress and/or maternal depression (Gao et al., 2007; J. Paterson et al., 2013, 2014). Further research with Pasifika mothers found that

psychological distress is an imminent concern and is a greater risk for mothers who experience intimate partner violence (Gao, Paterson, Abbott, Carter, & Iusitini, 2010; Gao, Paterson, Abbott, Carter, Iusitini, et al., 2010) or have housing challenges (Butler et al., 2003; J. Paterson et al., 2018). Additional and important factors to consider for Pasifika mothers include stressful life events, postnatal depression, marital status, maternal education, ethnicity and cultural alignment (Abbott & Williams, 2006; Bécares & Atatoa-Carr, 2016; J. Paterson et al., 2016; Underwood et al., 2017; Waldie et al., 2015). Further research found that Pasifika fathers were more likely to experience psychological distress in the first 6 years of their child's life, if they were a heavy smoker, separated or single, unemployed and were of Tongan or Cook Island Māori descent (Tautolo et al., 2009). As a whole, parenting styles which were lower in nurturing and more discipline focused was associated with postnatal depression (Cowley-Malcolm et al., 2009).

Further research suggests that mental health varies by Pacific ethnic background and cultural alignment and should remain a key focus of future Pasifika mental health research and services. Pacific migration to NZ has long been perceived as the journey to the land of milk and honey, but this idea and the sense of associated euphoria has since been debunked (Pernice & Brook, 1996a, 1996b). Mental distress was reportedly lowest for Pasifika migrants who migrated to NZ as adults (adult migrants) in comparison with Pasifika migrants who migrated as children (child migrants) and NZ-born Pasifika (Kokaua et al., 2009; Pernice & Brook, 1994). This builds on the "healthy migrant effect", suggesting that only migrants in "good health" have been able to migrate to NZ (Oakley Browne et al., 2006). However, another study indicated that older Pasifika reported poorer mental health, with no effect found when controlling for country of birth (Lotoala et al., 2014). This in turn raises the question of whether the measure(s) being used to assess mental health rates are entirely appropriate for our diverse Pasifika population.

A more recently published report, *Te Kaveinga*, provides an overview of Pasifika mental health and wellbeing in NZ and echoes all prior research in which Pasifika reported higher levels of mental health concerns but these concerns were also higher in NZ-born Pasifika (Ataera-Minster & Trowland, 2018). Cross-sectional data also indicated that the most common mental health issues for Pasifika are anxiety and depression and that 1 in 10 Pasifika are likely to have coexisting mental and physical health concerns (Stokes et al., 2018). These higher prevalence rates of mental distress for Pasifika compared with the total NZ population are not a new trend and have remained relatively stable across time. It is then important to look beyond the statistical data and understand the services that provide mental health support to our Pasifika.

Theme: Pasifika mental health services in New Zealand

Twenty online articles (34%) discussed Pasifika mental health services, indicating that a moderate proportion of research has been developing around this theme. The studies included in this theme were published within the period from 1997 to 2017. Across the 20-year time span, the general finding was that mental health service use by Pasifika is low but lowest in older Pasifika migrants. It was also found that NZ-born Pasifika and child migrants have higher levels of mental distress but are also more likely to use mental health services than older Pasifika migrants (Bridgman, 1997; Foliaki et al., 2006; Kokaua et al., 2009). From a cross-cultural perspective, a depression programme received greater participation rates from Cook Island Māori service users, and lower participation from Samoan and Tongan service users (Tutty & Goodyear-Smith, 2014). Understanding why these groups access mental health services differently is important and should remain a priority focus in future research, particularly regarding developing Pacific ethnic-specific research because Pasifika are not a homogeneous

group. This will help to shape and develop more ethnic-specific Pacific mental health services, as the pan-Pacific approach does not work for all Pasifika.

Another common theme that was highlighted is the need for culturally appropriate health services that serve and support our Pasifika communities. The visible disconnection between Pasifika and Western understandings of mental health is believed to be an important factor in the lower mental health service use by Pasifika (Agnew et al., 2004; Gunther, 2011). Western tools, such as the *Diagnostic and Statistical Manual of Mental Disorders*, have been described as an inappropriate diagnosis tool for Pasifika, because their criteria do not align with how Pasifika view and understand mental health (Bush et al., 2009). However, a more meaningful tool for Pasifika and their families explores mental health holistically, drawing upon a Samoan concept of the relational self. It incorporates vā, family, culture and spirituality as part of a culturally responsive mental health service model. This is important because it can contribute to greater recovery rates (Bush et al., 2005, 2009; Tamasese et al., 2005). Other important factors to consider include the involvement of family or other support networks and access to culturally safe and responsive practices conducted by mental health staff (Suaalii-Sauni et al., 2009).

Pasifika who work in mental health services have found that the complex service infrastructure and the use of language are major contributors to practice constraints (Apelu, 2008), as well as the lack of organisational sustainability, particularly from a Pasifika perspective (Currey, 2017). This further highlights the importance of cultural sensitivity and the input and collaboration required from both Pasifika and non-Pasifika leaders to not only enhance the mental health services in NZ but create a safe and inclusive space for all service users. Critical success in this area may be achieved through several ways: effective communication, shared values and beliefs, stakeholder engagement and understanding, and building strong relationships (Currey, 2017). Developing a diverse mental health workforce

that puts a focus on attracting, retaining and supporting Pasifika employees is also important for the future not only of our Pasifika but also our NZ.

As a youthful population, young Pasifika are expected to thrive in the coming generations and a priority focus for young Pasifika is essential because Pasifika growth means increasing demands on Pacific health services. There are significant differences in attributes, needs and values between older and younger Pacific peoples, and the high mental distress rates among those born in NZ signal the urgent need to address the impact of the influence of Western values on NZ-born Pasifika youth (Ape-Esera et al., 2009). Pacific health and wellbeing models have long been critiqued for privileging Pacific-born adult perspectives, as well as adopting a pan-Pacific approach. For example, the Fonofale model, developed between 1970 and 1995, applies a pan-Pacific exploratory approach towards Pasifika health in NZ, including elements of mental health (Foliaki, 2001). Since the Fonofale model was developed, there has been a significant growth in Pasifika communities in both size and diversity (i.e., age, country of birth, ethnicity), and we cannot expect such models to be stable or enduring. In light of this, there is a need to develop models that account for age (young Pasifika) and ethnicity (Pacific ethnic specific) into new or existing models.

Theme: Pasifika perceptions of mental health

Eight online articles (14%) discussed Pasifika perceptions of mental health, indicating that the development of research around this theme is emerging. The *Te Kaveinga* report (Ataera-Minster & Trowland, 2018) drew upon NZMHM and HLS data and provided a more rounded snapshot of contemporary Pasifika mental health and wellbeing. *Te Kaveinga* echoes prior research that found that Pasifika report higher psychological distress and depressive symptoms than non-Pasifika in NZ. It also reported that mental health stigma is high for Pasifika and that some Pasifika do not

know where to seek help for mental distress. However, Pasifika continue to maintain well-established social and cultural connections, but cultural connectedness is lower in multi-ethnic Pasifika. Clear suggestions from the report include focusing on removing barriers to access, strengthening the Pasifika mental health workforce and exploring how cultural identity can inform a strengths-based lens to develop Pasifika mental health approaches.

From a Pacific perspective, using our culture to understand mental health is not only important but essential. Tamasese and colleagues (2005) discussed how the Samoan self can be used to understand the Samoan view of mental health as it aims to foster the relational, spiritual, physical and mental aspects of the self. In this way, it suggests that there are elements within Pasifika mental health that can only be addressed appropriately and safely when considering elements of culture. Further research within a sporting context presented similar ideas when exploring perceptions of Pasifika young male rugby players (Marsters & Tiatia-Seath, 2019). The importance of mental wellbeing being addressed in a holistic and vā-based way was highlighted, as was the notion that support, a balanced lifestyle, athletic performance and personal development outside of sports are integral to fostering personal wellbeing.

Other work explored a Pacific ethnic approach, and one in particular examined how Tongans define and describe mental health (Vaka et al., 2016). There were distinct differences between Tongan perceptions and constructions of mental health depending upon the culture and society in which they grew up. For example, Tongan men who were born in Tonga were more likely to describe mental distress as a Tongan construction, meaning that mental distress was aligned with a curse, spirituality or non-compliance with society. On the other hand, Tongan youth who were child migrants or born in NZ were more likely to describe mental distress from a biopsychosocial perspective. Similar concepts were seen

when exploring Tongan migration to NZ (Foliaki, 1997). However, Foliaki (1997) suggested that an upbringing in the Pacific can have a protective function against mental illness as stress is likely to be on the lower end of the spectrum.

Another ethnic-specific approach explored the Tokelauan view of depression and highlighted that the Tokelauan language does not have a word equivalent to the term depression. However, a similar health issue (based upon the Western description of depression) does exist, and is characterised by extreme sadness (Loan et al., 2016). From a Western and biomedical framework, we know that there is a lot more to consider with depression, and given the loss of meaning through translation, this could be a major factor when diagnosing or treating someone with depressive symptoms. Also worth mentioning is the privacy and pride that are important in the Tokelauan culture (and many other Pacific cultures) that may present further barriers to recognising sadness, and depression.

A common way of sharing perceptions in a Pasifika context is the use of talanoa, a technique readily used across these studies. Talanoa is an open way of discussing complex topics and is prominent in Pacific research (Vaioleti, 2006). Using talanoa is a very effective way of gathering research from Pasifika communities, as often quantitative measures can be confining and int turn misrepresent Pacific perspectives. Conversely, talanoa can be wide-ranging and has no boundaries when addressing a topic (Vaka et al., 2016), allowing researchers to unpack the rich understandings that sometimes, other research methods may not tap into. Unlike quantitative measures, talanoa (a qualitative approach) can be a time-consuming research method, but that should not detract Pasifika research from its use. If used together, both quantitative and qualitative measures can be useful in enhancing Pasifika mental health research and form the basis of a valuable and more meaningful union in future research.

Although each study differed in context, the commonality shared by these online articles is that the perceptions by Pasifika of mental health are defined in a holistic manner and are heavily influenced by and rooted in their vā, culture, and spirituality.

Theme: Pasifika strategies for mental illness prevention and intervention

Seven online articles (12%) discussed Pasifika mental distress prevention or intervention, indicating that the development of research around this theme is emerging. The key areas identified across these studies were the potential to develop culturally appropriate tools and services (Kupa, 2009; Peters, 2013), education (Brunton et al., 2005; Ioasa-Martin & Moore, 2012; Pickering, 2019) and the use of engaging community activities (Han et al., 2015; van Lier et al., 2017) to reduce the impact of mental health risk factors and enhance overall mental health. These ideas have the potential to be used as a preventative approach to improve mental health and develop agency over health among Pasifika, even more so for Pasifika youth who are at greater risk. The lack of prevention and intervention research highlights a crucial opportunity in Pasifika mental health research, where a greater preventative investment could be seemingly worthwhile.

Theme: Pasifika Suicide

Six online articles (10%) discussed Pasifika suicide, indicating that the development of research around this theme is limited but emerging. Research data tells us that Māori and Pasifika had a higher risk of suicidal planning and attempts. There was a greater risk of suicidal ideation for those who are younger and from lower socioeconomic backgrounds—demographics that are notable within the Pasifika population in NZ (Beautrais et al., 2006; Tiatia & Coggan, 2001). A review of the death registration data for intentional self-harm across 1996–2013 showed there were 308 Pasifika deaths, comprising 4.1% of the total deaths reported (Tiatia-Seath, Lay-Yee, &

Randow, 2017b). However, self-harm is often acknowledged as a behaviour that can be separated from suicide, and self-harm diagnosis criteria should be reviewed to incorporate definitions and recovery plans that are relevant to Pasifika (Dash, 2015; Dash et al., 2017). Several key factors were also highlighted regarding mental health service engagement, which should be considered for strategic planning towards suicide prevention, including issues of cultural competency, importance of family involvement, dichotomous views of Western and traditional beliefs concerning mental illness, and unsuccessful engagement of Pasifika youth (Tiatia-Seath, 2014). These key factors are reiterated throughout much of the research and are still extremely relevant. Tiatia-Seath and colleagues (2017b) have also highlighted the need for safe, ethical and culturally appropriate suicide messaging, the importance of addressing both mental health and addictions in suicide prevention, and the need for Pacific ethnic group data.

Discussion

Summary of results and recommendations

The results were presented across five themes found in the literature to provide a broader understanding of Pasifika mental health and its current positioning in contemporary NZ: (a) prevalence of Pasifika mental distress, (b) Pasifika mental health services, (c) Pasifika perceptions of mental health, (d) Pasifika mental health prevention and intervention and (e) Pasifika suicide. These themes are particularly important to consider for future research, as they highlight not only an opportunity but a need for more refined Pasifika mental health research, in this case, increasing the research capacity of Pasifika perceptions of mental health (14% of research articles), Pasifika mental health prevention and intervention (12% of research articles) and Pasifika suicide (10% of research articles). Enhancing the capacity of Pasifika mental health research is vital because Pasifika narratives are lacking. Pacific research provides an understanding

of cultural and social insight that is fundamental to our research being meaningful for our Pacific peoples, and the wider community. As the lead author, I hope that this paper serves as both an announcement and a reminder to our Pacific communities. To those who understand the importance of holding the pen and generating knowledge and see the importance of pursuing a career in research—we need more Pasifika telling our stories, to ensure that Pacific voices are heard in addressing matters concerning Pacific communities.

We know that Pasifika experience mental health related concerns at higher levels than the general NZ population and that Pasifika who experience serious mental health related concerns are less likely to access treatment than the total NZ population (Ataera-Minster & Trowland, 2018). Groups that experience greater risk include young Pasifika, NZ-born Pasifika and Pasifika child migrants (Ataera-Minster & Trowland, 2018). As mentioned, the higher prevalence rates of mental health related concerns for Pasifika compared with the total NZ population are not a new trend, and they have remained relatively stable across time. As an emerging researcher applying a critical lens, I believe this to be further perpetuated by the lack of action-focused research—we need research that not only inspires and educates but informs the prevention space; otherwise, why do it at all?

The literature also documents that Pasifika have different views and understandings of mental health, particularly in reference to a Westernised idea of mental health. This influences not only behaviours but also access to services (Agnew et al., 2004; Ataera-Minster & Trowland, 2018; Faleafa, 2020; Gunther, 2011; Tamasese et al., 2005). The difference in access across Pacific groups alone is significant, for example, differences between Pacific ethnic groups (Loan et al., 2016; Tutty & Goodyear-Smith, 2014), difference between NZ-born and Pacific-born (Foliaki, 1997; Vaka et al., 2016), difference between genders (J. Paterson et al., 2018; Tautolo et al., 2009) and difference across ages (Agnew et

al., 2004; Ataera-Minster & Trowland, 2018). Again, we know these differences exist, but we need to better understand why, which is a prime area for Pacific-centric research methodologies and frameworks. Eurocentric driven survey (quantitative) and interview (qualitative) data collection does not always serve our Pasifika communities or provide the rich and contextual information that will allow us to better understand Pasifika mental health.

Research methods used to obtain Pacific data need to be more ethnically and culturally appropriate for Pasifika, including using a more holistic approach so that the information output serves our communities better (Agnew et al., 2004; Ministry of Health, 2020b; R. Paterson et al., 2018), especially as we often adopt a collective approach to Pacific research, which further highlights the dire need for more Pacific ethnic research. These factors continue to be a serious action point for the mental health sector, future Pacific research, Pacific community initiatives and policy planning (Ministry of Health, 2020b; R. Paterson et al., 2018).

We must remember that when working with research data, or specifically quantitative methods, each number represents a Pacific voice—a Pacific family. Often, the narratives or the context behind these numbers is missing. It is easy to make assumptions when working only with quantitative data. Infusing qualitative methods enables our Pacific peoples and their families to narrate their own stories and make our research more meaningful. As seen in previous Pacific research (Mila-Schaaf, 2010; Tiatia-Seath, Lay-Yee, & von Randow, 2017), combining both quantitative and qualitative methods (such as talanoa) is a promising avenue for future Pasifika mental health research, especially as talanoa aligns more strongly with Pacific cultural values (Ponton, 2018; Vaioleti, 2006). As mentioned, this review forms part of a larger research project—the lead author's doctoral research dissertation. It was planned for this research project to combine quantitative (survey) and qualitative (talanoa) methods. The review has only affirmed the benefits of using this approach (70% of the reviewed

research used qualitative methods, including talanoa). Although no articles included in the review involved a combination of quantitative and qualitative methods, given the evidence of each and that of prior research, there is no doubt that such a combination can provide good practice models for future work—one that the larger research project aims to also provide.

In addition, more work needs to focus on how the mental health sector can develop a more inclusive framework, to account for a diverse service team as well as a diversity in service users (Kupa, 2009; R. Paterson et al., 2018; Peters, 2013). With the expected growth of our Pasifika population, there will be an increased demand on mental health services. *He Ara Oranga*, a report of the Government Inquiry into Mental Health and Addiction (R. Paterson et al., 2018), highlighted that Pacific peoples voiced the need for a Pacific way of enabling Pacific health and wellbeing through incorporating a Pacific "way of doing life", including identity, spirituality, languages, connectedness, nutrition, physical activity and healthy relationships. Investing in new and culturally relevant mental health services to meet the needs of our Pasifika is increasingly important (Faleafa, 2020; Le Va, 2017; R. Paterson et al., 2018). See Faleafa (2020) for further reading on the considerations for design and delivery of Pacific mental health and addiction services, including being Pacific led, family centred, holistic, integrative of clinical-cultural elements, community-based and connected. All future planning should focus on improving mental health and wellbeing not just for our Pacific communities but for all communities in NZ.

Based on the review, work on mental health prevention and intervention strategies is emerging. We know that there are key protective factors that enhance Pasifika mental health, including cultural identity, spirituality, healthy relationships, family support, communication and strong participation in social activity (Beautrais et al., 2006; Le Va, 2014b). We also know there are a number of risk factors linked to poorer mental health and suicide, such as poverty, discrimination and lack of social support (Beautrais et al., 2006; Kapeli, Manuela,

Milojev, et al., 2020; Kapeli, Manuela, & Sibley, 2020a; Krynen et al., 2013). Strategies focusing on developing culturally appropriate tools and services (Kupa, 2009; Peters, 2013), enhancing education (Brunton et al., 2005; Ioasa-Martin & Moore, 2012; Pickering, 2019) and developing engaging community activities (Han et al., 2015; van Lier et al., 2017) could potentially challenge these risk factors.

For instance, education can influence employment, potentially changing unemployment (and poverty as risk factors) to employment (protective factor). Additionally, a focus on growing the Pasifika mental health workforce by promoting a career in mental health as early as in high school could be an effective strategy. Faleafa and colleagues (2019) have identified a series of strategies for increasing the number of Pasifika psychologists and other mental health and addiction workers as an enabler to addressing inequitable mental health outcomes and building culturally appropriate services. Further to education, building mental health literacy in our Pacific communities could also be a central factor. To do so, we need a research base that not only supports the development of a mental health literacy framework but also informs it. Enhancing Pasifika mental health literacy could equip Pasifika and their families with the knowledge, tools and skills to enhance their overall mental health and wellbeing. Le Va (n.d.) has recently developed the Mental Wealth Project (MWP), a mental health literacy education programme for Pasifika young people and their families. As far as we are aware, the MWP not only addresses one of our most at-risk groups (young Pasifika) but also builds upon the review's key focus areas for mental health prevention and intervention strategies (culturally appropriate, education, engaging community activity). The MWP is a promising programme, and because of its focus on young Pasifika, it has the potential to have lifelong effects.

When discussing the prevention and intervention space, Pasifika suicide cannot go unmentioned. We know that Pasifika are at higher risk of suicidal planning and attempts

(Beautrais et al., 2006; Tiatia & Coggan, 2001) and make up a significant proportion of NZ's deaths by suicide (Tiatia-Seath, Lay-Yee, & Randow, 2017b). Much of what has already been discussed and proposed for future direction also applies to Pasifika suicide. This includes building our capacity both in research and on the front line—to develop more relevant diagnostic and recovery tools for Pasifika; to develop services that are culturally appropriate, holistic and provide support across the lifespan; and to develop more Pacific ethnic data. Again, we echo the need for mental health research and a mental health workforce that is Pacific led, Pacific governed and Pacific strong.

Strengths and limitations of the review

This review presents a clear picture of the available evidence-based online resources. The five overarching themes identified in the literature provide information on the research priorities and community needs that have been the subject of focus for the past 20 years. By identifying the core areas of research, future researchers and practitioners can more readily identify other areas that may need further development and focus.

The review did not take any additional research material into account, other than what was located through online database searching (as outlined in the methods section). Although a limitation, this is also a strength. Despite the smaller research pool to draw from in this review, it highlights the difficulty in locating Pasifika mental health research. This may in part be due to the terminology included in the search methods of this review. We recommend that those interested in understanding Pasifika mental health in NZ become familiarised with the diversity of search terms that help identify relevant literature. An example of this might be to include other derivatives of mental health, such as wellbeing or mental wellness.

As highlighted, we have focused on Pasifika as a collective group more broadly. In doing so, the review has missed relevant mental health research that otherwise would have

been picked up through an ethnic specific review, that is, by using the search terms "Samoan", "Tongan" or "Cook Islands"'. These key search terms may hold valuable research that is overlooked by taking the broad Pasifika approach. At the same time, each Pacific ethnic group could in fact have its own literature review and could be a prime focus for future research in this area.

As mentioned, this review forms part of the lead author's doctorate project. The wider project investigates the link between mental health literacy and mental health outcomes for Pasifika and explores the potential to improve Pasifika mental health literacy in order to enhance mental health and wellbeing for Pasifika. This not only adds strength to Pacific mental health research in NZ but will contribute significantly to mental health literacy research in NZ.

Research implications

There is much more work to be done in the area of Pasifika mental health. The review has provided an overview of areas where there is an opportunity for more research to be done between (i.e., ethnic specific data) and within (i.e., Pacific born vs NZ-born) our Pasifika ethnic groups: Pasifika perceptions of mental health, Pasifika strategies for mental illness prevention and intervention, and Pasifika suicide. The review also critically highlights how increased research in these areas could shape and develop more action-focused outcomes, that is, by increasing the capacity of Pasifika mental health research and practice, increasing the availability and accessibility of culturally appropriate tools and services, and enhanced access to education and mental health literacy programmes.

A rather significant implication for researchers is the link that understanding Pasifika mental health has with mental health literacy. Currently, there is a lack of NZ research that examines Pasifika mental health literacy despite the high levels of mental health concerns.

Previous work internationally has uncovered that there are varying degrees of mental health literacy.

For example, Australian-based researchers Reavley and Jorm (2011a, 2011b) identified that mental illness recognition rates were low but depression was 12 times more recognisable than anxiety, only 60% of Australians were aware of where to go to seek mental health related help, attitudes towards those experiencing mental health challenges were largely discriminatory, and 75% of Australians knew of someone experiencing a mental health challenge. Further to this and to our critical review of the research, we suggest that mental health literacy could serve as another pathway towards positive mental health outcomes (see discussion on mental health prevention and intervention strategies). For instance, if we can identify how experiences of depression are understood and engaged with at a community level, we could develop more culturally appropriate diagnostic and recovery tools for our Pasifika that better support recognition, management and prevention of mental health challenges. As discussed, LeVa (n.d.) has made headway in this area by developing the MWP, which aims to reduce stigma, improve wellbeing, prevent mental distress and enhance access to support services for our Pasifika.

Conclusion

Pasifika mental health in NZ continues to be a growing area of research. This review aimed to add to Pasifika mental health research in NZ by reviewing and presenting relevant online research, identifying overarching themes in the research and recommending future directions for strengthening research in this area. Future work should focus on building the capacity and diversity of Pacific mental health research led by Pacific researchers. It is also important to consider how building Pasifika mental health literacy could enhance mental health and wellbeing across our Pasifika communities as they continue to flourish in NZ.

Bridging comments

The literature review provided a deep dive into understanding Pasifika mental health in Aotearoa NZ. In addition to this, and as a member of the wider NZAVS research team, I wanted to explore the NZAVS dataset and realise its contribution to Pacific mental health in Aotearoa NZ. Therefore, Section 2 utilises data from the NZAVS and provides some wider context around mental health data. Study 1 used cross-lagged regression modelling to demonstrate the effects of mental health over time for our Pacific peoples. Study 2 used LPA to demonstrate how Pacific cultural values may influence Pasifika experiences of mental health.

As one of two Pacific researchers in the NZAVS research team, it was my honour to try and connect Western survey data with our Pacific knowledges and worldviews. Especially because Western research methods have not always served our Pacific communities. I acknowledge the space I hold to be able to (re)shape the narratives of our communities, a position I do not take in vain. There is an array of ways that Pacific science can be conducted. I hope that this next section inspires Pacific researchers to transform Eurocentric spaces with the beauty and power of our Pacific voices.

SECTION 2

Section 2 of this thesis contains two studies that drew upon data from the NZAVS. The NZAVS is a national longitudinal study of more than 60,000 New Zealanders that started in 2009 and plans to continue till 2029. The NZAVS aims to understand how people and their life circumstances change over time by tracking various social, psychological, and health related factors over a 20-year period. As well as providing information of how personality, attitudes, and values may be changing over time. The NZAVS also uses probabilistic sampling and therefore includes a substantive sample of Pacific peoples. More information about the NZAVS, including sampling procedure and sample details can be found on the NZAVS website (New Zealand Attitudes and Values Study, n.d.; C. G. Sibley, 2021).

Each study presented in this section has been published or submitted to a peer-reviewed journal and details of such will precede each study. Each study is presented as they have been published or submitted to their respective journals and are representative of the information that was available at the time of publication or submission. As each study has been prepared for publication, each are intended to be read as a standalone piece of work. As such, it was necessary to provide information around Pacific peoples, elements of mental health and the doctoral research project in each introduction. Therefore, the introduction can make for repetitive reading, but the contribution of each study is unique. Between each study I offer bridging commentary to weave the studies together as part of the larger doctoral research project.

Both studies provide some wider context around Pacific mental health in Aotearoa NZ by drawing upon existing data from the NZAVS. The first study used cross-lagged regression modelling to show how changes in mental health can occur over time. More specifically, Study 1 examined the changes in psychological distress across time. We have research around Pacific peoples' experiences of psychological distress, we also have research

around changes in psychological distress over time. What we do not have is research around Pasifika experiences of psychological distress over time – this is what this study aimed to provide.

The second study used LPA to show how Pacific values are translated across health and wellbeing. More specifically, Study 2 explored how Pacific cultural values may influence Pasifika experiences around mental health. Our Pacific models and frameworks centre Pacific cultural values and are often deemed the gold standard when working alongside Pacific communities. Although they are an appropriate way of framing health and wellbeing for a large proportion of Pasifika, this is not the case for all Pasifika. This study aimed to examine the link between Pacific cultural values and psychological distress and explored how inclusive our Pacific models of health are for our Pacific peoples.

The research article that follows is a copy of a manuscript that has been submitted.

Kapeli, S. A., Manuela, S., & Sibley, C. G. (2021). *Higher levels of social support predict lower psychological distress for Pacific peoples living in Aotearoa New Zealand.* [Manuscript submitted for publication]. School of Psychology, University of Auckland.

Study 1: Higher levels of social support predict lower psychological distress for Pacific peoples living in Aotearoa New Zealand

Abstract

It has been widely documented that people experiencing psychological distress have an increased likelihood of experiencing anxiety or depressive disorder. Recent research indicates that rates of psychological distress are almost 1.5 times higher for adult Pacific peoples versus non-Pacific peoples (Ataera-Minster & Trowland, 2018). Leveraging data from the New Zealand Attitudes and Values Study and utilizing cross-lagged regression modelling, we examined changes in psychological distress across time for adult Pacific peoples in Aotearoa New Zealand (n = 514). Our study found that experiences of psychological distress were associated with a greater likelihood of experiencing psychological distress in the future. Additionally, experiencing higher levels of social support were associated with a lower likelihood of experiencing psychological distress in the future. Our research is vital because detrimental mental health experiences are a serious concern for our Pacific peoples and we need more action-focused research in this area, to not only reduce the incidence of mental distress, but to empower our Pacific communities with knowledge to positively (re)shape deficit focused narratives.

Preview on terminology

We use the term *Pacific peoples*, which are inclusive of a group of people in Aotearoa New Zealand that have ethnic roots from many Pacific nations. Unless a research study specifically uses the term *mental illness or mental disorder*, the review uses the terms *mental distress* and *mental health issues/concerns* to broadly refer to diagnosis of a mental illness or any other challenges or experiences with mental health. The choice in terminology is to shift the focus away from a deficit model of health, to those that are more consistent with Pacific views of health and wellbeing (Ataera-Minster & Trowland, 2018).

Introduction

Pacific peoples in Aotearoa New Zealand

Pacific peoples have a strong presence in Aotearoa New Zealand (NZ). As the fourth largest ethnic group (alongside NZ European 70.2%, Māori 16.5%, and Asian 15.1%), Pacific peoples comprise approximately 8% of the total population with an expected increase to over 10% by 2038 (Statistics NZ, 2018b). Our Pacific community is ethnically diverse representing 19 Pacific nations with our four largest Pacific groups being Samoan (47.8%), Tongan (21.6%), Cook Island Māori (21.1%), and Niuean (8.1%) (Statistics NZ, 2018b). Despite our ethnic diversity, Pacific research and policy often prioritises Pacific peoples as a collective group. There are many experiences that are shared between our Pacific ethnic groups, such as the collective and relational context that many Pacific peoples are taught from a young age to respect and value (Alefaio, 2008). These teachings and experiences help to form many of the values and traditions that are then passed down through generations of Pacific families, and hence, form the strong foundations of many Pacific communities across Aotearoa NZ. For the purposes of this research, we have focused on Pacific peoples as a collective to examine psychological distress. We acknowledge the importance of Pacific ethnic research and hope this study provides a platform for this, particularly in research pertaining to psychological distress.

Our Pacific communities have a long history of oppression in Aotearoa NZ and are stereotypically marginalised, which draws upon the colonial influence across the Pacific and the dawn raid period in Aotearoa NZ. These circumstances have contributed to the socioeconomic disparity between Pacific peoples and other ethnic groups, namely the majority NZ European group. On average, Pacific peoples have some of the highest health and socio-economic disparities comparatively to the general Aotearoa NZ population (Statistics NZ, 2018b). Such disparity highlights the importance for continued Pacific

research and the role it can play in reducing inequality and inequity for our Pacific communities. Research for our people, and by our people is imminent in (re)claiming the narrative of our communities and shifting the negative stereotypes around Pacific peoples. This study in particular provides insight into the mental health of our Pacific population in Aotearoa NZ. It also encourages us to explore the role of mental health literacy, which is a focus of the lead author's larger research project that this paper contributes to. We than take this opportunity to explore psychological distress by utilizing data from the New Zealand Attitudes and Values Study (NZAVS), a national longitudinal study that has measured psychological distress and includes a subsample of Pacific peoples.

Psychological distress

Psychological distress refers to a wide array of experiences such as feelings of fear, sadness, and vulnerability, and can also translate into recurring negative and maladaptive thoughts and/or socially isolating. These experiences may become increasingly difficult to cope with over time, leading to anxiety and/or depression (Arvidsdotter et al., 2016). Psychological distress is commonly measured through utility of the 10-item Kessler scale (K10) and reduced 6-item Kessler scale (K6). Respondents self-rate across a series of questions on a scale from 0 to 4 and higher total scores are indicative of greater self-reported psychological distress (Kessler et al., 2002).

Factors to consider for psychological distress

Risk and protective factors of psychological distress generally fall into three categories: (1) sociodemographic factors (characteristics that are inborn i.e. age, gender, ethnicity); (2) stress-related factors (events and life conditions that exert stress on an individual i.e. poverty); (3) personal resources (resources that are available to an individual to prevent the occurrence of psychological distress i.e. income) (Drapeau et al., 2012).

Sociodemographic factors indicate that psychological distress is higher for women than men in most countries (Caron & Liu, 2011; Jorm et al., 2005; Phongsavan et al., 2006) and generally appears to decrease across the lifespan (Caron & Liu, 2011; Gispert et al., 2003; Phongsavan et al., 2006; Walters et al., 2002). Immigrants and minority groups often report higher distress (Ataera-Minster & Trowland, 2018; Chittleborough et al., 2010; González-Castro & Ubillos, 2011; Kapeli, Manuela, & Sibley, 2020a; Ministry of Health, 2020a; Yip et al., 2008). Stress-related risk factors tend to increase psychological distress but can have varying effects across age and gender (Drapeau et al., 2012; Mene-Vaele, 2017). Job security was a greater risk factor for men whilst death in the family and a relationship ending were greater risk factors for women (Jorm et al., 2005). Further, health related events were a greater risk factor for older people (Cairney & Krause, 2005) and academic stress was a greater risk factor for younger people (Myklestad et al., 2012). Both internal and external personal resources contribute to overall experiences of psychological distress. For instance, higher levels of self-esteem and higher perceived levels of social support are associated with lower levels of psychological distress (Cairney & Krause, 2005; Caron & Liu, 2011; Gadalla, 2009; Jorm et al., 2005; Préville et al., 2002; Walters et al., 2002). Whereas lower socioeconomic status are a greater risk factor for psychological distress (Callander & Schofield, 2018; Caron & Liu, 2011; Isaacs et al., 2018; Myer et al., 2008; Phongsavan et al., 2006).

Psychological distress and Pacific peoples

There is mixed ethnic data in regards to psychological distress, not only because ethnicity is complex, but because there can be additional challenges with particular ethnic groups including experiences of discrimination, stigma, and other socioeconomic factors (González-Castro & Ubillos, 2011; Kapeli, Manuela, & Sibley, 2020a; Yip et al., 2008). As mentioned, minority groups often report higher levels of psychological distress, a trend that is

seen in Aotearoa NZ where Māori, Pacific and Asian peoples experience higher levels of psychological distress comparatively with NZ Europeans (Ministry of Health, 2020a). There is also an assumption that identifying with an ethnic minority serves as a risk factor for psychological distress. However, it has been argued that although ethnic minority groups might be more exposed to risk factors i.e. lower socioeconomic status, that does not necessarily mean they more vulnerable to experiences of, and impacts from psychological distress (Bratter & Eschbach, 2005).

Differences in experiences of psychological distress between and across ethnic groups in Aotearoa NZ is widely documented (Ataera-Minster & Trowland, 2018; Harris et al., 2006, 2012; Krynen et al., 2013; Ministry of Health, 2020a). Currently, there are no existing measures that tailor towards Pacific ideas of psychological distress. However, the Kessler scales have demonstrated their construct validity and reliability across diverse populations, including Pacific populations in Aotearoa NZ (Drapeau et al., 2012; Krynen et al., 2013; Umucu et al., 2021). *Te Kaveinga*, a report drawing on K10 data from the New Zealand Health Monitor (NZHM) and Health Lifestyles Survey (HLS) found that Pacific peoples experience psychological distress 1.5 times higher than the general adult population in Aotearoa NZ. Further, that almost a quarter of Pacific peoples had experienced moderate levels of psychological distress in the 4 weeks prior and that moderate to high levels were significantly higher in younger Pacific peoples (38% of 15-24 year olds) comparatively to older Pacific peoples (35% of 45-64 year olds) (Ataera-Minster & Trowland, 2018).

We also know that within our Pacific population, anxiety and/or depression related mental health outcomes are more prevalent for women, whereas substance abuse is more prevalent for men (Foliaki et al., 2006). Our young Pacific peoples also have the highest reported suicide rates in Aotearoa NZ; being 2.5 times higher in young Pacific men than women (Ataera-Minster & Trowland, 2018; Beautrais & Fergusson, 2006; Tiatia-Seath, Lay-

Yee, & Randow, 2017b). It is our young Pacific peoples that are largely Aotearoa NZ born (66.4%) and below the age of 30 (51.1%) (Statistics NZ, 2018b). Aotearoa NZ born Pacific peoples have identified the difficulty that can come with adopting a Western NZ culture but having parents who hold strong to their Pacific culture. In this respect, the art of navigating between Pacific and Western worldviews can present its own challenges and increase vulnerability towards psychological distress (Ataera-Minster & Trowland, 2018).

Psychological distress longitudinal research

Research around psychological distress both internationally and across Aotearoa NZ is largely cross-sectional. The NZ Health Survey (NZHS) provides some of the most recent data around psychological distress prevalence in Aotearoa NZ (please see Table 4). The NZHS data highlights how there maybe changes in prevalence across time but due to its cross-sectional nature that argument cannot be made. We also cannot identify what is driving these changes. This is where longitudinal research can be extremely beneficial in examining effects over time and can be used to determine developmental lifespan changes as well as its contributing factors.

Longitudinal research has highlighted many factors that can contribute to increased psychological distress over time, such as relationship conflict (Özdemir & Sağkal, 2021); lower socio-economic status (Gadalla, 2009); stress (Gadalla, 2009; Mene-Vaele, 2017); living in temporary housing post natural disaster (Morishima et al., 2020); food insecurity (Kim-Mozeleski et al., 2021). On the other hand, factors that have been linked to decreased psychological distress across the lifespan include, increased sleep duration (Marques et al., 2021); residing in more rural areas (G. Baxter et al., 2021); enhanced physical health (Gadalla, 2009); higher social support (Gadalla, 2009).

Table 4

New Zealand Health Survey psychological distress prevalence rates for Pacific peoples from 2006/07 to 2019/20

	2006/07	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Total	13.2	8.5	9.4	13	10.2	11.2	11.8	11	12.4	9.7
Men	11.9	8.2	5.7	12	10	7.8	6	10.6	11.4	8.3
Women	14.3	8.7	12.6	13.9	10.3	14.1	17.2	11.5	13.1	10.9

Note. Table 4 presents percentages of the Pacific population who reported a K10 score of 12 or more in the 4 weeks prior. A K10 score of 12 or more indicates a high or very high probability of anxiety or depressive disorder

What we can see is that the prevalence of psychological distress has been studied extensively with the current body of research indicating that experiencing higher levels of psychological distress as a precursory contributing factor in the development of further mental health challenges across various populations. This in turn serves to reason that there is an increased need for mental health services/support. In this respect, preventative and/or early intervention measures focused on psychological distress may not only reduce subjective suffering but could see a reduction in subsequent mental health challenges and associated health care costs (Arvidsdotter et al., 2016; Gadalla, 2009). Further, allocating resources to groups at higher risk of developing psychological distress, such as Pacific peoples who are a youthful and growing population, will likely have long term benefits. In our study, we utilised longitudinal data from the NZAVS to demonstrate the cross-lagged effects of psychological distress for Pacific peoples, particularly focusing on factors that are essential to overall Pacific wellbeing, such as vā.

The importance of vā

What we as Pacific peoples understand as vā, the Western world understands as social support (Kapeli, Manuela, Milojev, et al., 2020). Albert Wendt describes the concept of vā as the "space between, the betweenness, not empty space, not space that separates, but space that relates, that holds separate entities and things together in the unity-in-all, the space that context, giving meaning to things" (as cited in Refiti 2006). Rather than a concept, vā is a way of being, knowing, and understanding. It is how we as Pacific peoples interpret and view the world. The collective Pacific understanding of vā can be loosely translated as a spatial way of conceiving the secular and spiritual dimensions of relationships and relational order, that facilitates both personal and collective wellbeing (Airini et al., 2010; H. Smith & Wolfgramm-Foliaki, 2020). In Pacific research, caretaking of our vā is imperative as the collaborative aspect of our research allows us to nurture relationships, work together, work

cooperatively, and work reciprocally with our communities to develop research that serves our people, its communities, and its places. Nurturing vā in this space also serves to empower our Pasifika who are otherwise disenfranchised in research using Western methodologies.

For this research we can make connections to vā, but it is vital to understand that this research has not been designed under or for a vā framework. With this in mind, it is important to consider how the wellbeing of Pacific peoples connects to social support and experiences of psychological distress for Pacific peoples over time. There is a wealth of research demonstrating the positive and protective factors of having a social support network including enhanced mental health and wellbeing for Pasifika communities (Anae et al., 2002; Kapeli, Manuela, Milojev, et al., 2020; Ofanoa et al., 2021; Puna & Tiatia-Seath, 2017). As an ethnic minority, Pacific peoples are believed to be more exposed to risk factors for psychological distress (Bratter & Eschbach, 2005). Given the positive links with social support, maintaining strong and secure social networks are an important buffer to consider, especially for our young Pacific peoples. Social support systems can vary vastly across the lifespan, as younger Pacific peoples tend to draw support from friends rather than family (Marsters et al., 2020; Puna & Tiatia-Seath, 2017; Teevale et al., 2016). It is expected that lower levels of social support would result in higher levels of psychological distress, so as we age, this is important to consider in how we grow and nurture our relationships and encourage our Pacific communities to do the same (Kapeli, Manuela, Milojev, et al., 2020).

Overview of study

Using longitudinal data from the NZAVS, we conducted a cross-lagged regression to assess the relationship between ratings of psychological distress during Wave 5 (2013) and Wave 6 (2014) for those identifying with a Pacific ethnicity.

Predictors

We also included other variables as predictors of psychological distress at 2014. Due to the smaller sample size and not wanting to compromise statistical power, we were mindful of the number of predictors used and their cultural significance. Therefore, we chose the following variables because of their importance in understanding the health and wellbeing of Pacific peoples in Aotearoa NZ. Each variable described below highlights its significance across our Pacific communities.

Age. Young Pacific peoples have the highest reported rates of mental health challenges and suicide deaths (Ataera-Minster & Trowland, 2018; Beautrais & Fergusson, 2006; Tiatia-Seath, Lay-Yee, & Randow, 2017b).

Gender. Pacific women tend to have greater reported levels of emotional distress whilst Pacific men have higher rates of death by suicide (Beautrais & Fergusson, 2006; Foliaki et al., 2006; Tiatia-Seath, Lay-Yee, & Randow, 2017b).

Country of birth. Aotearoa NZ born Pacific peoples have higher levels of psychological distress in comparison to Pacific peoples born in their respective Pacific Island nations (Ataera-Minster & Trowland, 2018; Beautrais & Fergusson, 2006; Ministry of Health, 2020a).

Religiosity. Religion and church are important in many Pacific communities with approximately 80% of Pacific peoples identifying with Christianity (Ministry for Pacific Peoples, 2016; Te Pou o te Whakaaro Nui, 2010).

Deprivation. Those living in more deprived areas have poorer mental health outcomes and have almost twice the chance of developing a mental health issue than those who live in more affluent areas (Oakley Browne et al., 2006). Deprivation is also considered a risk factor for psychological distress and Pacific peoples in Aotearoa NZ.

Perceived social support. Social support is not only beneficial for mental health, but under a Pacific lens, social support can be connected with vā. As mentioned, although this research is not designed under a vā framework, our understanding of vā allows us to interpret the research results in a meaningful way for our Pacific communities. Vā is how Pacific peoples understand the social, economic, religious and cultural systems that we work within (Mo'a, 2015). The relationship is not just how we see it within the Western world, but the relationship must be understood by thinking about the world that it comes from.

Guiding Hypotheses

There is information about psychological distress experienced by Pacific peoples in Aotearoa NZ. There is also information about psychological distress over time and its causes. What is missing are factors that predict psychological distress over time for Pacific peoples. The cross-lagged model that we present here aims to fill this gap. A cross-lagged model collects information at two or more time points to estimate the directional effects that one variable has on another at different points in time. In this way, we can examine causal effects within longitudinal data (Bentler & Speckart, 1981; Little, 2013).

We know that Pacific knowledge highlights vā as a crucial element to overall wellbeing; suggesting that the relational nature of Pacific worldviews puts emphasis on positive relationships as a protective factor for wellbeing. Although there are no quantitative measures of vā that currently exist, there are measures we can use that can parallel vā, such as social support. We predicted that higher social support at Wave 5 (2013) would be associated with decreased psychological distress at Wave 6 (2014). We also predicted that age, gender, country of birth, religiosity, and deprivation would have a significant change (positive or negative) in psychological distress over time.

Method

Participants

Participants were 514 Pacific peoples (167 men and 347 women), representing 3.5% of the total sample. Participants had a mean age of 43.44 (SD = 13.59). Descriptive statistics for all variables are presented in Table 6.

Sampling procedure

Participants were posted a copy of the NZAVS questionnaire, with a postal follow up sent two months later. Participants that provided an email address were also emailed and invited to complete the questionnaire online if preferred. Those that did not respond were emailed a follow up reminder approximately two months later. Non-respondents were then contacted using provided numbers, to encourage participation. This occurred at 1-week intervals, where three phone call attempts were made. A voice message was left upon the third attempt if possible. The 2013 wave of the NZAVS sampled a total of 18,261 participants, and the 2014 wave of the NZAVS sampled a total of 15,822 participants, all of whom completed the NZAVS questionnaire. From each sample, 14,875 participants completed a questionnaire from both the 2013 and 2014 wave. Full sampling details for the NZAVS, copies of the full questionnaire and all other materials are available on the NZAVS website (New Zealand Attitudes and Values Study, n.d.; C. G. Sibley, 2021).

Measures

Briefly, the measures used included the 6-item Kessler (K6) scale; age; gender; whether one was born in NZ; whether one was religious; the deprivation index; and three items from the Social Provisions Scale. Bivariate correlations between all measures are reported in Table 6. Measurement details are reported in Table 7.

Results

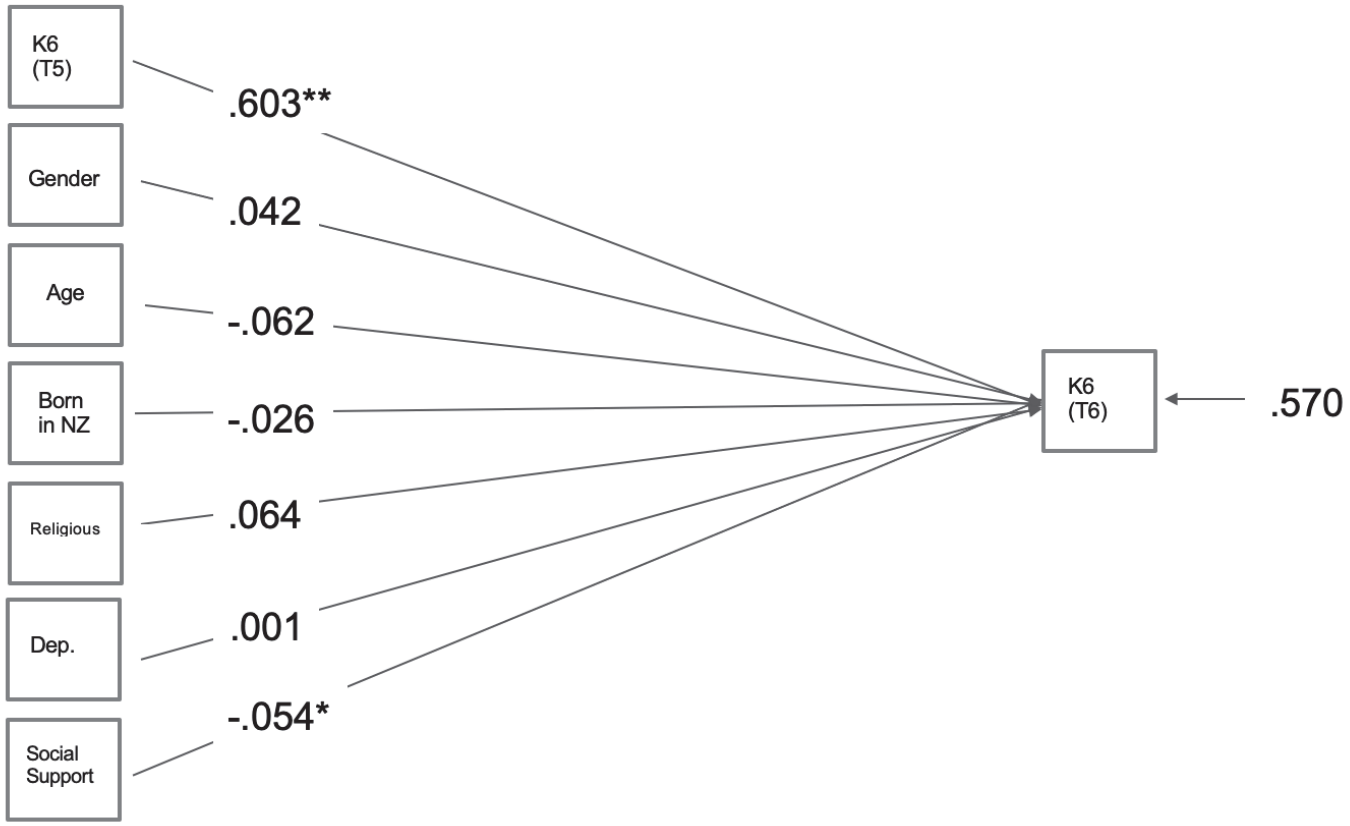
Using MPlus 8.3 (Muthén & Muthén, 1998-2019), we constructed a cross-lagged regression model to assess the relationship between psychological distress in 2013 (Wave 5) and psychological distress in 2014 (Wave 6). We included other variables as predictors of psychological distress in 2014, including: psychological distress in 2013, age, gender, place of birth, religiosity, deprivation, and perceived social support.

As reported in Table 5, Pacific peoples experiences of psychological distress in 2013, had a significant and positive association with psychological distress at 2014 (b = .603, se = .032, p = .000). Please also see Figure 8. Our model also indicated that Pacific peoples' experiences of social support in 2013, had a significant and negative association with psychological distress at 2014 (b = -.085, se = .037, *p* = .023). Please see also Figure 8.

Descriptive statistics and bivariate correlations between all variables assessed in the cross-lagged regression model are reported in Table 6.

Figure 8

Cross-lagged regression analysis with standardized coefficients



Note. K6 = psychological distress; Dep. = deprivation. *N = 514; *p<.05; **p<.001*

Table 5

Standardized coefficient model predicting cross-lagged change in psychological distress over a 1-year period

	β	*se*	*t*	*p*
Intercept	1.069	.297	3.597	.000
K6 (2013)	.603	.032	19.136	.000
Gender	.042	.034	1.227	.220
Age	-.062	.036	-1.742	.082
Born in NZ	-.026	.036	-.726	.468
Religious	.086	.053	1.626	.104
Deprivation	.004	.034	.125	.900
Social Support	-.085	.037	-2.275	.023

Note. K6 = psychological distress

Table 6

Descriptive statistics and bivariate correlations between all variables assessed in the Cross-Lagged Regression Analysis

Variables	1	2	3	4	5	6	7	8
1. K6 (2014)								
2. Gender	.042							
3. Age	-.104	.177						
4. Born in NZ	-.113	-1.62	-.272					
5. Religious	.055	-.017	.096	-.232				
6. Deprivation	.122	.018	-.055	-.115	.101			
7. Social Support	-.304*	-.142	-.099	.084	.073	-.052		
8. K6 (2013)	.645**	-.007	-.117	-.124	-.004	.165	-.368	
M	1.023	.326	43.438	.693	.637	6.599	6.028	.973
SD	.733	.469	13.558	.462	.482	2.985	1.153	.754

Note. K6 = psychological distress. *N* = 514*; *p<.05; **p<.001*

Table 7

Measurement details for all variables assessed in the Cross-Lagged Regression Analysis

	Item content	Units	Reference
K6 psychological distress (mean of six-item scale)	During the last 30 days, how often did… you feel hopeless? During the last 30 days, how often did… you feel so depressed that nothing could cheer you up? During the last 30 days, how often did… you feel restless or fidgety? During the last 30 days, how often did… you feel that everything was an effort? During the last 30 days, how often did… you feel worthless? During the last 30 days, how often did… you feel nervous?	0 (none of the time) to 4 (all of the time)	(Kessler et al., 2002)
Gender	Are you male or female?^ What is your gender?*	Yes/No response Open ended response	
Age	What is your date of birth?	Open ended response	
Born in New Zealand	Which country were you born in?^ Where were you born? Please be specific, e.g., which town/city?*	Open ended response	
Religious	Do you identify with a religion and/or spiritual group?	Yes/No response	
Deprivation	Affluence measurement of participants' immediate neighbourhood	Coded using the deprivation index with a decile rank from 1 (low) to 10 (high	(Atkinson et al., 2014; C. Sibley, 2014)
Social support	There are people I can depend on to help me if I really need it There is no one I can turn to for guidance in times of stress I know there are people I can turn to when I need help	1 (strongly disagree) to 7 (strongly agree)	(Cutrona & Russell, 1987)

Note. All item content was consistent across Wave 5 (2013) and Wave 6 (2014) unless otherwise specified: ^ item content used in Wave 5 only; * item content used in Wave 6 only

Discussion

Our results indicate that experiences of psychological distress predict higher levels of psychological distress one year later. Further, that social support was associated with decreased reported symptoms of psychological distress. This relationship between social support and psychological distress is an important consideration for Pacific health and wellbeing and has serious implications for the (re)development of mental health services. For instance, how social connectedness can be fostered through community activities (Han et al., 2015; Ofanoa et al., 2021) and mental health service provision (Faleafa, 2020). We hope that this research, alongside the lead author's larger research project, provides knowledge that empowers our Pacific communities to be(come) the leaders of our health and wellbeing arena.

What the results mean

We are looking at variables that can predict change, indicating what is causing the change rather than what the change is. Thus, higher levels of psychological distress predicted higher levels of psychological distress one year later. However, higher levels of perceived social support predicted lower levels of psychological distress one year later. Gender, age, country of birth, religiosity, and deprivation did not predict changes in psychological distress over the one-year time period.

In this case, it is important to focus on social support and its buffering affect towards experiences of psychological distress. As mentioned, good levels of social support are largely considered a protective factor against psychological distress. Further, protecting against psychological distress may prevent subjective suffering, subsequent mental health challenges and reduce mental health care costs (Arvidsdotter et al., 2016; Gadalla, 2009). Strengthening levels of social support is not a unidimensional matter of having a larger social network, but rather, a close social network that you can turn to for specific forms of support during times

of need (Cairney & Krause, 2005; Caron & Liu, 2011; Gadalla, 2009; Préville et al., 2002). We also know that social support decreases across the lifespan for Pacific peoples, more significantly for Pacific men (Kapeli, Manuela, Milojev, et al., 2020). This suggests that older Pacific peoples, particularly older Pacific men, maybe more at risk of experiencing psychological distress.

From a Pacific perspective, it should not just be about building strong relationships and social networks to buffer psychological distress, we should also focus on building our knowledge around mental health – or mental health literacy, as a way of preventing distress and subsequent mental health challenges. As Pasifika, we know that our social networks are relatively strong (Ataera-Minster & Trowland, 2018; Kapeli, Manuela, Milojev, et al., 2020; Ofanoa et al., 2021), and that our young people predominantly turn to friends and/or family members for mental health support (Marsters et al., 2020; Puna & Tiatia-Seath, 2017). However, we need to ensure that our friends and/or family members are equipped with mental health knowledge to best support those who seek support from them. In turn, this could not only alleviate subjective suffering but also encourage our Pacific communities to seek mental health support earlier as a preventative measure towards experiencing serious mental health challenges.

For this research we have largely been considering experiences of psychological distress in relation to social support. However, we can draw parallels between social support and vā. As mentioned, vā is widely discussed within Pacific academia and is central to how and why relationships are nurtured within Pacific contexts. Acknowledging vā is important because with a growing Pacific population in Aotearoa NZ, this research and research around vā could help shape the future of Pacific health and wellbeing. Although the NZAVS social support construct was not designed from a vā perspective, this research lends to discussions around linking Pacific and Western constructs. In this case, considering how the

interpretation of the effects of social support on psychological distress can be developed to imagine vā as a psychological construct. Further, consideration could also be given to what extent is social support a poxy measure of vā and what point it is simply the social support construct.

Therefore, this research calls for the development and utility of vā as a psychological construct and/or a research framework that serves our Pacific communities, and ultimately, will better inform our research, practice, and care of our Pacific communities. Vā is not just about relationships but it is a way of understanding, a way of being, and a way of viewing the world. Future generations of Pacific peoples will thrive through strengths-based and action focused research approaches that incorporate Pacific knowledges, Pacific worldviews, and Pacific understandings. It is the passing down of this knowledge that has led our peoples for many generations, and although this passing of knowledge may look different now (i.e., through research narratives), the essence is still the same – Ko e Kai ia ‘a e Pasifika (a Tongan expression meaning to enrich Aotearoa with Pacific Wisdom).

Limitations and future directions

The measure of social support from the NZAVS was not developed under a Pacific lens, and therefore is not the best tool for measuring connectedness across and within our Pacific communities. As mentioned, there is opportunity for the development and utility of vā as a psychological construct and/or a research framework. We already see strong use of Pacific centred research approaches through qualitative research e.g., Talanoa (Vaioleti, 2006). A vā centred research framework could be another avenue to explore and a useful companion to the development of talanoa as a research methodology (as opposed to just a method).

We have highlighted that young Pacific peoples are an at-risk age group, and an obvious limitation of our dataset is that it excludes anyone below 18 years of age. Especially

when we consider age as an important factor for Pacific mental health. Future studies could explore Pacific youth, potentially looking at the youth 2000 study in Aotearoa NZ, which includes data from secondary school students.

We are also limited using a small sample size, but due to the recent booster sampling for the NZAVS, we expect future waves to have larger Pacific samples that can provide larger data pools for quantitative modelling. Such research could focus on research exploring mixed ethnic backgrounds (e.g., NZ European/Pacific, multiple Pacific ethnicities, or another ethnicity/Pacific), or exploring differences between Aotearoa NZ born Pacific peoples and Pacific born Pacific peoples.

It would also be beneficial to explore other variables that we know impact our Pacific community. We know from previous studies that discrimination (Kapeli, Manuela, & Sibley, 2020a) and ethnic identity (Manuela & Sibley, 2014) can effect psychological distress. No effects were found when including discrimination and ethnic identity as predictors in preliminary analyses. But if we look over time, perhaps we might see changes with more time points and a greater sample size.

Conclusion

Pacific wellbeing can be understood as the quality of relationships with others, so social support should be associated with lower psychological distress scores over time. While it could be argued that social support is a protective factor for all ethnic groups, rather than just Pasifika, in the buffering of psychological distress, it is important for our interpretations and theorising to be grounded and relevant to the communities we are working with. So, what non-Pacific peoples might understand as relationships or social support, we as Pacific peoples understand as vā – the dynamic and connecting space that exists to contextualise Pasifika perspective. Being sensitive to this, shapes the direction of future research, developing culturally relevant and appropriate tools for our Pacific communities.

Bridging Comments

Study 1 highlighted changes in psychological distress in a Pasifika sample over time – experiences of psychological distress were associated with a greater likelihood of experiencing psychological distress one year later and experiencing higher levels of social support were associated with a lower likelihood of experiencing psychological distress one year later. A key aspect of this study was the connection of psychological distress with social support, and how we can make links with vā, to develop a more meaningful interpretation for our Pacific communities. This study also complements previous research I have led (Kapeli, Manuela, Milojev, et al., 2020), where mean levels of social support decreased across the lifespan for Pacific peoples, and how again, under a Pacific lens we can acknowledge social support as vā – our relationships, our connectedness with one another. Further demonstrating the importance of incorporating and upholding our Pacific knowledges in approaches or efforts that centre Pacific mental health and wellbeing. As we move into Study 2, we continue to build upon research around Pacific mental health, by exploring how Pacific cultural values translate across mental health. Much like Study 1, Study 2 builds upon Pacific knowledges and understandings in navigating the health and wellbeing of our communities.

The research article that follows is a copy of a manuscript published in Pacific Health Dialog. Please see:

Kapeli, S. A., Manuela, S., & Sibley, C. G. (2021). A Latent Profile Analysis of Pacific health values. *Pacific Health Dialog*, *21*(8), 531-544. https://doi.org/10.26635/phd.2021.148

Study 2: A Latent Profile Analysis of Pacific health values

Abstract

Introduction: Pacific health models that centre Pacific values can serve as a tool to address Pacific disparities in healthcare. In this study, we broadly draw upon the health concepts of these models to determine how Pacific values are translated across Pacific health and wellbeing. **Methods:** Using data from the New Zealand Attitudes and Values Study, we identified proxy indicators of common Pacific values. With these proxy indicators we developed a Latent Profile Analysis to uncover subgroups of Pacific peoples based on their orientation towards each proxy indicator and their association with psychological distress. **Findings:** We identified four subgroups of Pacific peoples: (1) 65% of Pacific peoples identified strongly with Pacific values with low associated psychological distress (2) 18% of Pacific peoples identified moderately with Pacific values with medium associated psychological distress (3) 5% of Pacific peoples identified less with Pacific values with low associated psychological distress (4) 12% of Pacific peoples identified ambivalent with Pacific values with high associated psychological distress. **Conclusions:** These results suggest that Pacific values and the utility of Pacific health models are an appropriate way of framing health and wellbeing for a vast majority of our Pacific population. However, we also need to recognise the incredible diversity among our Pacific community and be understanding and accommodating of the diverse ways that Pacific peoples can express what they consider valuable.

Introduction

Pacific peoples in Aotearoa New Zealand

Pacific peoples or *Pasifika* describe a growing (comprise approximately 8% of the New Zealand population), diverse (representative of more than 40 Pacific ethnic groups in New Zealand) and youthful (median age = 23.4 years) ethnic population in Aotearoa New Zealand (NZ) (Statistics NZ, 2018b). Given the flourishing nature of our Pacific population in Aotearoa NZ, the future of our Pasifika is extremely important to navigate.

As Pacific researchers, through research that serves our people, its communities, and its places, we can play a small part in guiding our communities towards positive and fruitful outcomes. Therefore, this paper uses data from the New Zealand Attitudes and Values Study (NZAVS), an annual longitudinal study that tracks the attitudes and values of a large proportion of New Zealanders. As a representative sample of New Zealand, the NZAVS dataset allowed us to build a Latent Profile Analysis (LPA) to examine what relevant cultural values are important in understanding the health and wellbeing of our Pasifika. By doing so, we add to the plethora of research around Pasifika health and wellbeing. This is vital because, as Salesa (2017) describes, due to the growing size of our Pacific population in Aotearoa NZ, Pasifika success or failure will have consequences for all New Zealanders.

Pasifika have a long history in Aotearoa NZ. A pivotal era for our Pasifika is the *Dawn Raid*s, which has contributed to the historical trauma still felt by many Pasifika in Aotearoa NZ today. It is periods such as this, and the colonial influence across the Pacific, that has and continues to shape the marginalisation and socioeconomic disparity between Pacific peoples and other ethnic groups in Aotearoa NZ (Salesa, 2017). Knowledge and acknowledgement of Pacific history is imperative in further understanding *NZ's Pacific peoples*. Salesa (2017) describes the paradox of Pacific peoples in NZ as being both internal and external to NZ at the same time. These exist as interlocking dimensions where "Pacific

NZ" encompasses our Pacific peoples who have moved to NZ and forged their own path, and a "NZ's Pacific" that encompasses the Pacific nations in the South Pacific that continue to be of interest and influenced by NZ.

Determinants of Pacific health in Aotearoa New Zealand

Pacific peoples in Aotearoa NZ have a relatively poor health profile. The biggest influencing factors of overall health for Pasifika are social, cultural and economic, many of which are interrelated to education (lower qualification rates), employment (highest unemployment rates), occupation (disproportionately employed in lower-skilled occupations), income (lower annual median income), and housing (less likely to own a house) (Statistics NZ, 2018b). There are a variety of intersecting factors that contribute to the health disparities experienced by Pasifika, such as lower life expectancy comparatively with the Aotearoa NZ population and the inequitable burden of chronic disease (Sorensen & Jensen, 2017; Statistics NZ, 2021). These factors include barriers that prevent Pacific peoples access to health services; poorer levels of cultural sensitivity around health care tools; and socio-political-historical factors that contribute to or maintain systemic inequality that disproportionately affects Pacific peoples (Ministry of Health, 2020b; Southwick et al., 2012; Statistics New Zealand and Ministry of Pacific Island Affairs, 2011).

Despite the socio-cultural and economic factors surrounding Pasifika, we tend to have a fairly positive perception of subjective health and are leading the way in immunisation rates with higher rates of immunised children than the total Aotearoa NZ population. When we look closer at our Pasifika health profile, we also see that life expectancy at birth continues to improve for our Pasifika (Ministry for Pacific Peoples, 2016). Following the trend of improvements in life expectancy and child vaccination rates, growth can be seen across several other areas. For instance, our Pasifika employment rate has been steadily increasing as well as increases in our Pasifika median income, and educational improvements have seen

tertiary participation and completion rates continue to increase (Ministry for Pacific Peoples, 2016).

Pacific health models

From the 1980s, and as the presence of Pasifika grew in Aotearoa NZ, it became increasingly important to provide tools that were culturally appropriate and effective to improve and maintain material and spiritual health and wellbeing of our Pasifika. From this came the development of Pacific models and frameworks, which are based upon Indigenous Pasifika concepts, knowledge, values, and practices (Tu'itahi, 2009).

Fonofale Model

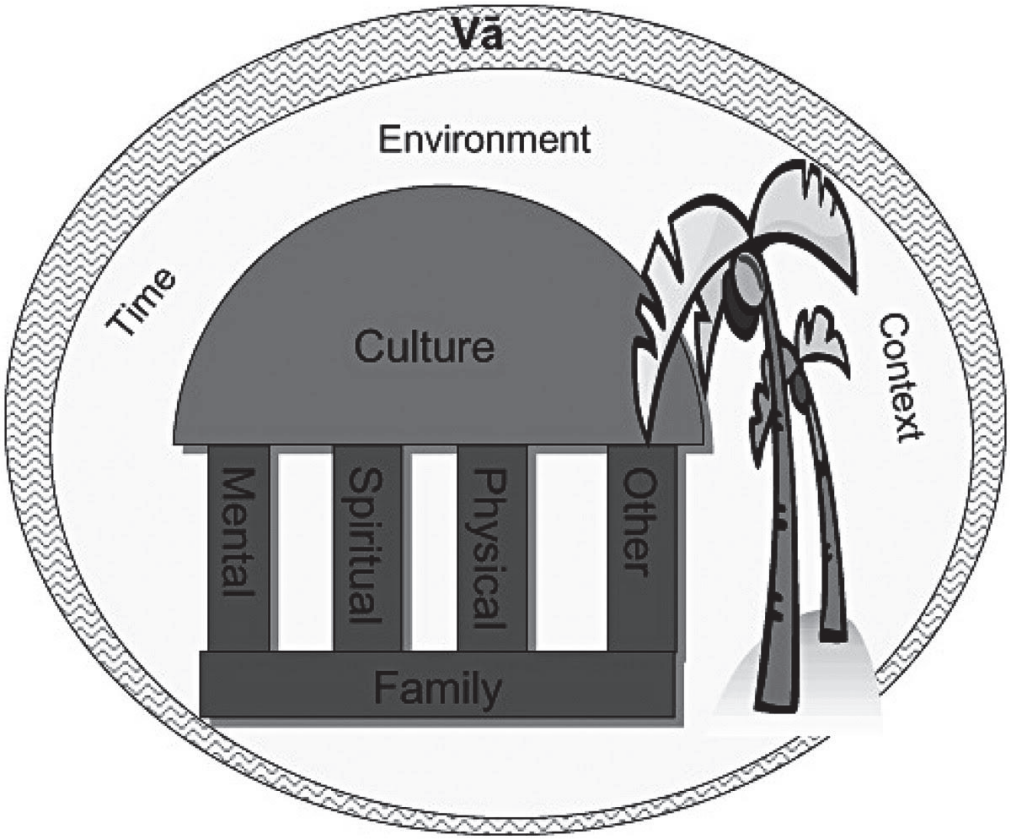
The Fonofale model was developed by Fuimaono Karl-Pulotu Endemann in collaboration with other Pasifika healthcare professionals during the early 1990s and applies a pan-Pacific approach to exploring the health of Pasifika in Aotearoa NZ (Ministry of Health, 2008). Fonofale is centred around values of great significance to Pasifika, including family, culture and spirituality. It is also dynamic in which all aspects of the model have an interactive relationship with each other (Ioane & Tudor, 2017).

As depicted in Figure 9 (Suaalii-Sauni et al., 2009), the Fonofale model takes the form of a Samoan fale (home) and consists of:

1. *Family* as the base or the foundation for our Pasifika.
2. *Culture* as the roof or shelter for our Pasifika.
3. *Physical*, *spiritual*, *mental*, and *other (other* also includes *sexuality, gender, age, socio-economic status)* as the pou (also known as pillars) or connection and support between family and culture.
4. *Environment*, *time* and *context* encapsulates the fale.
5. *Vā* represents the space around things and is indicative of our relatedness and connectedness with others, land, space.

Figure 9

The Fonofale Model



Fonua Ola Model

The Fonua Ola Model was redeveloped by Sione Tu'itahi (2009, 2015) and signifies the *holistic wellbeing* (ola) of *people and their environment* (fonua). As seen in Figure 10 (Tu'itahi, 2015), Fonua Ola comprises six dimensions:

1. *Laumalie* representing spiritual wellbeing.
2. *'Atamani* representing mental wellbeing.
3. *Sino* representing physical wellbeing.
4. *Koloa* representing economic wellbeing.
5. *Anga fakafonua* representing cultural wellbeing.
6. *'Atakai* representing ecological wellbeing.

Figure 10

The Fonua Ola Model

Te Vaka Atafaga Model

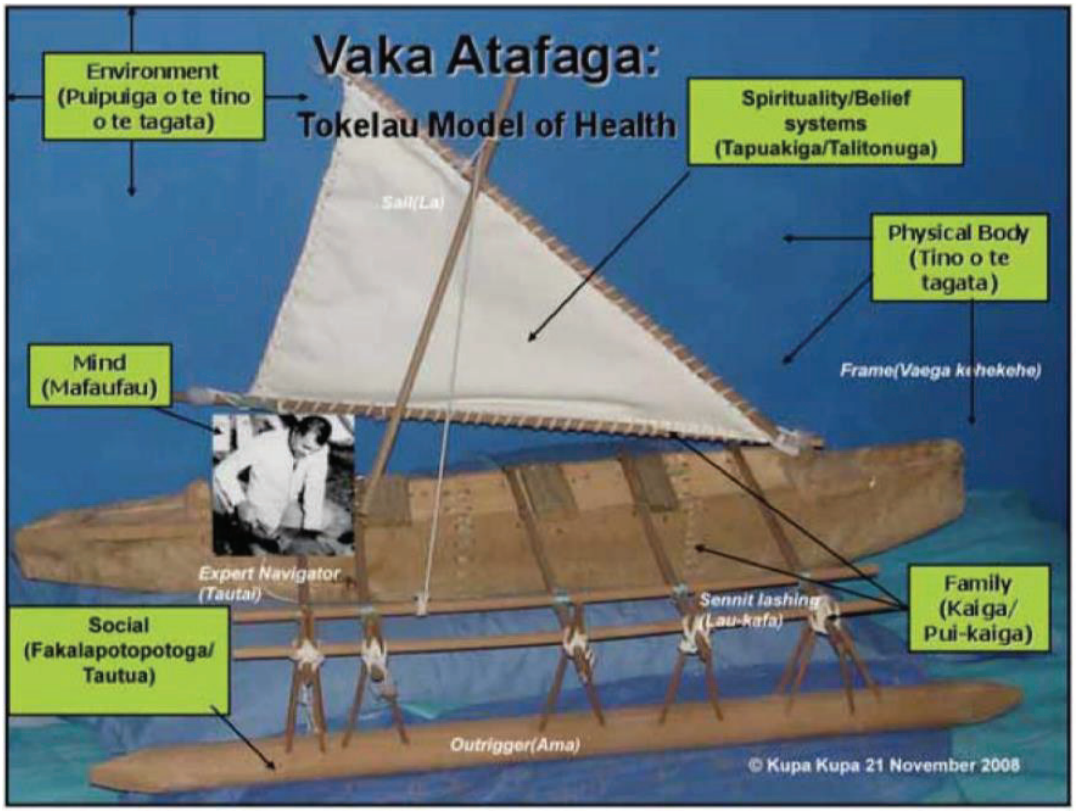
The Te Vaka Atafaga Model was developed by Kupa (2009) and is a Tokelauan perspective of health and wellbeing. As illustrated in Figure 11 (Kupa, 2009), Te Vaka Atafaga draws upon a paopao (a Tokelauan outrigger canoe) to represent the six core elements of health and wellbeing:

1. *Te tino o Te Tagata* meaning physical body and is represented by the wooden structure of the paopao with its interrelated parts and complementary function.
2. *Mafaufau* meaning mind and is represented by the Tautai (expert navigator) who navigates and maintains the paopao.
3. *Kaiga/Pui-kaiga* meaning family and is represented by lau-kafa (rope) and is symbolic of the family structure with individual family members (or strands) bound together to form a strong and extended kaiga (family) system.

4. *Tapuakiga/Talitonuga* meaning spirituality or belief systems and is represented by the la (sail), which is driven by pule (power) that cannot be seen but has an influence in many ways.
5. *Puipuiga o Te tino o Te Tagata* meaning environment and comprises all that is outside and surrounds the paopao, which influences one's wellbeing.
6. Fakalapotopotoga/Tautua meaning social/support systems represented by the ama (outrigger) and symbolises social structures or organisations as the paopao needs support and stability of the ama to stay afloat.

Figure 11

The Te Vaka Atafaga Model



Fa'afaletui

Fa'afaletui is a Samoan research framework that essentially means *ways of* (fa'a) *weaving together* (tui) *deliberations of different groups* or *houses* (fale). Fa'afaletui infuses the values of the Samoan culture with principles of qualitative research (Tamasese et al., 2005).

Uputāua Therapeutic Approach

The Uputāua Therapeutic Approach (Seiuli, 2012, 2013) builds upon the Fonofale model by extending to include social and emotional wellbeing. As seen in Figure 12, Uputāua comprises:

1. Roof: *Ola Fa'alegaga* (Spirituality).
2. Land: *Tu ma Aganu'u Fa'asamoa* (Culture and Customs).
3. Foundation: *Aiga Potopoto* (Family and Relationship Network).
4. Internal Boundaries: *Le Va Fealoaloa'i* (Relational Space).
5. Left Frontal Post: *Ola Fa'aletino* (Physical Wellbeing).
6. Right Frontal Post: *Ola Fa'aleloto* (Social Wellbeing).
7. Left Rear Post: *Ola Fa'alemafaufau* (Psychological Wellbeing).
8. Right Rear Post: Ola Fa'alelagona (Emotional Wellbeing).
9. Neighbourly Boundaries: *Tausi Tua'oi* (External boundaries).
10. First Step: *Meaalofa* (Gifting Process).
11. Second Step: *Loto Fa'atasia* (Collaborative 'we' approach).
12. Third Step: *Mana ma le Mamalu* (Maintaining honour and dignity).

Figure 12

Uputāua Therapeutic Approach

Kakala Research Framework

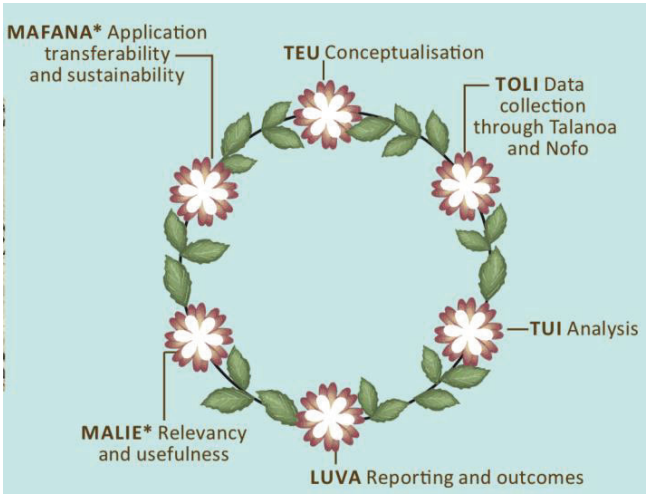
In the Tongan culture, a kakala is a flower garland and Koani Helu-Thaman first likened the making of a kakala to steps followed in research (Thaman, 1997). Since its initial development, the Kakala Model has evolved from three major steps to a six step research framework (Chu et al., 2013; Fua, 2009) as seen in Figure 13 (Strategy Performance and Leaning (SPL) Unit, Office of the Director-General, SPC, 2020):

1. *Teu* means *to prepare* and is the preparatory phase of making a kakala, considering the purpose of the kakala, for whom shall be the recipient, what flowers will be used and so forth. In research, teu involves clarifying the research purpose and conceptualising it.
2. *Toli* means *to pick* and is the selection and collection of flowers, leaves and fruits for the kakala. Toli requires expertise to ensure that appropriate flowers are selected (and any other ingredients are collected) to reflect the occasion and recipient. In research, toli is associated with the data collection and methodologies stage.

3. *Tui* means *to thread* and is the making or weaving of a kakala. The design and assembly of a kakala is dependent upon the occasion and recipient. In research, tui represents the analysis and reporting stage.
4. *Luva* means *to give* and is about presenting the kakala to its intended recipient as a sign of ‘ofa (love) and faka’apa’apa (respect), of which the intended recipient is expected to pass onto someone else. Luva is symbolic of sharing and tauhi vā (fostering relationships). In research, luva represents the outcomes stage through presenting findings – giving back to our people.
5. *Mālie* means *pleasant* and is about reflecting upon the kakala and its fit for purpose, its usefulness, its relevance, and worthwhileness. In research, mālie considers the relevancy and worthwhileness of the research project.
6. *Māfana* means *warmth* and is about acts of kindness, generosity and love that are usually expressed through gifting, dancing, and singing following the gifting of a kakala. In research, māfana evaluates the research project and considers areas such as application and sustainability.

Figure 13

The Kakala Research Framework



Tivaevae Model

Maua-Hodges (1999) developed the Tivaevae Model, a theoretical model for underpinning education that incorporates the values of Kūki ʻĀirani (Cook Islands) through the process of making a tivaevae. In Māori Kūki ʻĀirani culture a tivaevae is a large handmade quilt that is decorated with various designs and patterns that tell a story, often related to the family of those who are making it. As seen in Figure 14 (Hunter et al., 2018), the Tivaevae Model comprises five values:

1. *Taokotai* meaning collaboration and reflects the value of working together to achieve shared goals.
2. *Tu akangateitei* meaning respect relates to the importance of experience and mutual respect of the knowledge of others.
3. *Uriuri kite* meaning reciprocity and highlights the reciprocal relationship between teacher and learner.
4. *Tu inangaro* meaning relationships and signifies the relational journey with family and community over time.
5. *Akairi kite* meaning shared vision involves creating knowledge together whilst complementing personal growth.

Figure 14

Tivaevae Model

Overview of Pacific health models

We expanded on multiple Pacific models to highlight how understanding health and healthcare delivery can be articulated through Pacific knowledges and values. For a greater overview of contemporary Pacific models and research approaches see Tualaulelei & McFall-McCaffery (2019). Each model and framework articulate health and wellbeing from a unique Pacific perspective. Although each is nuanced to its respective Pacific nation, we can draw parallels between each such as the holistic perceptions of health and wellbeing incorporating the mind, body, spirit, and environment. As well as the cultural values that underpin each model that are deeply rooted in family, culture and a collectivist nature. For the purposes of this research, we broadly draw upon the health concepts of these Pacific health models by using data from the NZAVS to build a LPA to examine subgroups of Pacific peoples to determine how Pacific cultural values are important for Pasifika health and wellbeing.

Pacific values and how this translates across health

Research examining Pacific health and wellbeing continues to highlight key protective factors such as cultural identity, spirituality, healthy relationships, family support, communication, and strong participation in social activity (Ataera-Minster & Trowland, 2018; Le Va, 2014a; Manuela & Anae, 2017; Tautolo et al., 2020). These factors are engrained within our Pacific communities and are valued across many of the Pacific health models mentioned. Yet as we have seen and continue to see, Pacific peoples have poorer health outcomes comparatively with the total Aotearoa NZ population. When we delve deeper, we see that Pasifika health and wellbeing is affected in a number of ways, predominantly by (Wright & Hornblow, 2008):

1. The quality of our health services.
2. Educational barriers.
3. Cultural and social contexts.

4. Lifestyle factors including values and preferences which can influence how Pacific peoples view health care.

Quality health support and service is important to ensure our Pacific population is living well and thriving (Ministry of Health, 2020b; Tiatia-Seath, 2019). Pacific models of health can contribute positively to Pasifika health and wellbeing as they provide a framework for understanding Pasifika health and wellbeing. While these models have been introduced in such formal settings, it is important to note that these models do not exist in these formulated ways within Pasifika communities. Pacific models of health are often used as teaching tools across education and research to address disparities in healthcare, as well as educate about diverse and common understandings of Pacific health and wellbeing. Each model has articulated health and wellbeing from a unique Pacific perspective (i.e., Fonua Ola from a Tongan perspective). However, we can draw parallels between each, such as the holistic perceptions of health and wellbeing incorporating the mind, body, spirit, and environment. As well as the cultural values that underpin each model that are deeply rooted in family, culture and a collectivist nature.

Education continues to be a significant factor influencing Pasifika health and wellbeing with roll on effects within our cultural and social contexts (i.e., language barriers, barriers to transport and access). We see this in the varying levels of health literacy, which can be a determining factor in the type of care received, health information retained, and the likelihood of adopting a healthcare plan. Following on from this is the importance of mental health literacy and is a focus of the lead author's larger research project that this paper contributes to. As recognised in health literacy, mental health can also be a key factor that disconnects Pacific communities from accessing, understanding, or engaging with mental health and wellbeing information or services when and/or if required. Recent work by Faleafa (2020) discusses core elements of Pacific mental health addiction provision such as being

Pacific-led, Family-centred, Holistic, Clinical-Cultural Integration, Community-based, Connected. Although this is focused on mental health, it highlights how a refocused investment in Pacific health more generally would better support our communities.

We must also acknowledge the advances that Pacific models have provided in supporting the health and wellbeing of our Pacific communities. However, the applicability of Pacific models across the diversity of our Pacific population is not always clear. For example, no single model entirely caters toward the intricacies and nuances of each specific Pacific culture, the differences between NZ-born and Pacific-born Pasifika, or variation across the lifespan. That said, utility of each model requires awareness of this diversity as this may shape Pacific peoples' differing orientations towards Pacific cultural values and subsequent outcomes. For instance, research has shown that young Pasifika may not fully uphold traditional values of their respective Pacific cultures and construct a more contemporary understanding of what influences their health and wellbeing (Ape-Esera et al., 2009; Niumata-Faleafa & Lui, 2005; Vaka et al., 2016).

Therefore, it is important to see how Pacific peoples may vary on the cultural values emphasised across these models of health – this has guided the development of the LPA used in this paper, and is one way we can explore potential Pacific profiles across relevant proxy indicators of cultural values from the NZAVS.

Analytic Approach

A LPA is a statistical analysis that can be used to uncover different groups or profiles within a population (Hagenaars & McCutcheon, 2002). LPA uses response patterns from multiple continuous variables to group together participants into profiles, which we refer to as classes. Recent research has utilized LPA exploring an array of areas including personality (Stronge et al., 2016); health literacy (Degan et al., 2019); political views (Cowie et al., 2015); and psychological capital (Bouckenooghe et al., 2019) to name a few.

In our case, we utilised data from the NZAVS, an annual longitudinal study that tracks the attitudes and values of a large proportion of New Zealanders. By identifying the common values across the Pacific health models mentioned prior, we have selected variables (see *measures*) from the NZAVS dataset that best approximate those values. Although these variables are not a direct measurement of what we consider to be Pacific cultural values, they are indicators that are within the NZAVS that we can use as proxy indicators of Pacific cultural values. Each selected variable was rated to the extent that each participant endorsed the value.

We also included an auxiliary variable, the 6-item Kessler scale (K6) that measures psychological distress. Not only did we examine different Pacific profiles (each with differing orientations towards Pacific values), but we were also able to examine the association that each profile had with psychological distress. The inclusion of K6 provided an important link to the lead author's larger research project that this paper is part of, focusing on Pasifika mental health, allowing us to explore Pacific cultural values and their translation across mental health.

Therefore, we developed a LPA to uncover subgroups (or profiles) of Pasifika. Each subgroup is based on their orientation towards proxy indicators of Pacific cultural values from the NZAVS, and then examining each subgroups' association with psychological distress.

Method

Participants

Our analyses included 574 Pacific peoples (381 women, 191 men, 2 gender diverse), representing 2.6% of the total sample (21,936 participants) from Time 8 (2016) of the NZAVS. Participants had a mean age of 45.13 (SD = 13.218).

Sampling Procedure

Participants were posted a copy of the NZAVS questionnaire, with a postal follow up sent two months later. Participants that provided an email address were also emailed and invited to complete the questionnaire online if preferred. Those that did not respond were emailed a follow up reminder approximately two months later. Non-respondents were then contacted using provided numbers, to encourage participation. This occurred at 1-week intervals, where three phone call attempts were made. A voice message was left upon the third attempt if possible. Full sampling details for the NZAVS, copies of the full questionnaire and all other materials are available on the NZAVS website (New Zealand Attitudes and Values Study, n.d.; C. G. Sibley, 2021).

Measures

Based on our understanding of Pacific health models and Pacific cultural values, we measured a series of continuous variables from the NZAVS that best approximate common Pacific values across Pacific health models. We have identified these variables as proxy indicators of Pacific cultural values and categorised these into factors. We also observed an auxiliary variable, the 6-item Kessler (K6) scale, which is a measure of psychological distress (Kessler et al., 2002). Briefly, the cultural value proxy indicators used included *relationships* using a sense of community factor (Quality of Life 2008 Survey National Report, 2009; Sengupta et al., 2013); *family* using a family values factor (Schwartz, 1992; Stern et al., 1998); *culture* using an in-group warmth factor (C. Sibley et al., 2020); *spirituality* or *religion* using a religious attitudes factor (Gibson & Barnes, 2013); *land* using an environmental factor (Schwartz, 1992). Descriptive statistics and measurement details for all variables are detailed in Table 8.

Table 8

Measurement details and descriptive statistics for cultural proxy indicator and auxiliary variables

	N	M	SD	Item content	Units	Reference
Family (mean of 2-item scale)	548	6.52	0.71	Family security (safety for loved ones) Honouring of parents and elders (showing respect)	-1(opposed to my values) to 7 (of extreme importance)	Schwartz, 1992; Stern et al., 1998
Relationships	550	4.80	1.59	I feel a sense of community with others in my local neighbourhood	1 (strongly disagree) to 7 (strongly agree)	Quality of Life 2008 Survey National Report (2009) as used in Sengupta et al. (2013)
Culture	550	5.75	1.35	Warmth towards Pacific Islanders	1 (least warm) to 7 (most warm)	Modelled on affect thermometer items in United States National Election Study; Thermometer scale as used in Sibley et al. (2020)
Spirituality/Religion (mean of 3-item scale)	567	5.03	1.39	I oppose religion in any form All things considered; religion is a cause for good in the world The teachings of traditional religions are still helpful today	1 (strongly disagree) to 7 (strongly agree)	Gibson & Barnes, 2013
Land	553	5.72	1.49	Protecting the environment (preserving nature)	-1 (opposed to my values) to 7 (of extreme importance)	Schwartz, 1992
K6 psychological distress (mean of six-item scale)	566	1.03	0.77	During the last 30 days, how often did… you feel hopeless? During the last 30 days, how often did… you feel so depressed that nothing could cheer you up? During the last 30 days, how often did… you feel restless or fidgety? During the last 30 days, how often did… you feel that everything was an effort? During the last 30 days, how often did… you feel worthless? During the last 30 days, how often did… you feel nervous?	0 (none of the time) to 4 (all of the time)	Kessler et al., 2002

Note. Full sample was 574, missing values were imputed. Only the units at the endpoints of the measures are labelled (e.g. 1, very inaccurate), with the exception of the K6 measure of psychological distress (where each point has a label attached); Family and Land (where points 0, 3, 6 have labels attached); Culture (where point 4 also has a label attached)

Results

Model Estimation

Latent Profile solutions ranging from two to five profiles as specified in Mplus 8.3 (Muthén & Muthén, 1998). Fit statistics for these models are presented in Table 9. Bayesian Information Criterion (BIC), and Akaike Information Criterion (AIC) are relative fit indices that compare each profile solution. A four-profile solution also provided a clear and interpretable solution with the identification of additional profiles simply extracting more fine-grained distinctions in the relative level of all indicators (with one profile splitting into two, both following the same pattern, but in which one profile reflected people with slightly higher scores than the other), rather than qualitatively distinct patterns of combinations of high/low belief.

We estimated the probability that each participant belonged to each of the 4 profiles (classes). The probabilities (averaged across participants) that a given participant belonging to a given class would be correctly categorized are presented in Table 10. This provides an intuitive way to assess the reliability of the latent class model. As shown, these probabilities are well above .85, indicating excellent classification likelihood and only a small average likelihood of incorrect classification.

Table 9

Model fit for the four-profile solution of the Latent Profile Analysis

	AIC	BIC	Entropy
Two-profile	8498.800	8568.442	0.875
Three-profile	8318.478	8414.235	0.890
Four-profile	8208.953	8330.826	0.850
Five-profile	8109.838	8257.827	0.894

Note. BIC = Bayesian Information Criterion; AIC = Akaike Information Criterion

Table 10

Average latent profile probabilities for most likely latent profile membership (row) by latent profile (column)

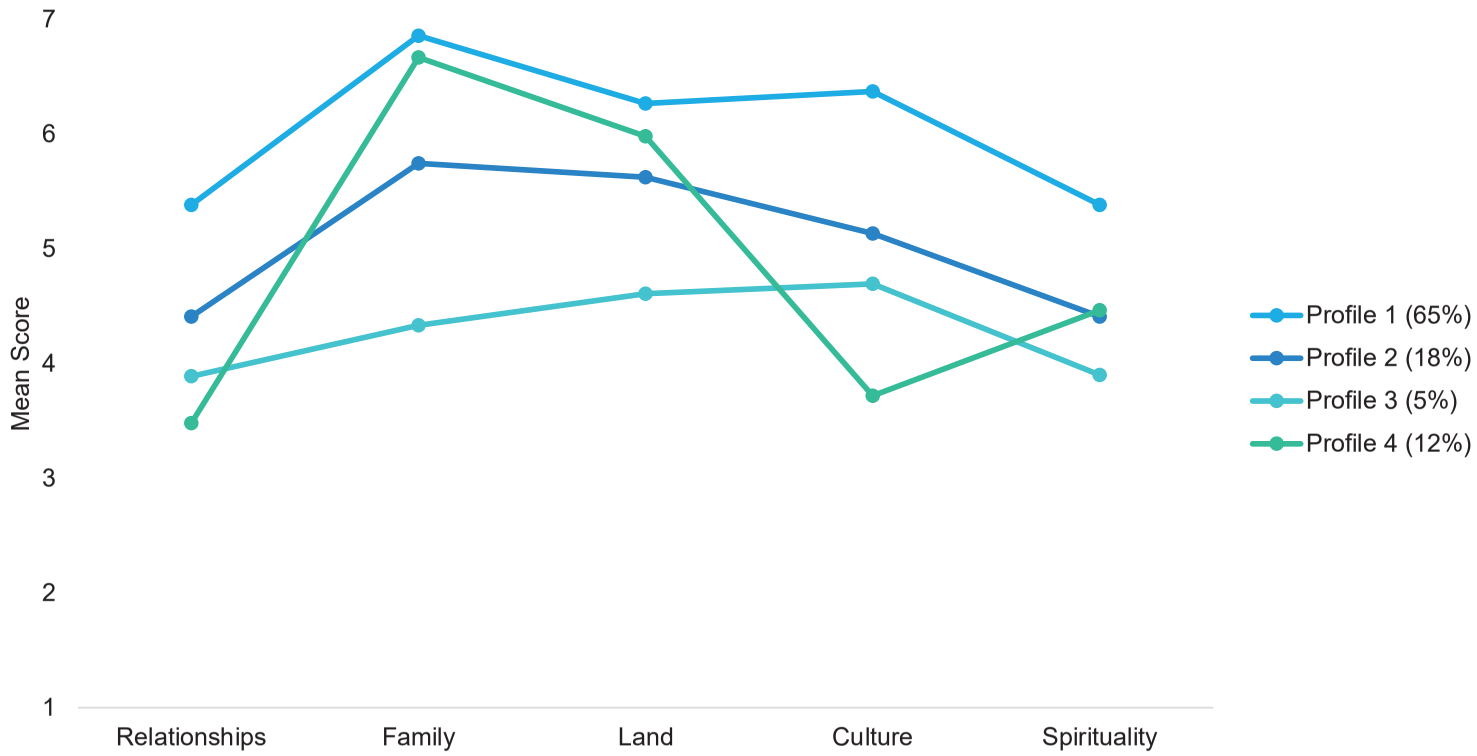
	1	2	3	4
Group 1	0.863	0.055	0.0414	0.067
Group 2	0.027	0.946	0.001	0.026
Group 3	0.028	0.000	0.972	0.000
Group 4	0.060	0.121	0.005	0.813

Latent Subgroups

Mean scores of the levels of support across the five variables/domains for each of the subgroups are shown in Figure 15. Three of the latent subgroups followed similar trends but at varying support levels across the five domains: Subgroup 3 demonstrated low support; Subgroup 2 demonstrated medium support; Subgroup 1 demonstrated high support. Subgroup 4 demonstrated a different trend, depicting varying levels of high and low support across the five domains. K6 scores representing psychological distress are shown in Table 11.

Figure 15

Mean scores of relationships, family, land, culture and spirituality for the four profiles identified by Latent Profile Analysis



Note. N = 574

Table 11

Results of the equality test with the auxiliary variable of psychological distress

	M	se
Group 1 Pd	0.932	0.037
Group 2 Pd	1.183	0.080
Group 3 Pd	0.934	0.137
Group 4 Pd	1.396	0.113

Note. M represents an average of the sum of K6 scores across each respective group. Pd = psychological distress.

The largest of the subgroups made up 65% of the sample (subgroup 1). This subgroup was high across all domains (placing highest value on family) and had the lowest K6 score, demonstrating the lowest likelihood of experiencing psychological distress in comparison to the other subgroups. This reflects what we would expect of Pasifika that *identify strongly with Pasifika values*, who are more likely to have a good understanding of the dynamics and nuances of their Pacific culture and therefore its values – holding strong values toward their community, family, land, culture, and spirituality. Such values could provide a protective function towards enhancing health and wellbeing.

The second largest of the subgroups made up 18% of the sample (group 2). This subgroup was moderate across all domains (placing highest value on family) and had a medium K6 score, demonstrating a more medium likelihood of experiencing psychological distress in comparison to the other subgroups. This reflects what we would expect of Pasifika that *identify moderately with Pasifika values*, who are more likely to have a fair understanding of the dynamics and nuances of their Pacific culture and therefore its values – holding moderate values toward their community, family, land, culture and spirituality.

The smallest of the subgroups made up 5% of the sample (subgroup 3). This subgroup was low across all domains (placing highest value on culture). This reflects what we would expect of Pasifika that *identify less with Pasifika values*, who are likely to be more disenfranchised from their Pacific culture and therefore its values – holding low value toward their community, family, land, culture and spirituality. An associated low K6 score demonstrates a lower likelihood of experiencing psychological distress in comparison to the other subgroups, which could be due to feeling culturally disconnected, or contentment with being so, therefore acting as a buffer towards adverse wellbeing outcomes.

The third largest of the subgroups made up 12% of the sample (subgroup 4). This subgroup demonstrated varying support across all domains: low value toward community, culture, and spirituality, but high value toward family and land – highlighting a contradictory relationship dynamic. Having a high K6 score, highest of all the subgroups demonstrates a higher likelihood of experiencing psychological distress in comparison to the other subgroups. This reflects what we would expect of Pasifika that *identify as ambivalent with Pasifika values*, who are likely to be experiencing dissociation from their Pacific culture. An interesting perspective is that they may be experiencing conflict between what they value, and how they identify.

Discussion

The current study has drawn upon models of Pacific health and existing data from the NZAVS to develop an LPA. The LPA used proxy indicators of Pacific cultural values (community; family; culture; spirituality; and land) to identify subgroups of adult Pacific peoples based on the weight given towards each indicator. This is important because it identified that Pasifika have differing orientations around Pacific cultural values and subsequent variations in psychological distress. It also allowed us to explore how inclusive our Pacific models of health are for our Pacific population.

We identified four Pacific profiles and their K6 scores. These profiles highlight an appropriate way of framing health and wellbeing for a vast majority of our adult Pacific population in Aotearoa NZ – 65% of our sample identified strongly with Pasifika values (subgroup 1) with a lower K6 score comparative to the other subgroups. This echoes prior research whereby upholding strong Pacific values can offer a protective function and contribute to enhanced wellbeing (Ataera-Minster & Trowland, 2018; Le Va, 2014a; Manuela, 2021; Mila-Schaaf, 2010; Tautolo et al., 2020). This is also why we expect Pacific health models, that centre Pacific values, to be an extremely positive and helpful tool across our communities.

Yet, we also need to recognise that there is incredible diversity within the Pacific population. The remaining 35% of our sample varied in the weight they placed on each proxy cultural indicator – 18% identified moderately with Pasifika values (subgroup 2) with a more medium K6 score comparative to the other subgroups; 5% identified less with Pasifika values (subgroup 3) with a lower K6 score comparative to the other subgroups; 12% identified as ambivalent with Pasifika values (subgroup 4) with a higher K6 score comparative to the other subgroups. For instance, those that identified as ambivalent with Pasifika values (subgroup 4), may be more reflective of a group that has no access to a cohesive Pasifika community, and thus, a lower connection to Pasifika communities. For instance, they may reside in an area that is less populated with Pacific peoples. This does not mean the models are inaccurate, as they provide a helpful and important way of researching, teaching, and navigating Pacific health and wellbeing. The profiles might not necessarily just be reflective of the differing orientation toward each proxy cultural indicator but could highlight nuances in certain demographics between each profile.

A common critique of Pacific models is that they tend to privilege the perspectives of older Pacific-born peoples. Given the growing and youthful nature of our Pacific

communities, it has been encouraged for such models to be revised to ensure they are also appropriate for Pasifika youth (Niumata-Faleafa & Lui, 2005). Pasifika youth are also more likely to be Aotearoa NZ-born (Ataera-Minster & Trowland, 2018). This could suggest that acculturative factors are influencing the outcomes i.e., those who have resided in Aotearoa NZ for a longer period, may have more blended cultural values. Pasifika youth are also more likely to be of mixed ethnic backgrounds and this could impact on their sense of cultural identity. This does not mean that Pacific models will not be useful but means that we may have to allow for more flexibility in its utility and interpretation. It is also important to note that Pacific health models have been developed by Pasifika within the Aotearoa NZ context. Thus, may represent a unique diasporic interpretation of Pacific values that attempt to centre Pacific knowledge and experiences, but may not fully capture changing values and experiences of Pacific peoples born in Aotearoa NZ. As much as our identities and culture can be fluid over time, we cannot assume that a model will remain stable or enduring over time either.

This leads us to question how inclusive a Pacific model of health may be for someone whose experience of being Pasifika may not fully align with how these models describe. The models can be an informative way to guide an understanding of health but recognising at the same time, there are shifts in our demographics, our identities, our cultures. We know that identities and culture can be fluid over time, so these models need to be able to encapsulate that somehow – this can be a skill of the researcher or practitioner, in understanding and/or accommodating the diverse ways that Pasifika can express their culture and identity, or what they consider valuable in their lives.

Finally, the same critiques that we, as Pasifika often have of Western approaches (as a one size fits all) and the benefit of these Pacific models is that they nuance that to Pacific populations. We must be mindful that Pasifika are not homogenous, and a one size fits all

approach is not optimal. Moving forward it is also vital to remember that we cannot assume that identifying as Pasifika or holding strong Pasifika values implies that Pasifika centred approaches would work best. When working alongside Pacific communities, it is important to be reflexive – this will help us as researchers to determine what approaches will optimally support our communities.

Strengths, limitations, and future directions

To the best of our knowledge, there is no work utilizing LPA methods to examine the relationship between Pacific cultural values and mental health outcomes for Pasifika communities in Aotearoa NZ. This paper provides a significant contribution to the literature and highlights the usefulness of LPA in Pacific focused research.

We acknowledge that Pasifika as a group are not homogenous, and that there is beauty in the intricacy and culture of each individual Pacific ethnicity. However, for the purposes of this research we looked at a collective Pacific sample. Therefore, it was necessary to take a broad approach that drew parallels between each Pacific model of health, such as the holistic and collective cultural values that underpin each.

Despite the commonalities of Pacific health models, they have been criticised for not being adaptable for all Pasifika in Aotearoa NZ. Given the longitudinal nature of the NZAVS, we do expect to see larger Pacific samples in the years to come. Larger samples may allow a more nuanced demographic approach (i.e., ethnicity, place of birth, living location) and being able to track changes across time. It is likely that a more nuanced approach could uncover more about our Pacific communities i.e., why some Pasifika appear more connected to their culture than others.

Conclusion

Research examining Pasifika health and wellbeing is vital as our Aotearoa NZ continues to expand in both size and diversity. Our analysis identified four distinct Pacific

subgroups who had differing orientations around Pacific values and subsequent levels of psychological distress. This research is important because it highlighted (yet again) the diversity among our Pacific population and in what ways we may be able to address this moving forward. Not only does this research provide an opportunity to better understand our Pasifika communities, but it also provides a resource of knowledge to further support our Pasifika communities. As the lead author, I want to once again stress that Pacific research is meaningful when it serves our people, its communities, and its places – of which this research and its larger research project aims to do.

Bridging Comments

Study 2 identified that Pasifika have differing orientations towards Pacific cultural values and subsequent experiences of psychological distress. In Study 1, we saw higher levels of social support were associated with a lower likelihood of experiencing psychological distress. Then in Study 2, we saw how having a stronger identification with Pacific cultural values was associated with lower levels of psychological distress. Both studies highlight how values of importance can reduce incident and impact of detrimental mental health outcomes. Overall, Study 2 tells us that Pacific models, that are largely centred around Pacific values, are an appropriate way of framing health and wellbeing for our Pacific communities. However, with differing orientations towards Pacific cultural values and experiences of psychological distress, this study also recognises the incredible diversity among our Pacific communities. As much as our identities and culture can be fluid over time, our Pacific health models should also capture this. As such, a flexible and nuanced approach should always be adopted by researchers and practitioners when working within the realm of Pacific health and wellbeing.

The studies presented in Section 2 have uniquely contributed to Pacific mental health and wellbeing research – merging Western methods and Pacific knowledges to examine changes in mental health outcomes over time; and the relationship between Pacific cultural values and mental health outcomes. Having knowledge around the landscape of Pacific mental health in Aotearoa NZ (through the literature review presented in Section 1) and having drawn upon existing data from the NZAVS to explore Pacific mental health outcomes (through Study 1 and 2 presented in Section 2), we move in Section 3 to explore and extend our knowledge around Pacific mental health literacy. As mentioned, although Study 1 and 2 provide an insight into existing data around Pacific mental health, they do not provide insight into the recognition, knowledge and attitudes around mental health. Section 3 aims to address

these areas through examining data from the Pasifika Mental Health in Aotearoa (PMHA) project, consisting of survey and e-talanoa research data. The survey and e-talanoa research components were designed with our Pacific communities at the forefront of mind – by Pasifika, for Pasifika. I hope this next section inspires Pacific researchers to be innovative in developing new approaches to Pacific research that centre our Pacific voices and elevate our communities to new heights.

SECTION 3

Section 1 presented a review of research relevant to Pacific mental health in Aotearoa NZ. Then, Section 2 presented two studies that provided an insight into existing data around Pacific mental health highlighting the changes in psychological distress over time and how Pacific cultural values can inform our mental health experiences. Now, Section 3 draws upon data from the Pasifika Mental Health in Aotearoa (PMHA) project, which provides insight into recognition, knowledges, and attitudes around Pacific mental health – contributing to a developing area of Pacific mental health literacy.

The PMHA project is the main project designed as part of this doctoral research project and was carried out across two phases by adopting a sequential mixed methods approach. Phase 1 was a quantitative component and involved the development and administering of a Pacific mental health literacy survey – otherwise known as the PMHA survey. Phase 2 was a qualitative component and involved the design and conduction of e-talanoa sessions – otherwise known as the PMHA e-talanoa. I used sequential mixed methods as an innovative approach towards Pacific research. In this way, the PMHA survey informed the direction of the PMHA e-talanoa. More specifically, the PMHA survey participant responses to the open-ended vignette questions reflected the gender of the character presented in the vignette. The patterns of the responses to the male and female characters in the vignettes warranted further investigation to understand why participants described the characters the way they did. Therefore, the PMHA e-talanoa explored participant views in response to vignettes presented in the PMHA survey.

As discussed in the literature review in Section 1, mixed methods approaches have not been commonly utilised across Pacific research. However, I recommend that quantitative and qualitative methods, when guided by a Pacific lens, can be used together to create a valuable and meaningful union in Pacific research (Kapeli, Manuela, & Sibley, 2020b) – one

that this doctoral research project aimed to do. When developing the PMHA project, incorporating both quantitative (survey) and qualitative (e-talanoa) components allowed me to build on strengths that the other respective counterpart lacked. For example, a commonly recognised limitation of quantitative data is depth, which is a strength of qualitative methods. Quantitative research is often represented by numerical data and fails to recognise that each number represents a person, or a voice. Introducing a qualitative component can give greater depth by providing context around the numerical data and giving meaning to the numbers it represents. In this way, the PMHA e-talanoa data gave a voice to the PMHA survey numbers, allowing our Pacific community to narrate their stories and help in shaping research that is more meaningful. Conversely, a limitation of qualitative data is breadth yet a strength of quantitative. Highlighting how mixed methods can be used complementary. This doctoral research project aimed to show how mixed methods combined with a Pacific worldview can be used responsively and appropriately with our Pacific communities – and I hope it inspires more Pacific researchers to consider its use.

Developing the PMHA project was a very considered process and reflects upon *teu* or the preparatory first step of the KRF. When considering the development of the PMHA project it was crucial that I sought guidance from leaders within our Pacific community who have a wealth of knowledge and experience in the area of Pacific mental health and wellbeing. I was extremely honoured to have the guidance of the following people as part of my Pacific Advisory Team (PAT) for the PMHA project and who at the time of consultation held the following roles:

Dr. Jemaima Tiatia-Seath, Sāmoan, Associate Professor at the University of Auckland.

Dr. Sione Vaka, Tongan, Senior Lecturer at the Auckland University of Technology.

Dr. Epenesa Olo-Whaanga, Sāmoan, Clinical Psychologist.

Dr. Sam Manuela, Cook Island Māori, Lecturer at the University of Auckland.

Mrs Sisilia Noavea, Tongan, Secondary School Teacher, and Mentor at Lāngima'a Oceania Counselling Services.

The PMHA survey (quantitative phase) was initially developed by me. As I developed the first draft of the PMHA survey, I drew upon knowledge, resources, and research around Pacific mental health in Aotearoa NZ; existing MHL studies and mental health measurement tools. Once the first draft was complete, I organised a talanoa with my PAT. Our talanoa was filled with kai (food) and māfana (warmth). It was an opportunity for us to not only review the PMHA survey draft but also allowed us to build deeper connections and talanoa around an area we are passionate about. The PAT talanoa was pivotal in the development of the PMHA survey as there is limited research to demonstrate how Pacific research frameworks can be used to guide quantitative research. The PAT also provided cultural, clinical, community and academic expertise and allowed me to draw on strengths from within our community and be held accountable to our community. After the PAT talanoa, I redeveloped the PMHA survey, and after final consultation with the PAT, the PMHA survey was complete. The PMHA survey, alongside other documents, were then submitted to the University of Auckland Human Participants Ethics Committee (UAHPEC) for review. The UAHPEC approved ethics on 29 October 2018 until 29 October 2021. Reference number: 022137. Data collection commenced soon after. Please see Appendix A for a copy of the PMHA survey. Please refer to Kapeli (n.d.) in Section 3 for an overview of the PMHA survey and its findings.

Once PMHA survey data collection was complete, I proceeded with reviewing the collected data, coding, running descriptive analyses, and preparing descriptive results. At this point, I began to consider the direction of the PMHA e-talanoa (qualitative phase). The

PMHA survey included two vignettes, one of a Pacific man experiencing depression and one of a Pacific woman experiencing anxiety. Participant responses to the open-ended vignette questions reflected the gender of the character presented, which invoked thoughts about how Pacific perceptions of Pacific men and Pacific women interrelate with understandings and/or experiences of mental health. With this in mind, I decided that the e-talanoa would explore the survey participant responses to the vignettes as a way to better understand why participants described the characters the way they did. From here, I developed the PMHA e-talanoa guide. Having a guide ensured each e-talanoa was consistent in the ideas explored but also allowed for freedom of talanoa during each e-talanoa. The PMHA e-talanoa guide and associated documents were submitted to UAHPEC as an amendment to the aforementioned ethics application, reference number: 022137. The UAHPEC approved the ethics amendment on 11 May 2020 and e-talanoa preparation and data collection commenced soon after. Please see Appendix B for the PMHA e-talanoa guide. Please refer to *Pasifika perceptions of Pasifika men and women and its interrelationship with mental health* in Section 3 for an overview of the PMHA e-talanoa and its findings.

Each piece of research presented in this section has been prepared for publication and is intended to be read as a standalone piece of work. As such, it was necessary to provide information about Pacific peoples, mental health, and the doctoral research project in each introduction. Therefore, parts of the introduction can make for repetitive reading, but the contribution of each piece of research is unique. Between each piece of research, I offer bridging commentary to weave the research together as part of the larger doctoral research project.

The first piece of research has been prepared as a research report and provides a descriptive overview of data collected as part of the PMHA survey: *Pasifika Mental Health in Aotearoa New Zealand: Findings from the Pasifika Mental Health in Aotearoa Survey*.

More specifically, the research report provides information around recognition of depression and anxiety; experiences, attitudes, and understandings associated with mental health challenges; and engagement with mental health promotion activity. It aimed to provide a deeper understanding of what and how our Pacific communities recognise, know, and feel in relation to mental health – or gaining a deeper understanding of Pasifika mental health literacy. For the purposes of layout, the report has been edited to align with American Psychological Association (APA) 7 and thesis formatting guidelines.

The second piece of research has been prepared as a research chapter and provides an overview of the PMHA e-talanoa methodology, methods, and its findings: *Pasifika perceptions of Pacific men and women and its interrelationship with mental health in Aotearoa New Zealand*. More specifically, the research chapter explores Pacific perceptions of Pacific men and women in relation to experiences of mental health challenges as presented in the vignettes of the PMHA survey. This piece of research is presented as a chapter due to its length, which is customarily outside the scope of a journal article. However, this research chapter will be redeveloped and submitted for publication to a journal article in due course.

The research report that follows is an edited version of a report that has been prepared for publication. The following citation is proposed:

Kapeli, S. A. (n.d.). *Pasifika Mental Health in Aotearoa New Zealand: Findings from the Pasifika Mental Health in Aotearoa Survey.* [Unpublished Report]. School of Psychology, University of Auckland.

Pasifika Mental Health in Aotearoa Report: Findings from the Pasifika Mental Health in Aotearoa Survey

Acknowledgements

This report is prepared as part of Sarah Kapeli's doctoral research project supervised by Dr. Sam Manuela and Prof. Chris Sibley. The report aims to facilitate the wider doctoral research project in navigating optimal pathway(s) forward in building Pasifika mental health literacy as a way toward promoting positive mental health outcomes within and across our Pacific communities. This work was supported by a University of Auckland Doctoral scholarship and a New Zealand Institute of Pacific Research grant.

This report would not be possible without the contribution from our Pacific communities. Faka'apa'apa atu mo tu'a 'ofa atu to every single person who shared and/or completed the survey, we are so very grateful to you for taking the time to share your knowledge and experience with us. A warm and heartfelt thanks is also extended to our Pacific advisory team who provided their expert clinical and cultural knowledges towards the development of the survey used as part of this report – Mālō `aupito Dr. Jemaima Tiatia-Seath, Dr. Sione Vaka, Dr. Epenesa Olo-Whaanga, and Mrs Sisilia Noavea.

Pacific Data Sovereignty

As caretakers of this research, we ask that any reference made towards the data outlined in this report is acknowledged appropriately and aligns with Pacific Data Sovereignty (please see Moana Research, 2021) and Indigenous Data Sovereignty principles (please see Walter et al., 2020).

Contact Information

Any data requests can be directed to Sarah Kapeli.

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Executive Summary

Introduction

This report presents findings from the Pasifika Mental Health in Aotearoa (PMHA) survey developed by Sarah Kapeli as part of their doctoral research project completed at the University of Auckland. The PMHA survey was designed as part of a larger doctoral research project exploring Pasifika mental health literacy. Alongside the larger doctoral research project, the PMHA survey aims to investigate the link between mental health literacy and mental health outcomes for Pasifika in Aotearoa New Zealand (NZ). Further, it seeks to explore the potential in improving Pasifika mental health literacy as a way toward enhancing mental health and wellbeing for our Pasifika in Aotearoa NZ. Additionally, the project aims to strengthen the area of Pacific mental health research in Aotearoa NZ, whilst contributing significantly to mental health literacy research in Aotearoa NZ.

Method

Survey Design

The PMHA survey is a cross-sectional survey study (online and paper version) that collected information from 2018 to 2019 from 548 self-identified Pacific peoples aged 16 years and older that normally live in Aotearoa NZ.

Measures

The PMHA survey comprised seven sections, each section requested information related to: socio-demographics; personal experiences with mental health; personal attitudes towards mental health; personal knowledge around mental health promotion activity; knowledge around depression; knowledge around anxiety.

Data analysis

The data presented in this report is descriptive and provides an overview of Pasifika mental health in Aotearoa NZ.

Results

The PMHA survey highlights that our Pacific communities:

- Have moderate recognition rates of depression and anxiety.
- Have more common experiences of stress, depression, and anxiety above all other mental health issues.
- Are more likely to turn to family and friends for mental health support even though they are aware of health professionals and helpline mental health support services.
- Have a medium to high knowledge around mental health more generally.
- Generally, have positive attitudes towards people experiencing mental health challenges.
- Do not think mental health promotion activities are positively serving our communities.
- Find therapeutic forms of mental health support (seeing a counsellor and talking to friends) more helpful than any other source of support.

Conclusion

Drawing upon data from the PMHA survey, we present a descriptive overview of Pasifika mental health in Aotearoa NZ. Although this research identifies what is happening more generally around mental health for Pacific peoples, it provides a good foundation of knowledge to build upon. Of course, we do need more Pacific ethnic specific approaches, a very realistic goal that has been set by the gathering of this knowledge.

Introduction

Pacific peoples in Aotearoa NZ

Pacific peoples or *Pasifika* are a youthful (median age 23.4 years), urban (64% live in Auckland area) and growing (25.1% growth between 2013 and 2018 Census) population group in Aotearoa NZ (Statistics NZ, 2018b). Pacific peoples currently comprise approximately 8% of the Aotearoa NZ population, which is expected to rise to 10% by 2038 (Statistics NZ, 2018). The Pacific community of Aotearoa NZ is made up of many Pacific Island nations and the four largest groups are Samoan (47.9%), Tongan, (21.6%), Cook Island Māori (21.1%), and Niuean (8.1%) (Statistics NZ, 2018b). As the fourth largest ethnic group in Aotearoa NZ, alongside NZ European (70.2%), Māori (16.5%) and Asian (15.1%) (Statistics NZ, 2018b), Pacific-focused research is increasingly important as we continue to witness Aotearoa NZ's ever-changing demography and the increasing importance of addressing ethnic inequities.

Mental health literacy

Mental health literacy (MHL) is defined as the knowledge and beliefs about mental illness, which aid their recognition, management or prevention (Jorm et al., 1997). Additional work by O'Connor and colleagues (2014) draws upon a framework that identifies recognition (ability to recognise mental illness), knowledge (of help seeking behaviours) and attitudes (that promote recognition or appropriate help seeking behaviours) as key facets of MHL.

Internationally, the interest in MHL has grown and continues to highlight the positive link between MHL and mental health and wellbeing outcomes (Bourget & Chenier, 2007; Cabassa, 2009; Kermode et al., 2010; Klineberg et al., 2011; Reavley & Jorm, 2011a, 2011b). Across the globe, depression remains the most recognisable mental illness comparatively to schizophrenia, post-traumatic stress disorder and anxiety. However, a common theme from overseas research continues to be the overall under recognition of mental illness (Jorm,

2012). We see this in the way that mental illness associated terms, such as ‘stress’ are used, which can lead to a sense of normalisation and detract from experiences of ‘depression’. Doing so has been linked to a reduced likelihood of help seeking behaviours and subsequent poorer mental health outcomes (Jorm, 2012; Jorm et al., 2006).

Research around the world has also indicated an increasing awareness of knowing where to seek help for mental health related challenges, with the most common avenues being general practitioners and counsellors and a higher preference towards medication in Canada and the United States. Also in the United States, ethnic minorities reported less emphasis on biomedical causes of mental health challenges and were more in favour of therapeutic forms of support including counsellors, social workers, friends, and family. Additionally, three out of four people reported knowing someone or having helped someone with a mental health challenge. However, attitudes towards those experiencing mental health challenges were largely centred around discrimination and a desire for keeping socially distant, as well as perceptions of danger and unpredictability. Ethnic minorities in the United States experiencing mental health challenges were also perceived as more dangerous comparatively with non-ethnic minority groups (Bourget & Chenier, 2007; Cabassa, 2009; Reavley & Jorm, 2011a, 2011b).

Although comparisons with overseas research data can be problematic, it provides a pool of knowledge to draw upon. For example, overseas MHL research has highlighted some key distinctions between ethnic minority groups and non-ethnic minority groups, which may provide some insight around our ethnic minority groups in Aotearoa NZ. Further, many of the research methods used overseas can guide the future of MHL research. Such research methods have largely drawn upon survey data using vignettes with questions related to recognition, knowledge, and attitudes (Jorm et al., 1997) – drawn upon as part of the PMHA survey. There are also several psychometric scales including the Mental Health Knowledge

Schedule (MAKS) and Reported and Intended Behaviour Scale (RIBS), although not designed under a MHL framework, they examine knowledge, attitudes and behaviours in relation to mental health (Evans-Lacko et al., 2010, 2011) – used as part of the PMHA survey. More recently, the development of the Mental Health Literacy Scale (MHLS) can be used in assessing individual and population MHL as well as determining the impact of programmes designed to improve MHL (O'Connor & Casey, 2015).

Pacific mental health literacy in Aotearoa NZ

There has been a slow rise in MHL research in Aotearoa NZ. Early research indicates that the majority of Māori (72%) and non-Māori (80%) correctly identified depression (Marie et al., 2004). More recently in 2018, the PMHA project was developed and forms the foundation of this report. Then in 2019, Dr. Sam Manuela developed the *Understanding Mental Health in Aotearoa* project. Another recent study with adolescents found that approximately 74% and 52% recognised depression and schizophrenia respectively where the majority indicated non-professional over professional help seeking avenues (Tissera & Tairi, 2020). Additionally, a national study with community pharmacists found that 84% correctly identified depression (Rimal et al., 2022). Te Hiringa Hauora (Health Promotion Agency) has also contributed to a wealth of research around mental health and wellbeing (Health Promotion Agency, 2018). Although their work does not explore this under a mental health literacy framework, their work contributes significantly to knowledge, behaviours, and attitudes around mental health – key facets of mental health literacy.

There is currently no research exploring Pacific MHL under a MHL framework in Aotearoa NZ, but there is a wealth of research that outlines prevalence and contributes to knowledge and attitudes around Pacific mental health. Te Rau Hinengaro was the first and remains the largest mental health study conducted in Aotearoa NZ. Prior to Te Rau Hinengaro, Pasifika were thought to have low levels of mental distress. However, research

since then has developed significantly and indicates that our Pacific communities have higher rates of psychological distress, mental health challenges and suicidal behaviour (Ataera-Minster & Trowland, 2018; J. Baxter et al., 2006; Oakley Browne et al., 2006; Wells et al., 2006). The reasons for this are complex and are heavily interrelated to social-cultural-economic factors. Te Kaveinga, the most recent report of mental health and wellbeing of Pacific peoples indicates that being culturally and socially connected to our Pacific communities is not only important to our overall wellbeing, but can act as a buffer towards adverse mental health outcomes (Ataera-Minster & Trowland, 2018). For a more detailed overview of Pasifika mental health in Aotearoa NZ, please see Kapeli and colleagues (2020b).

Pacific research and its sovereignty

Despite an increase in Pacific focused research in recent years, there is still a dire need for Pacific focused research narratives. Historically, Western-centric narratives have dominated the research field, even Pacific research domains. Quantitative research has also historically been led by Western-centric methods and written with a Western focus. As such, quantitative research methods and its data have not typically operated with the best interest of Indigenous peoples, including our Pacific communities. That said, Western and Pacific research can coexist and foster a space where different ways of knowing can sit together (McNamara & Naepi, 2018). This has been demonstrated more recently by Enari (2021), who highlighted how the merging of Western and Pacific research design can be academically rigorous yet still culturally appropriate.

It is important that we recognize what Pacific data is so that it is not misappropriated. Pacific data is *any* information about Pacific peoples - it can be about our resources and environments (i.e., land history, geological information); it can be about us (i.e.,

demographic, health, education data); and it can be data from us (i.e., traditional cultural data, oral literature, lived experiences, personal narratives).

Another key element in recognising Pacific data, or Indigenous data, is its sovereignty – commonly referred to as Indigenous Data Sovereignty (IDS). Often *data* is positioned as the *new land* and if we do not retain ownership of our information, it can be taken from us – which has historically been seen through dominating Western narratives amongst Indigenous research domains. More recently, we have seen the emergence of the Pacific Data Sovereignty (PDS) Network, which was established to provide a unified voice and collective guardianship of data and information around Pacific peoples in Aotearoa NZ (please see Moana Research, 2021). As Pasifika, it is important that we maintain sovereignty of Pacific data by upholding the rights of our Pacific communities in respect of our Pacific data and its collection, access, analysis, interpretation, management, and its reuse. Doing so allows us to strengthen PDS through its governance – which ensures our Pacific voices are at the helm of decision making.

As Pasifika, we know that an understanding of cultural and social insights is fundamental towards developing meaningful research for our communities. This ensures that our research is done for our people, by our people – nothing about us, without us. Ultimately, it is about building Pacific research that is Pacific led, Pacific governed, and Pacific strong. Naepi (2019) articulates that as Indigenous researchers, we understand research as service and a relational exercise. As Pacific researchers, we need to always think about how our research is serving our communities? Who is benefitting from our research? How does our research challenge institutional understandings of creating knowledge? How can we use our skills to serve our communities? These questions (and more) should be at the forefront of our minds. It is these questions that have not only led to the development of the PMHA project (inclusive of the PMHA survey used as a basis for this report), but also, how it has been

developed alongside our Pacific communities and how it will be shared with our Pacific communities.

This paper draws upon quantitative methods, by presenting descriptive findings from the PMHA survey. As mentioned, quantitative methods and research data have historically not operated with the best interests of Indigenous groups, including Pacific peoples. Further, quantitative research has often been led by Western-centric methods and written under a Western gaze. However, the PMHA survey was developed through the merging of Western and Pacific research design. Making space for multiple ways of research design enabled a robust and coherent collection of ideas from our Pacific peoples in Aotearoa NZ. This report serves as a(nother) step towards (re)shaping the deficit narratives surrounding our communities. It seeks to empower our Pacific communities through dismantling the rhetoric around mental health that has been told about our communities and to our communities for far too long.

The current report

This report draws upon findings from the PMHA survey, which formed part of a larger doctoral research project exploring Pacific MHL led by Sarah Kapeli at the University of Auckland. The larger doctoral research project aimed to investigate the link between MHL and mental health outcomes for Pasifika in Aotearoa NZ. Further, it explored the potential in improving Pasifika MHL as a way toward enhancing mental health and wellbeing outcomes for Pasifika in Aotearoa NZ. Additionally, the project aimed to strengthen the area of Pacific mental health research in Aotearoa NZ, whilst contributing significantly to MHL research in Aotearoa NZ. More specifically, this report aimed to provide a deeper understanding of what and how our Pacific communities recognise, know, and feel in relation to mental health – or gaining a deeper understanding of Pasifika MHL.

Terminology

We use the terms *Pacific peoples* and *Pasifika* interchangeably, which are inclusive of a group of people in NZ that have ethnic roots from many Pacific nations. Unless a research study specifically uses the term mental illness or mental disorder, the review uses the terms mental health issues/challenges to broadly refer to diagnosis of a mental illness or any other challenges or experiences with mental health. The choice in terminology is to shift the focus away from a deficit model of health, to those that are more consistent with Pacific views of health and wellbeing (Anae et al., 2002).

Report structure

This report includes four major sections:

1. **Introduction:** Provides an overview of our Pasifika in Aotearoa NZ and the importance of Pacific MHL research.
2. **Method:** Describes the data collection process and data analysis procedures.
3. **Results:** Presents descriptive results with supporting discussion across five areas: (1) Recognition of mental health challenges; (2) Experiences with mental health; (3) Attitudes towards mental health; (4) Mental health advertisements, campaigns, and websites; (5) Understanding of depression and anxiety.
4. **Overall discussion:** Summary of key discussion points and recommendations.

Strengths and limitations

The PMHA survey is the first of its kind in Aotearoa NZ and could help guide future research projects. For example, in developing research to investigate ethnic differences in recognition and understanding of mental health. The vignettes used in the PMHA survey could also be redeveloped to align with Pasifika understandings of depression and/or anxiety (or other mental health challenges). There may also be an opportunity to pool data from the

PMHA survey with other studies who have looked at the same measures, including MAKS and RIBS.

As mentioned, there is also scope to be inclusive of all ethnicities in Aotearoa NZ. To account for and highlight differences between ethnicities, as Dr. Sam Manuela has initiated with the *Understanding Mental Health in NZ* survey project that launched in 2019. Official data has yet to be released from this project, but Manuela did not obtain a large Pacific sample (smaller than our own), so the merit in focusing on Pacific peoples was important for this research project. Despite obtaining a relatively small sample size of Pasifika, much of the data that we did obtain is rich and contextual from the various open-ended questions in the survey. Unlike close-ended questions with 'yes' and 'no' responses, open-ended questions and their responses are important in developing meaningful research for our Pasifika communities.

There is also a wealth of data across the PMHA survey and wider PMHA project that has yet to be explored. The PMHA project was developed by Pasifika for Pasifika with the aim to disseminate additional research as it becomes available and in a timely manner.

Method

Ethics

The University of Auckland Human Participants Ethics Committee (UAHPEC) approved the PMHA survey and supporting documents on 29 October 2018 until 29 October 2021. Reference number: 022137. The PMHA survey was an anonymous, confidential, and voluntary survey, all of which was communicated via a Participant Information Sheet before a participant completed the survey. This was to ensure that participants were informed of their decision to take part in the research.

Sampling and recruitment

Recruitment for the PMHA survey was entirely voluntary and participants opted in to complete the survey. A combination of direct and snowball sampling methods was used. A unique follow-on effect of direct sampling is snowball sampling, where participants identify other potential participants. As a smaller population in Aotearoa NZ, Pacific peoples are generally harder to reach for research purposes and snowball sampling methods have proven advantageous for smaller population groups (see Kalsbeek, 2003). To enhance recruitment, advertisements were also displayed in public spaces and on social media platforms, including Facebook and Instagram.

Data collection

The PMHA survey was available to complete online or via paper copy. Completed surveys were collected from November 2018 to October 2019 and participation occurred several ways:

1. Obtaining online information from poster advertisements (QR code or online link).
2. Receiving the online link via email.
3. Following the online link via social media advertisements on Facebook and/or Instagram.
4. Requesting a paper copy from the lead researcher via email (details of the lead researcher may have been obtained through word of mouth, seeing a poster advertisement, seeing advertisements via social media or other online platforms).

Participants

The PMHA survey included responses from 548 Pacific peoples (14.6% men, 84.8% women, .6% gender diverse) with an age range from 16 to 83 years ($M = 27.18$, $SD = 9.98$). Participants represented many Pacific nations, in many cases, identifying with more than one Pacific ethnicity. Of the four largest represented Pacific ethnic groups in Aotearoa NZ, the

PMHA survey responses included 291 participants (53.1%) that identified as Sāmoan, 156 participants (28.5%) that identified as Tongan, 62 participants (11.3%) that identified as Cook Island Māori, and 62 participants (11.3%) that identified as Niuean. Please see Table 12.

Table 12

Participant demographic information

Gender		% Yes
	Male	14.6
	Female	84.8
	Gender diverse	0.6
Pacific ethnicity		% Yes
	Sāmoan	53.1
	Tongan	28.5
	Cook Island Māori	11.3
	Niuean	11.3
	Fijian	6.4
	Tokelauan	2.6
	Tuvaluan	0.9
	Tahitian	0.2
	Kiribati	0.5
	Papua New Guinean	0.5
	Solomon Islanders	0.4
	Rotuman	0.4
	Hawaiian	0.2
	Pitcairn Islander	0.2
	Also identified as New Zealand Māori	13.3
	Also identified with non-Pacific ethnicity	24.5
Age group		% Yes
	16-24	48.4
	25-44	45.1
	45-64	5.8
	65+	0.8
Place of birth and migration		% Yes
	Born in Aotearoa NZ or other Western country	85.9
	Migrated to Aotearoa NZ	16.8
	Migrated to Aotearoa NZ before 33 years of age	98.9
Education		% Yes
	Studying	54.5
	Qualification (undergraduate or higher)	20.3
Employment		% Yes
	Employed	63.5
	Professional employment	29.3
	Community / Service work employment	22.4
	Health related employment	6.9
Marital status		% Yes
	Relationship	51
Location based on regional council		% Yes
	Auckland	73.6
	Wellington	10.1
	Canterbury	3.6
	Waikato	3.4
	Bay of Plenty	2.7
	Manawatu-Wanganui	2.3
	Otago	2.3
Religion		% Yes
	Religious	78
	Christian	75.5
	No religion	18.6

Survey

The PMHA survey (please refer to Appendix A) comprised seven sections as outlined below:

Section 1: Personal Information

Requested personal information related to ethnicity, age, country of birth, languages, gender, sexual orientation, employment status, level of qualification, relationship status, religiosity, spirituality.

Section 2: Recognition of depression

Provided a vignette about a Pasifika male (Tevita) displaying clinical signs of depression as per the Diagnostic and Statistical Manual of Mental Disorders Fifth Edition (DSM-5), with follow up questions.

Section 3: Recognition of anxiety

Provided a vignette about a Pasifika female (Malia) displaying clinical signs of anxiety as per the DSM-5, with follow up questions.

Section 4: Experiences with mental health

Presented questions around personal experiences with mental health such as: experience with mental health issues, knowledge around places offering support for mental health, mental health service access.

Section 5: Attitudes towards mental health

Presented questions around personal attitudes towards mental health, including knowledge around mental health issues, attitudes towards mental health issues, exposure to mental health issues.

Section 6: Mental health advertisements, campaigns, and websites

Presented questions around personal knowledge of mental health campaigns.

Section 7: Understanding of depression and anxiety

Presented questions related to depression and anxiety.

Data analysis

The data presented in this report is descriptive and is presented across five areas.

1: Recognition of mental health challenges, recognition was determined by an open response explicitly stating depression or a derivative (i.e., depressed, depressive disorder) and anxiety or a derivative (i.e., anxious). Other response categories for open-ended questions were developed using reflexive thematic analysis, drawing upon both an inductive and deductive way of category development (Braun & Clarke, n.d.). For further reading on thematic analysis, please see Braun and Clarke (n.d.; 2013).

2: Experiences with mental health, response categories for open-ended questions were developed from a framework analysis, by working from a list of pre-determined categories and matching the responses to these. For example, this was used for the question concerning *places of support.*

3: Attitudes towards mental health, measures included the MAKS (Evans-Lacko et al., 2010) and RIBS (Evans-Lacko et al., 2011). To understand the basic response pattern for both the MAKS and RIBS that used a 5-point agreement scale, the following was applied (as seen in Deverick et al., 2017):

- *Strongly agree* and *slightly agree* were combined to indicate total agreement.
- *Strongly disagree* and *slightly disagree* were combined to indicate total disagreement.
- *Neither agree nor disagree* and *don't know* were combined to indicate neutral responses.

To understand overall scores, as per Deverick and colleagues (2017), scores were grouped into four categories and the percentage of participants in each category examined.

The categories were based on the average score for each item within a scale. The categories used for the MAKS and RIBS are:

- Low: average score of 1 to 2, indicating that the participant expressed only or mostly negative views of those who experience mental health challenges.
- Medium-low: average score of 2.1 to 3, indicating that the participant expressed a range of views that are overall negative.
- Medium-high: average score of 3.1 to 3.9, indicating that the participant expressed a range of views that are overall positive.
- High: average score of 4 to 5, indicating that the respondent expressed only or mostly positive views.

4: Mental health advertisements, campaigns, and websites, examine the location of exposure to mental health advertisements, campaigns, and websites through an open-ended response, where response categories were developed from a framework analysis, by working from a list of pre-determined categories and matching the responses to these. This section also developed response categories using content analysis (Forman & Damschroder, 2007) to identify patterns in the open-ended responses to better understand why participants connected with the mental health advertisements, campaigns, and websites they engaged with. Further, this section explored open-ended responses regarding what is missing from the current mental health advertisements, campaigns, and websites using content analysis (Forman & Damschroder, 2007; Hsieh & Shannon, 2005).

5: Understanding of depression and anxiety, examine what avenues are considered helpful or unhelpful for someone experiencing depression or anxiety. Each avenue was determined by selecting whether it was “helpful”, “harmful”, “unsure”, or made “no difference”.

Results and discussion

We present data for broadly descriptive purposes, with the intention of providing more research from the PMHA survey as it becomes available and in due course.

1: Recognition of mental health challenges

Recognition of depression

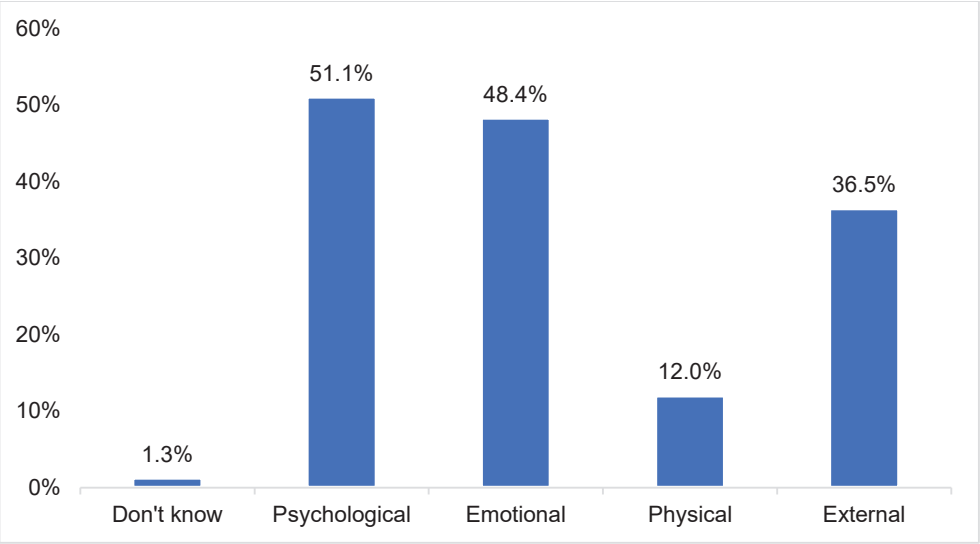
All participant questions refer to section 2 of the PMHA survey. A vignette was presented as per below, describing Tevita experiencing depression. Following the vignette, participants were asked *"...why do you think Tevita feels this way?*" Of the total sample, 42.3% of participants recognised depression.

> *Tevita is 44 years old, married, and has 5 children between the ages of 5 and 15. Tevita has been feeling really sad for the last few weeks. Tevita feels tired all the time and has had trouble sleeping nearly every night. Tevita does not feel like eating and has lost weight. Tevita's wife Siu, has asked him about his strange behaviour but Tevita says it is because he is busy. Tevita is a bank manager and has been unable to keep his mind on his work, and puts off making decisions. Even daily tasks seem too much for him. This has come to the attention of Tevita's boss, who is worried about Tevita's work and lack of leadership.*

The majority of participants believed that what Tevita was experiencing (depression) was psychological and emotional in nature. Across many responses, participants suggested more than one reason for what Tevita was experiencing and therefore the total percentage of participants equates to more than 100%. Please refer to Figure 16.

Figure 16

Percentage of participants in response to, "why do you think Tevita feels this way?"



In terms of the categories identified in Figure 16, definitions and examples are as follows. The *psychological* response category used here is defined as: related to the mental state of a person and their mental affliction and can be longer lasting. It included responses in reference to, "depression", "mental distress and/or distress", "trauma and/or tragedy", "crisis and/or mid-life crisis", "anxiety". Some of the responses categorised as psychological, included: "Tevita may have experienced something traumatic and is having trouble coping with that pain"; "Mental stress possibly due to work or family" (also categorised as external); "I feel like Tevita is depressed".

The *emotional* response category used here is defined as: related to the emotional state of someone and how they feel and can be transient. It included responses in reference to, "overwhelmed", "burnout", "sad and/or unhappy", "stress", and "dissatisfied". Some responses categorised as emotional included: "Tevita is feeling overwhelmed with his life"; "Possibly stressed or worried about something"; "I think he is feeling sad possibly because he

is overwhelmed with a big family to care for as well as the responsibility as a leader at work" (also categorised as external).

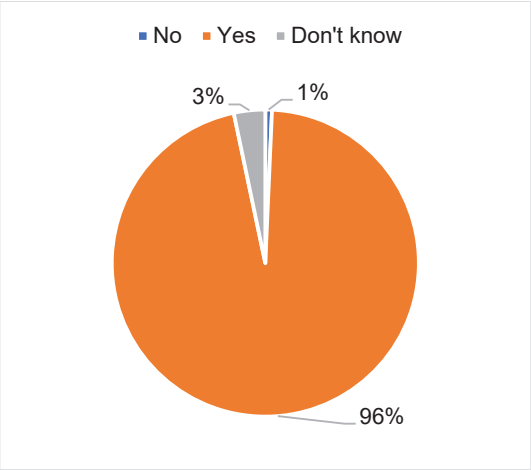
The *physical* response category used here is defined as: related to the physical or bodily state of someone. It included responses in reference to, "fatigue", "illness", "lack of appetite". Some responses categorised as physical, included: "Tevita is physically ill. If he is off sick, who will look after his family"; "He's exhausted"; "A physical, mental or emotional health issue" (also categorised as psychological and emotional).

The *external* response category used here is defined as: derived from sources outside of someone's mental, emotional, and physical state. It included responses in reference to, "family pressure", "job pressure", "lack of self care", "lack of communication". Some responses categorised as external, included: "Work and family responsibilities"; "The responsibilities of being a Pasifika dad with a big family"; "Maybe a combination of things from work load, diet, relationships, home life, and other things not mentioned" (also categorised as physical and emotional). For a full breakdown of the coding schedule used for the purposes of this research (as per Figure 16), please see Appendix C.

Participants were also asked, *"do you think Tevita needs help?"* followed by tick-box selections of *"Yes", "No", "Don't know."* Almost all participants thought that Tevita needed help with what he was experiencing. Please refer to Figure 17.

Figure 17

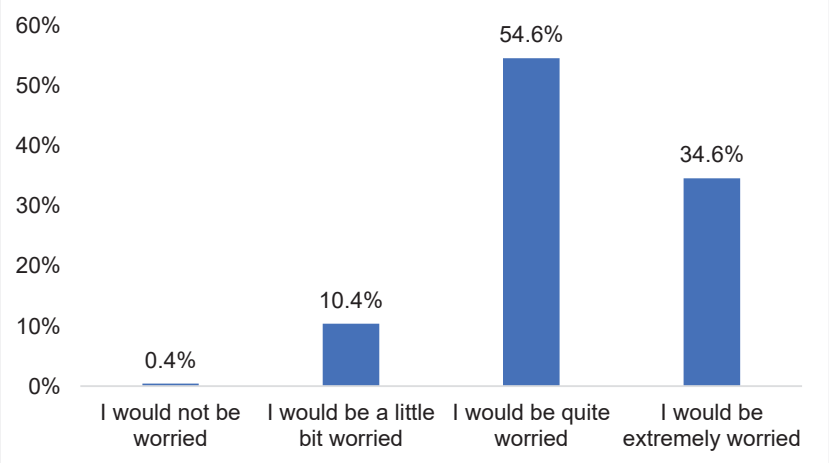
Percentage of participants in response to, "Do you think Tevita needs help?"



Participants were also asked, *"how worried would you be about Tevita?"* followed by tick-box selections of *"I would not be worried", "I would be a little bit worried", "I would be quite worried", "I would be extremely worried."* Almost all participants indicated they would be worried about Tevita, with over 80% indicating quite to extremely worried. Please refer to Figure 18.

Figure 18

Percentage of participants in response to, "how worried would be about Tevita?"



Recognition of anxiety

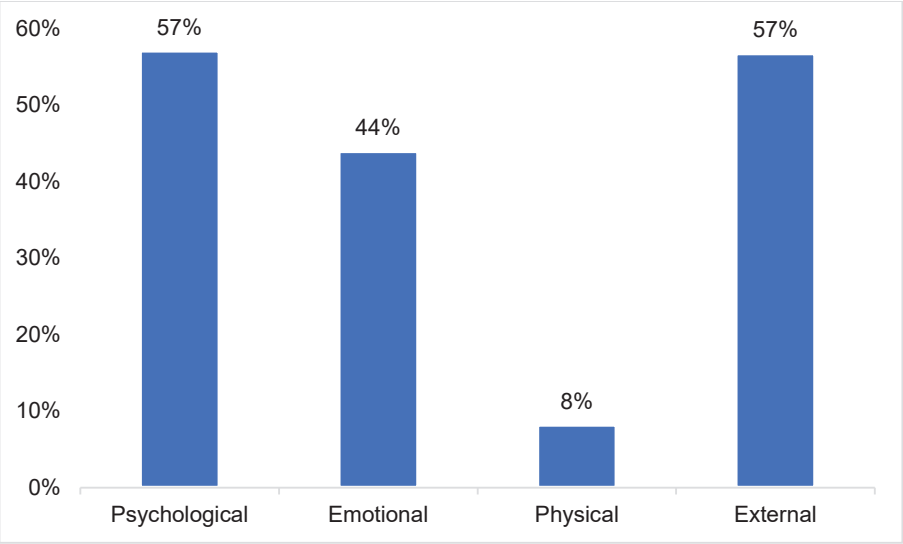
All participant questions refer to section 3 of the PMHA survey. A vignette was presented as per below, describing Malia experiencing anxiety. Following the vignette, participants were asked *"...why do you think Malia feels this way?"* Of the total sample, 53% of participants recognised anxiety.

> *Malia is 18 years old and is in her second year at University. Malia is also a part of her church youth group, works part-time at McDonald's and plays netball. Within the last 12 months, Malia has been avoiding youth group and has found it hard to relax. Malia has also felt nervous about all the work she has to do at University. Over the last 6 months, Malia has found it hard to concentrate at University and has also found herself breathing fast and shaking for no reason. Malia thinks this is because she is so busy and not sleeping much. Last week at church, Malia's mother found her in the church bathroom breathing fast, shaking and crying, but Malia's mother did not know what to do and is now very worried.*

The majority of participants believed that what Malia was experiencing (anxiety) was psychological in nature and due to external factors. Across many responses, participants suggested more than one reason for what Malia was experiencing and therefore the total percentage of participants equates to more than 100%. Please refer to Figure 19.

Figure 19

Percentage of participants in response to, "why do you think Malia feels this way?"



In terms of the categories identified in Figure 19, definitions and examples are as follows. The *psychological* response category used here is defined as: related to the mental state of a person and their mental affliction and can be longer lasting. It included responses in reference to, "depression", "mental distress and/or distress", "trauma and/or tragedy", "crisis and/or mid-life crisis", "anxiety", "panic attacks". Responses categorised as psychological, included: "A little Anxiety maybe as workload has increased" (also categorised as external); "She's probably depressed and got anxiety"; "Because she is overcome with anxiety and doesn't know how to control it".

The *emotional* response category used here is defined as: related to the emotional state of someone and how they feel and can be transient. It included responses in reference to, "overwhelmed", "burnout", "sad and/or unhappy", "stress", "worry", "dissatisfied", "confused", "fear of failure". Responses categorised as emotional, included: "Because she is overwhelmed"; "She could be suffering from a stress disorder"; "The fear of failure".

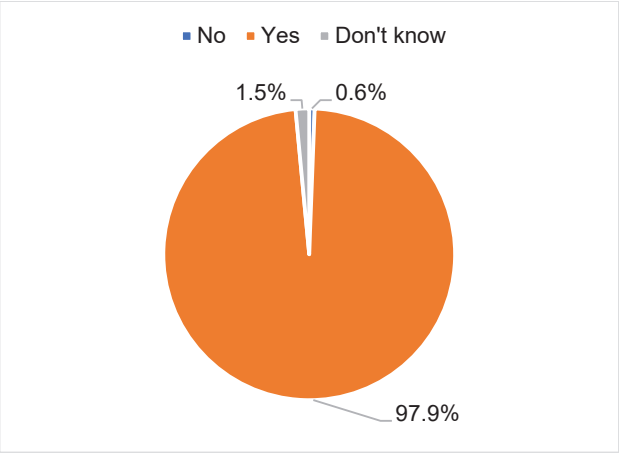
The *physical* response category used here is defined as: related to the physical or bodily state of someone. It included responses in reference to, “fatigue”, “illness”, “lack of appetite”, “young age”. Responses categorised as physical, included: “For such a young person she is taking on too much. She needs to slow down” (also categorised as external); “Fatigue”; “She’s young (may lack experience to manage time?) and she has a lot of commitments that span across different areas of her life e.g., education, spiritual, and physical activities” (also categorised as external).

The *external* response category used here is defined as: derived from sources outside of someone’s mental, emotional, and physical state. It included responses in reference to, “family pressure”, “job pressure”, “university pressure”, “church pressure”, “youth group”, “too much pressure”, “taking on too much”, “too many commitments”, “heavy workload”, “expectations”, “lack of communication”. Responses categorised as external, included: “A heavy workload and pressure”; “Been busy and not enough sleep” (also categorised as physical); “Sounds like she’s committed to more than she can handle at the moment”. For a full breakdown of the coding schedule used for the purposes of this research (as per Figure 19), please see Appendix D.

Participants were also asked, *“do you think Malia needs help?”* followed by tick-box selections of *“Yes”, “No”, “Don’t know.”* Almost all participants thought that Malia needed help with what she was experiencing. Please refer to Figure 20.

Figure 20

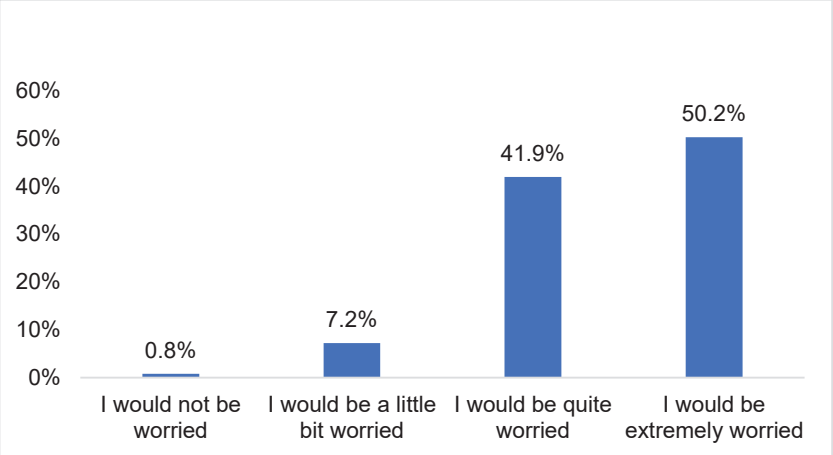
Percentage of participants in response to, "Do you think Malia needs help?"



Participants were asked, *"how worried would you be about Malia?"* followed by tick-box selections of *"I would not be worried", "I would be a little bit worried", "I would be quite worried", "I would be extremely worried."* Almost all participants indicated they would be worried about Malia, with over 90% indicating quite to extremely worried. Please refer to Figure 21.

Figure 21

Percentage of participants in response to, "how worried would be about Malia?"



Discussion. Almost 42% and 52% of participants correctly recognised depression and anxiety respectively. This is important because it provides an indication of the depression and anxiety awareness within our Pacific communities in Aotearoa NZ. Interestingly, these results differ from what we have seen in overseas data, where depression tends to be more recognised than any other mental illness (Jorm, 2012). These recognition rates are moderate and echo similar findings from the New Zealand Mental Health Monitor (NZMHM) where 51% of Pasifika were able to identify anxiety and depression in comparison to Māori (69%) and NZ Europeans (85%) (Hudson et al., 2017). Such moderate findings further highlight an opportunity to increase recognition for both depression and anxiety. There is a link between mental health literacy and help seeking attitudes and/or behaviours, which in our current mental health climate, this research provides an invaluable source of information.

When exploring further as to why participants believed Tevita (experiencing depression) and Malia (experiencing anxiety) to feel the way they were feeling, participants primarily reported psychological, emotional, and external indicators. This is important to highlight with the increasing awareness of psychological and emotional factors that are impacting the mental health of our Pasifika, we need to ensure that our mental health services and supports are accessible for our communities – of which there are currently numerous barriers to Pacific peoples accessing primary health care (Fa'alogo-Lilo & Cartwright, 2021; Faleafa, 2020; Southwick et al., 2012). Creating a workforce that meets the cultural needs of our communities is undoubtedly needed (Faleafa et al., 2019; Pulotu-Endemann & Faleafa, 2017). Yet, recent research has also identified the role that community pharmacists could hold in the community through providing mental health support and services (Rimal et al., 2022). Given the barriers to accessing healthcare services (i.e. cost, appointment availability, open hours), access to community pharmacists may be a positive way forward if managed effectively. However, it would be vital that community pharmacists are skilled in mental

health service provision through updated training regimes and ongoing professional development.

We also need to ensure that at a community level, our community members can appropriately respond or give guidance to those experiencing mental health challenges. This could be further addressed with the introduction of programmes that promote MHL education such as the Mental Wealth project (Le Va, n.d.) or mental health first aid (Jorm et al., 2011) may prove beneficial. Further, it would also be vital for people at the junctions, where community meets the healthcare system, to be able to recognise nuances in the ways Pacific peoples experience and express depression and anxiety. Even more so, regardless of knowing what Tevita or Malia were experiencing, most participants thought they both needed help and were worried about them. Interestingly, the distribution of 'being extremely worried' was greater towards Malia's experiences than Tevita's – further research could seek to understand why Malia's experiences was more cause for concern.

2: Experiences with mental health

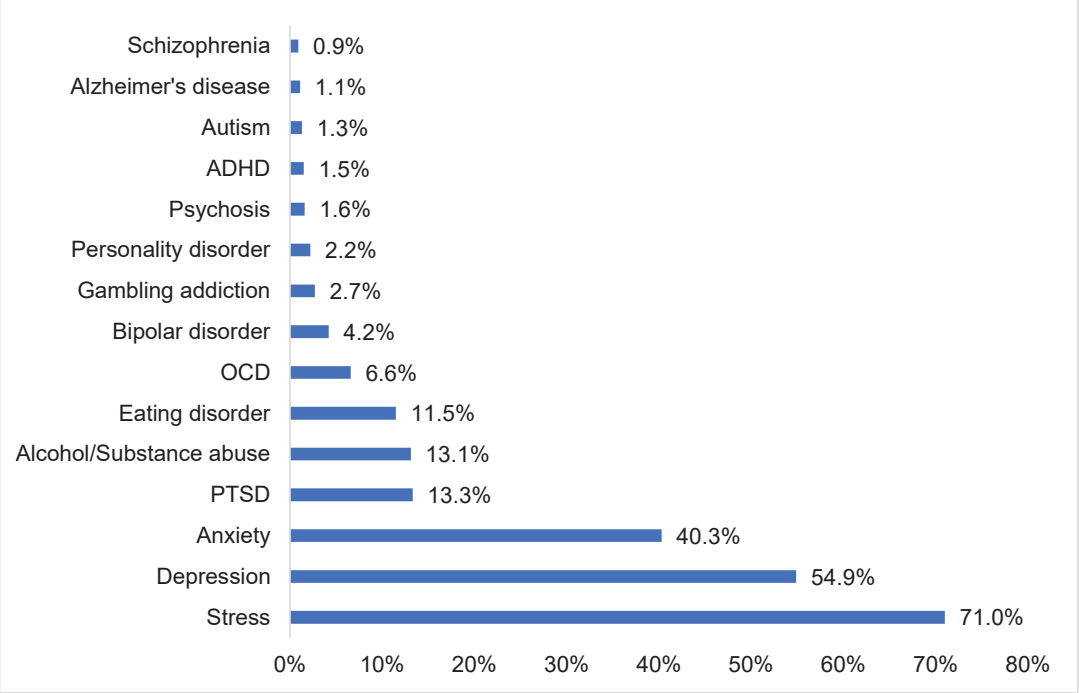
All participant questions refer to section 4 of the PMHA survey.

Personal experiences with mental health challenges

Participants were asked, "*have you ever had any of the following mental health issues?"* followed by an array of mental health issues to choose from, where participants could choose more than one mental health issue and thus, the total percentage of participants equates to more than 100%. The majority of participants indicated experiences of stress (71%), depression (54.9%) and/or anxiety (40.3%). Please refer to Figure 22.

Figure 22

Percentage of participants who reported experiencing a mental health issue



Note. N=273; PTSD = Post Traumatic Stress Disorder; OCD = Obsessive Compulsive Disorder; ADHD = Attention Deficit Hyperactivity Disorder

Further, participants were asked *"if any of the above* [mental health issues indicated previously] *were diagnosed by a doctor, which ones?"*. Of those who indicated having had a mental health issue, almost 65% was diagnosed by a doctor, with most common diagnosed mental health issues being depression (72.88%), anxiety disorder (51.98%), stress (37.29%), and Post Traumatic Stress Disorder (PTSD) (21.47%). Please see Figure 23 and 24.

Figure 23

Percentage of participants whose mental health issue was diagnosed by a doctor

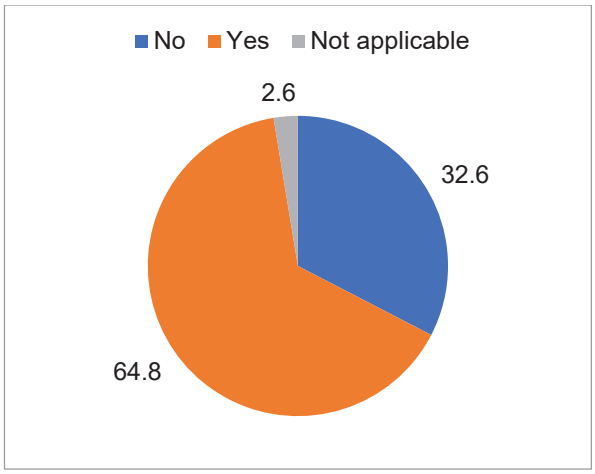
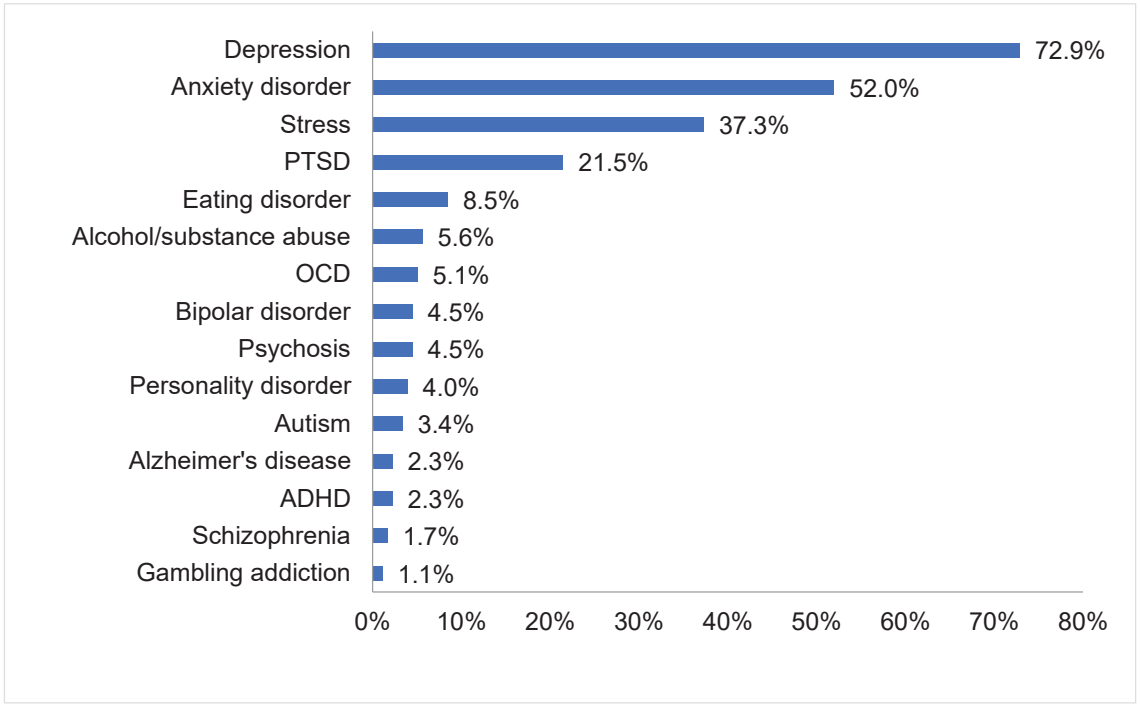


Figure 24

Percentage of participants and respective mental health issues diagnosed by a doctor



Note. PTSD = Post Traumatic Stress Disorder; OCD = Obsessive Compulsive Disorder; ADHD = Attention Deficit Hyperactivity Disorder

Discussion. The most experienced mental health challenges were stress, depression and/or anxiety. Lesser experienced mental health challenges included PTSD, alcohol/substance abuse, and eating disorders. The least commonly experienced mental health challenges were Obsessive Compulsive Disorder (OCD), bipolar disorder, gambling addiction, personality disorder, psychosis, Attention Deficit Hyperactivity Disorder (ADHD), autism, Alzheimer's disease, schizophrenia. In terms of diagnosis by a doctor, there is no further information to indicate the type of doctor. For example, general practitioner versus clinical psychologist. Since Pasifika face more barriers to accessing healthcare in general, it can be assumed that diagnosis was carried out by a general practitioner. The type of diagnosis and care plan between a general practitioner and a clinical mental health professional (i.e. clinical psychologist, psychiatrist) may differ for the same individual, which would be an interesting avenue to explore. This in no way seeks to minimise the great and important work carried out by our general scope of health professionals, but rather, highlights a growing need for accessible health professionals that specialise in mental health.

At a population level, depression and anxiety are our nation's most experienced mental health challenges but also our most stigmatised (Kvalsvig, 2018). It is important that we continue to address stigma around mental health within our Pacific communities, whilst navigating ways to reduce its impact. As mentioned, stigma can lead to a reduced likelihood of seeking help and subsequent worsening of mental health challenges. Going forward, Pacific-centric methods could provide a positive yet constructive way of exploring mental health across our communities, particularly in research. For example, talanoa methods would provide a safe space to centre Pacific voices. Although talanoa was not used as part of the PMHA survey, talanoa does form part of the larger PMHA project and adds immense value. Together, survey and talanoa components can provide a meaningful union in research – a

unique and innovative approach towards Pacific research (Kapeli, Manuela, & Sibley, 2020b).

Mental health issue prevalence rates can also help to identify what mental health issues need to have a greater focus from a prevention and intervention space, but also from an educational and mental health promotion perspective. Further, this means that spaces addressing prevention, intervention, education, and mental health promotion need to be inclusive of Pacific worldviews, to ensure these spaces are not only safe and culturally responsive but also provide relevant and effective messaging for our Pacific communities. As mentioned prior, talanoa can provide an appropriate space to explore the parameters of effective messaging. In Section 4: *Mental Health Advertisements, Campaigns, Websites*, data is presented around personal experiences of mental health promotion activity and how this space can better meet the needs of our Pacific communities.

Additionally, almost 65% of participants reported that their mental health issues were diagnosed by a doctor. We know that seeking support is important for mental health and wellbeing management, particularly with the support of a health professional. However, our research does not indicate at what point our participants sought help from a health professional or its efficacy in doing so. Timeliness is a critical factor in providing quality and effective mental health care, tracking such information could provide valuable information in future research (Pomerantz et al., 2008).

Places of support

Participants were asked *"are there places and/or people you would turn to for support? If yes, what are the places and/or people?"* The majority of participants (86%) indicated that there were places and/or people they would turn to for support, with family (64.1%) and friends (50.9%) being the main sources of support. Across many responses, participants indicated more than one place they would turn to for mental health support, and

thus, the total percentage of participants equates to more than 100%. Please refer to Figure 25 and 26. For a breakdown of the coding schedule used to determine the categories for the purposes of this research (as per Figure 26), please see Appendix E.

Figure 25

Percentage of participants in response to, "are there places and/or people you would turn to for support?"

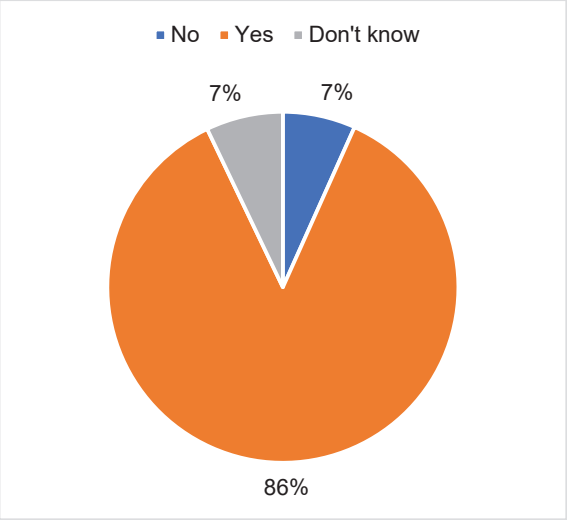
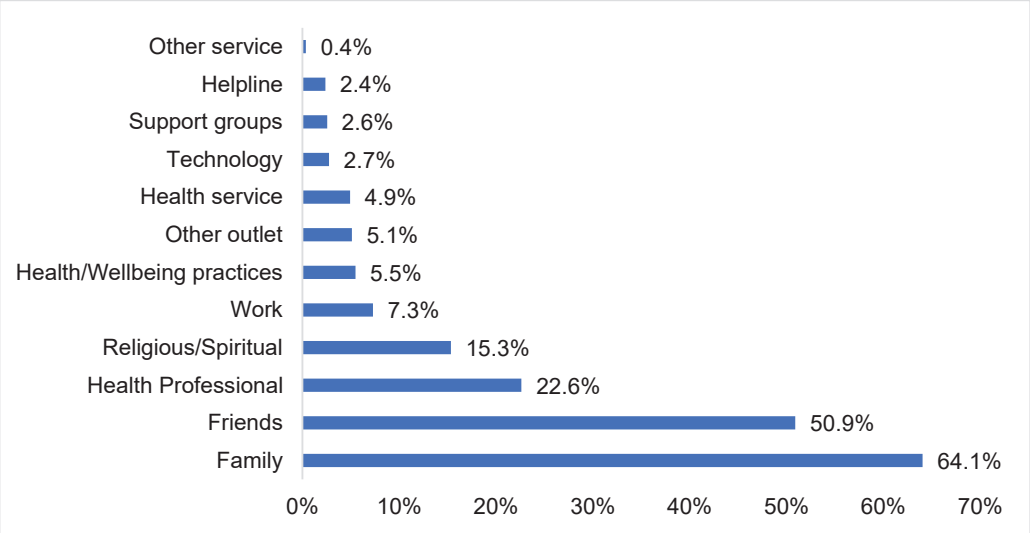


Figure 26

Percentage of participants who responded "yes, there are places and/or people I would turn to for support" and reported the places and/or people



Note. N=548.

Discussion. Almost ¾ of participants indicated that there are places/people they would turn to for support, with family and friends being the prime sources of support. Having a strong social support network is vital to the health and wellbeing of our Pasifika as we tend to thrive off vā-centred approaches (Kapeli, Manuela, Milojev, et al., 2020). With family and friends reported as the main sources of emotional and practical support that Pacific peoples are able to access, this highlights the need for more resources to be put in place to strengthen family and friend skills to create safe spaces and to be able to navigate the healthcare system when appropriate.

Only ¼ of participants indicated being able to turn to a health professional for support. With health professionals being reported as any of the following: Counsellor/Therapist; Psychologist; Doctor/GP; Psychiatrist; Social worker; Teacher; Nurse; Health professional not further defined. Given the high rates of reported mental health

challenges (see *personal experiences with mental health challenges*), this is concerning. Barriers to mental health care include but are not limited to high cost, restricted opening hours, long wait times, community and cultural disconnect (Fa'alogo-Lilo & Cartwright, 2021; Faleafa, 2020; Southwick et al., 2012). By breaking down barriers to access, this could lead to more equitable mental health care as well as mental health professionals becoming a more accessible and trusted source of mental health support. As mentioned, to do so we need to be investing in a workforce that meets the cultural needs as well as the socioeconomic needs of our communities (Faleafa et al., 2019; Pulotu-Endemann & Faleafa, 2017).

It is also important to consider that almost ¼ of participants indicated they did not have or were unsure of places/people to turn to for support. Future research understanding the reasons why this is the case will be imperative to informing the mental health education, mental health promotion, and the prevention and intervention space.

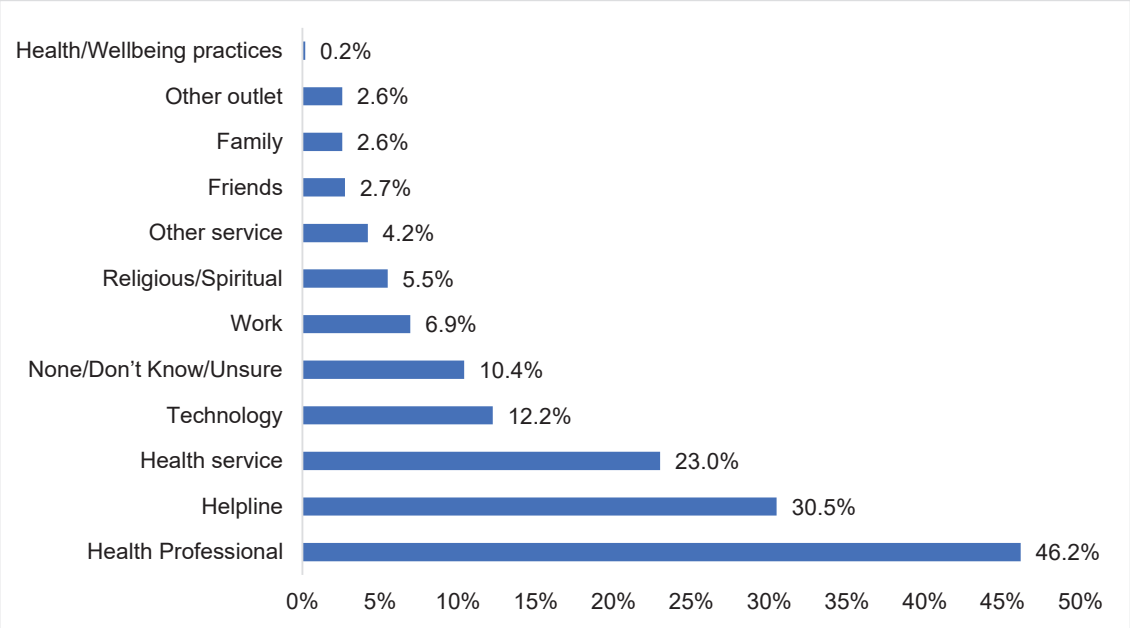
Awareness of mental health support

Participants were asked *"what places are you aware of if you need mental health support?"* Participants shared various places they were aware of to provide mental health support. Across many responses, participants indicated more than one place they were aware of for mental health support, and thus, the total percentage of participants equates to more than 100%. The majority of participants were aware of seeking mental health support from a health professional (46.2%) or a helpline (30.5%). Please refer to Figure 27.

In terms of the category *health professional*, this included: Counsellor/Therapist; Psychologist; Doctor/GP; Psychiatrist; Social worker; Teacher; Nurse; Health professional not further defined. For a full breakdown of the coding schedule used to determine the categories for the purposes of this research (as per Figure 27), please see Appendix F.

Figure 27

Percentage of participants in response to, "what places are you aware of if you need mental health support?"



Discussion. Almost half of participants were aware of health professionals if they were needing mental health support, including Counsellor/Therapist; Psychologist; Doctor/GP; Psychiatrist; Social worker; Teacher; Nurse; Health professional not further defined. Followed closely by a helpline or a health service. It is important to highlight that awareness does not equate to use. Given that the top three places can be restricted by access (health professional, helpline, health service), there is an opportunity to build more awareness around technology and mental health and wellbeing practices, as these could act to reduce perceptual barriers towards accessing health professionals and health services. The combination of technology and health is not a new idea and there has been a significant increase in research around the use of digital technologies to reduce mental health disparity, particularly since the emergence of the COVID-19 pandemic (Friis-Healy et al., 2021). Recently in Aotearoa NZ we have seen the digital outcomes of this through the rise of Tend

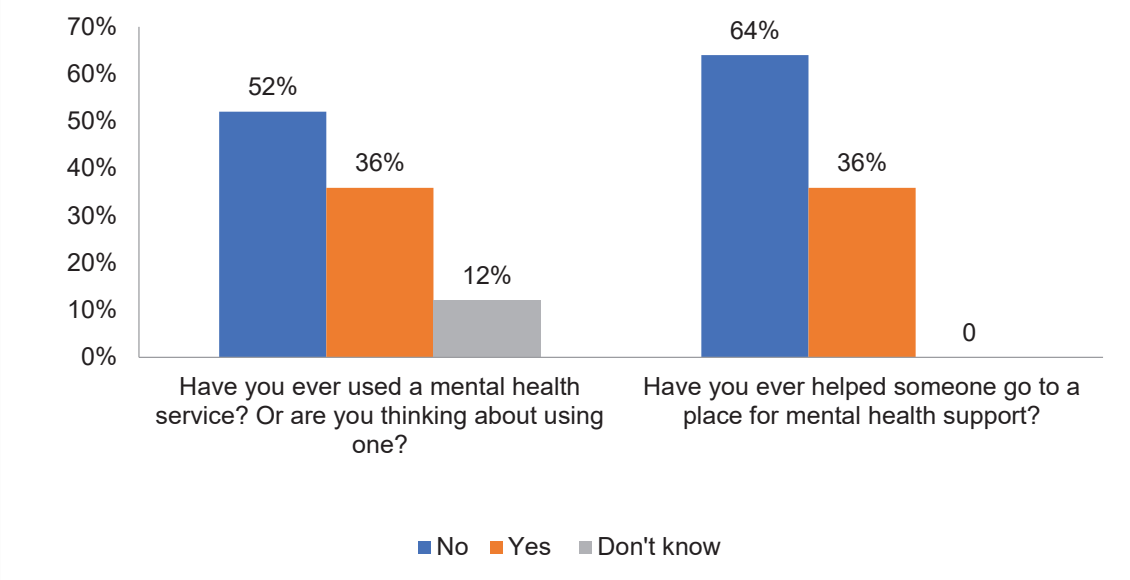
Health, an online healthcare platform (Robinson Duo, 2021). Le Va also offers various digitally accessible mental health platforms such as Aunty Dee (Le Va, 2021) and Mental Wealth (Le Va, n.d.).

Personal experiences with mental health services

Participants were asked, *"Have you ever used a mental health service? Or are you thinking about using one?"* and *"Have you ever helped someone to go to a place for mental health support?"* The majority of participants reported that they had not used a mental health service (52%) and had not helped someone go to a place for mental health support (64.1%). Please see Figure 28.

Figure 28

Percentage of participants who have engaged with mental health services



Discussion. More than half of participants had not engaged with or helped someone attend a mental health service. When considering these responses, it can be thought about in two ways. The first is, that the lower mental health service engagement rates are due to there being no need. The second is, that the lower mental health service engagement rates are due to access issues. Given the responses from the PMHA survey (higher rates of experiencing mental health challenges) and previous research (Pasifika experience higher rates of mental health challenges and have lower rates of engagement with mental health services), we proceed with the second option – access issues. Again, we stress the importance of enhancing MHL through education, with a particular focus on our Pacific youth. The Mental Wealth platform works into the prevention and intervention space by providing a culturally responsive, educational, and engaging community activity (Kapeli, Manuela, & Sibley, 2020b; Le Va, n.d.). Mental Wealth is also a promising programme because it has a focus on Pacific youth, thus having the potential to have lifelong effects.

3: Attitudes towards mental health

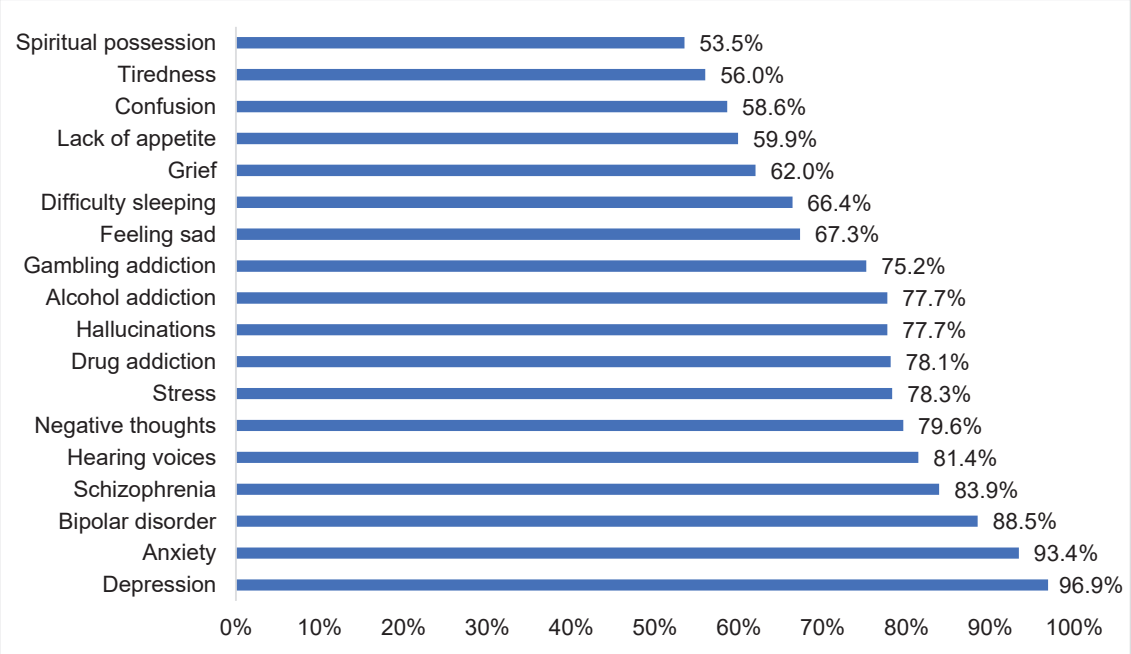
All participant questions refer to section 5 of the PMHA survey.

Awareness of mental health challenges

Participants were asked, *"please tick all the boxes of what you think is a mental health issue"*, followed by a selection to choose from. Across many responses, participants indicated more than one option for what they believe is a mental health issue, and thus, the total percentage of participants equates to more than 100%. Almost all of the participants believed that depression (96.9%) and anxiety (93.4%) were mental health issues. Please refer to Figure 29.

Figure 29

Percentage of participants who reported what they thought was a mental health issue



Discussion. As seen in Figure 29, we can see three clusters have emerged. Cluster 1 illustrates the highest percentage rates (Depression, Anxiety, Bipolar disorder, Schizophrenia) and includes mental health issues. Cluster 2 illustrates moderate percentage rates (Hearing voices, Negative thoughts, Stress, Drug addiction, Hallucinations, Alcohol addiction, Gambling addiction) and is more inclusive of symptoms or indicators of mental health issues. Cluster 3 illustrates the lowest percentage rates (Feeling sad, Difficulty sleeping, Grief, Lack of appetite, Confusion, Tiredness, Spiritual possession) and is more inclusive of less obvious symptoms or indicators of mental health issues.

Identifying these three clusters is hugely important. For instance, 56% of participants believe that *tiredness* is a mental health issue, and by considering tiredness in isolation, it is not necessarily recognised as problematic or contributing to a mental health issue – it could just be part of daily life. Essentially, Figure 29 illustrates that the participants appear to have a good understanding of how symptoms are symptomatic of a mental health issue but not necessarily problematic. Again, this signals the importance of MHL education and how it could help our communities draw links between problematic symptoms and mental health issues in relevant and relatable ways.

Mental Health Knowledge Scale (MAKS)

Participants were asked, *"for the following statements, please tick one option only"* followed by a series of statements and tick-box selections of *"Don't know", "Agree strongly", "Agree slightly", "Neither agree or disagree", "Disagree slightly", "Disagree strongly."* Please see Figure 30. This sub-section of the questionnaire is derived from the *Mental Health Knowledge Schedule* (MAKS), which is a measure of mental health knowledge and includes six questions about stigma-related mental health knowledge (Evans-Lacko et al., 2010).

Possible MAKS scores for the six questions range from 6 to 30, with higher scores indicating greater self-reported mental health knowledge and associated with more positive views of people with experience of mental distress. The mean MAKS score was 16.67 with a range of 1.3 to 56.7. The majority of participants had high (53.1%) or medium-high (29.2%) levels of mental health knowledge, which can be associated with more positive views. Please see Figure 31.

The MAKS looks at how mental health-related knowledge can influence stigmatizing attitudes or behaviours. By exploring the relationship between knowledge and its effect on attitudes or behaviours, we can further inform interventions that aim to modify behaviours. The MAKS can also be used to evaluate interventions that aim to reduce stigma, and when used alongside other attitude and behavioural measures, may help to understand how to better develop interventions to reduce stigma.

Figure 30

Percentage of participants for their reported knowledge for items 1 to 6 of the MAKS

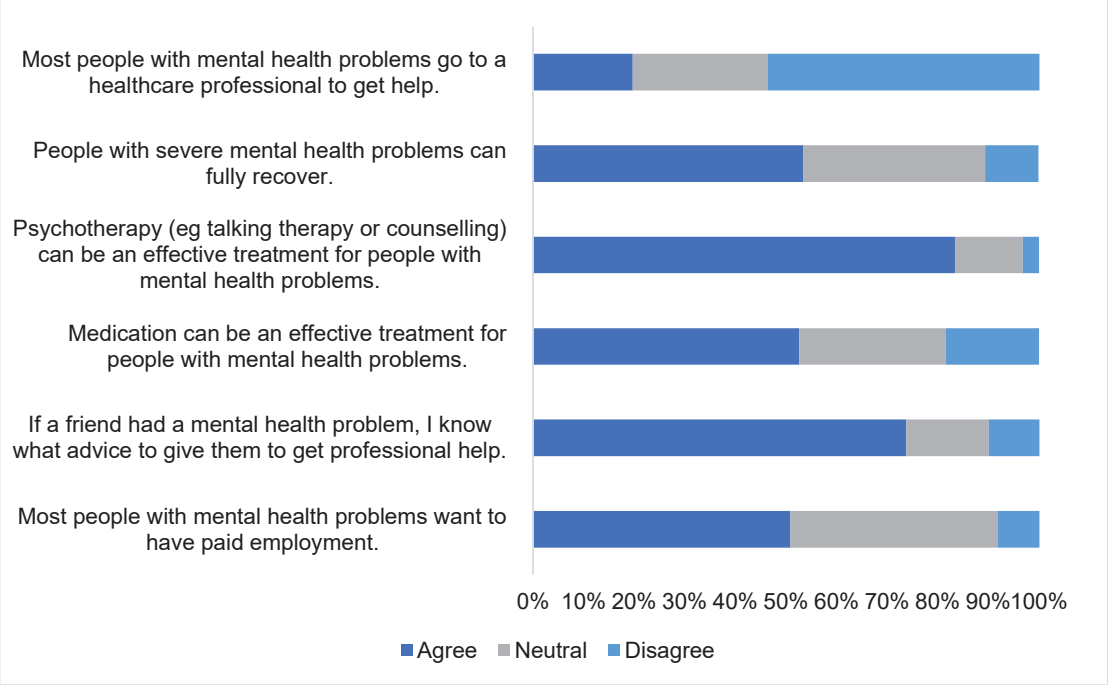
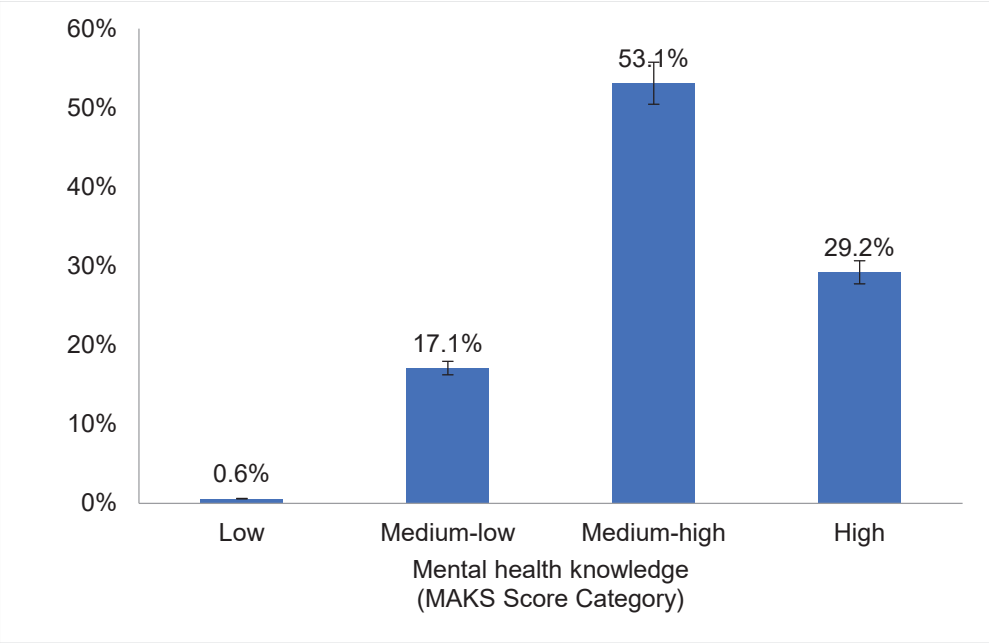


Figure 31

Percentage of participants in each overall MAKS category



Discussion. The majority of participants reported high and medium-high mental health knowledge, indicative of more positive views around mental health issues. This is encouraging because we would expect that more positive views would promote openness, and therefore, be more amenable towards interventions that focus on reducing stigma and stigma-related attitudes and behaviours.

Reported and Intended Behaviour Scale (RIBS)

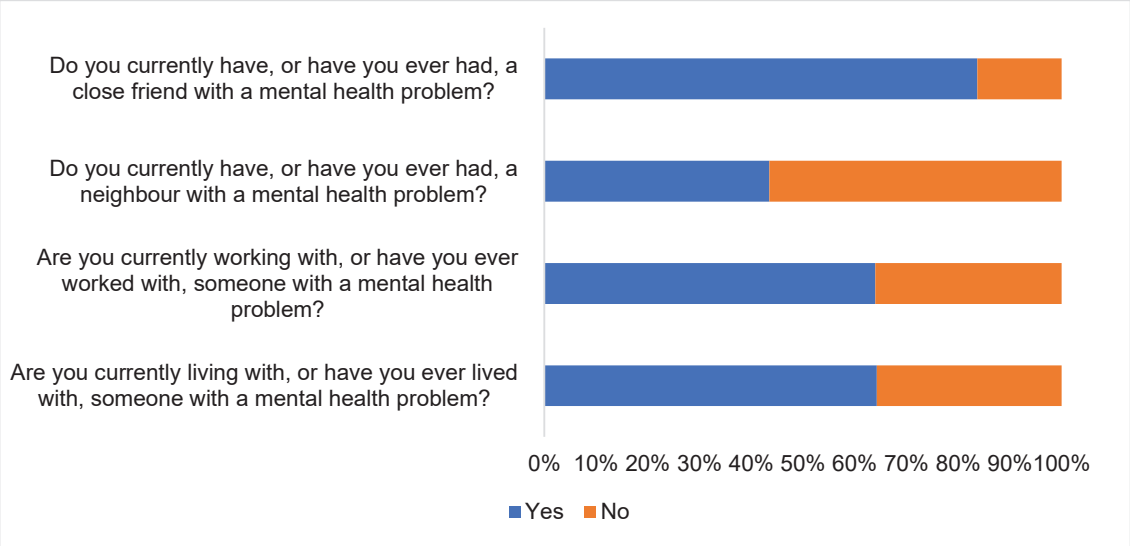
Participants were asked, *"for the following statements, please tick one option only"* followed by a series of statements and tick-box selections of *"Yes", "No", "Don't know."* This sub-section of the survey was derived from the *Reported and Intended Behaviour Scale* (RIBS), which is a measure of past, present, and intended behaviours related to mental distress and discrimination (Evans-Lacko et al., 2011). All participants indicated knowing someone who is currently experiencing or has experienced a mental health challenge with

varying rates seen across reports for close friends (83.7%), living with someone (64.3%), work colleagues (64%) and neighbours (43.5%). Please refer to Figure 32.

The RIBS looks at how reported and intended behaviours can influence discriminatory behaviours towards others experiencing mental health challenges. The RIBS can be used to evaluate interventions that aim to reduce stigma and discrimination related to mental health challenges. In line with the MAKS, the RIBS can be used alone or in conjunction with other measures to better develop interventions to reduce stigma and discriminatory behaviours.

Figure 32

RIBS items 1 to 4: Percentage of participants who indicated past or current interaction with people who experience mental health challenges



Further to the RIBS, participants were presented the same statement followed by a series of statements and tick-box selections of *"Don't know", "Agree strongly", "Agree slightly", "Neither agree or disagree", "Disagree slightly", "Disagree strongly."* The majority of participants reported positively (Agree strongly/Agree slightly) around continuing interactions with someone experiencing a mental health challenge. Please refer to Figure 33.

Figure 33

RIBS items 5 to 8: Intended behaviour percentages of participants towards people experiencing mental health challenges

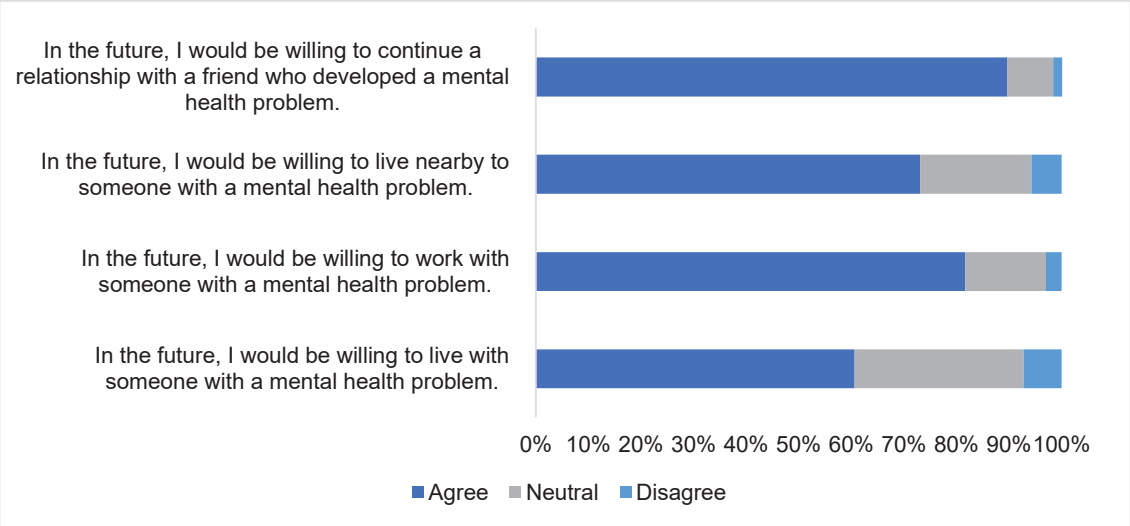
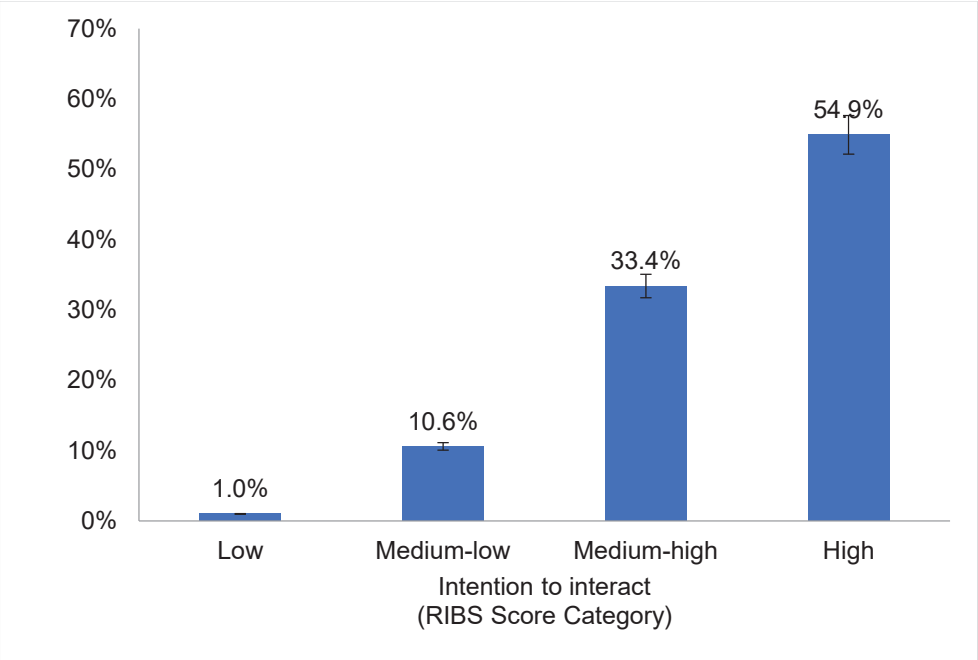


Figure 34

Percentage of participants in each overall RIBS category



Discussion. Higher overall RIBS scores indicate greater willingness to interact with people experiencing mental health challenges, which is associated with lower discrimination. The majority of participants had high or medium-high intention to interact with those who experience mental health challenges. This is a great positive from our Pacific communities and aligns closely with our Pacific values of family and community and their associated inclusivity.

MAKS and RIBS are examples of Western-focused quantitative measures and there are a very limited number of quantitative frameworks that build upon Pacific approaches. For an example of a Pacific quantitative measure please see the *Pacific Identity and Wellbeing Scale* by Manuela & Sibley (2015). Thus, research contributing to the development of Pacific quantitative frameworks would not only benefit our communities but work towards

(re)shaping the negative rhetoric that Western quantitative frameworks have held upon our Pacific communities.

Overall, MAKS and RIBS scores indicate that our Pacific communities have more positive views and exhibit lower discriminatory attitudes around mental health issues. This is a positive finding. Especially when considering earlier research indicating that ethnic minorities in the United States with mental health issues are being perceived as more dangerous. Future research could explore how discriminatory attitudes around mental health issues held by our Pasifika, are manifested emotionally and behaviourally. This could help in developing a better understanding of the impacts across our Pacific communities.

4: Mental health advertisements, campaigns, and websites

All participant questions refer to section 6 of the PMHA survey**.** In this section, mental health-related advertisements/campaigns/websites seen or heard on the TV, radio, on the internet, on a poster or in a pamphlet etc., will be collectively referred to as *mental health promotion activity*.

Personal experience with mental health promotion activity

Participants were asked, *"Over the last year, have you seen or heard any New Zealand mental health-related advertisements/campaigns/websites? For example, on the TV, radio, on the internet, on a poster or in a pamphlet. Please select one option only"*, followed by tick-box selections of *"Yes", "No", "Don't know."* If participants responded "Yes" they were presented with the open-ended question, *"If yes, where did you see them?"* The majority of participants (71%) indicated they had seen or heard any mental health promotion activity predominantly on TV or through Facebook and/or Instagram social media platforms. Please see Figure 35 and 36.

Figure 35

Percentage of participants in response to, "over the last year, have you seen or heard any New Zealand mental health-related advertisements/campaigns/websites?"

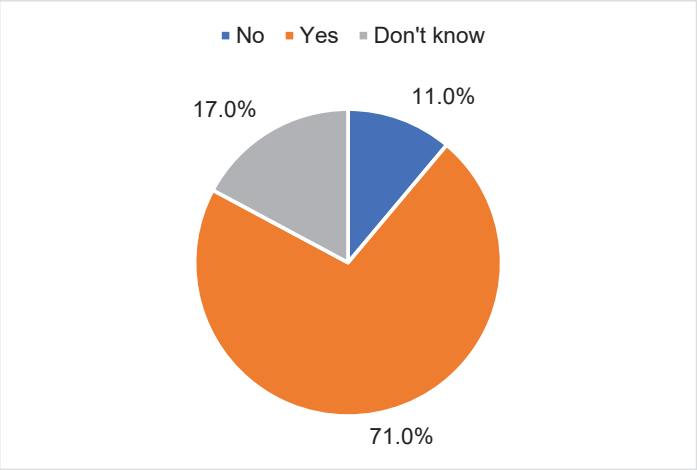
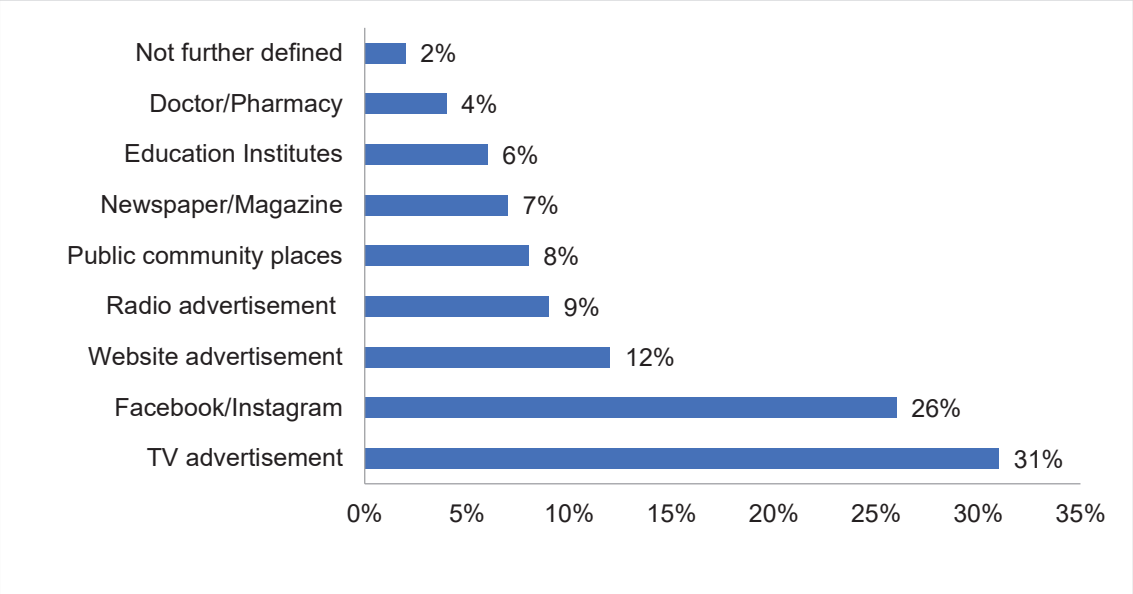


Figure 36

Percentage of participants that reported where they had seen mental health promotion activity



Discussion. The majority of participants had seen and/or heard of mental health related promotional activity (see Figure 35) and largely across TV and/or online platforms (see Figure 36). This is a good indication of health promotion exposure and provides evidence of what avenues might be best targeted for mental health promotion activity with our Pacific communities. Further, Māori, Pasifika, those living rurally, and older members of our Aotearoa NZ society are less likely to have access to the internet (Digital Government, 2022). Pacific peoples are a young population and considering our youthful sample (93.5% aged 16-44 years), this could explain the increased engagement with online mental health promotion activity. Continuing to strengthen digitally inclusive ways of mental health promotion will be important in the longevity of mental health care for our Pacific communities. Future research must still address mental health promotion activity engagement across various ages, so we do not overlook the needs of older Pacific peoples who may prefer

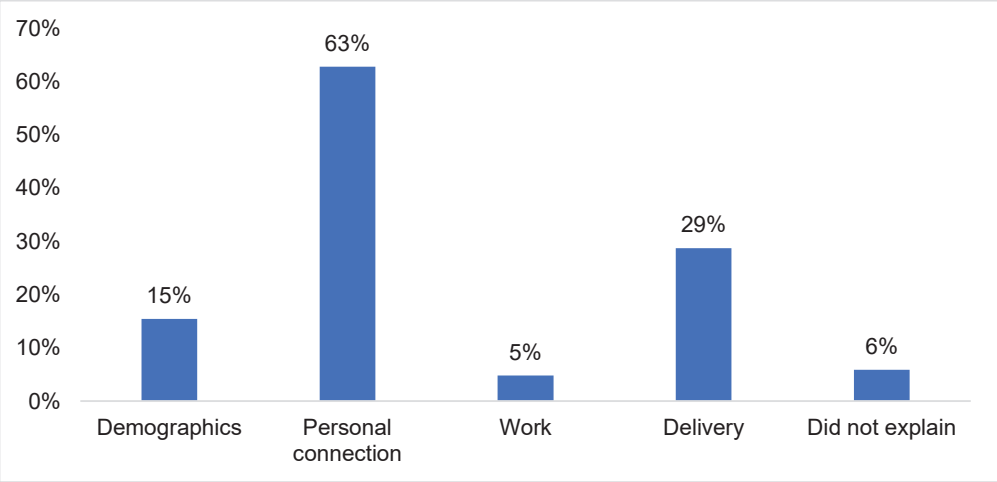
mental health promotion activity in a physical format i.e., a pamphlet from their general practitioner clinic.

Connection with mental health promotion activity

Participants were asked, *"Over the last year, have you seen or heard any New Zealand mental health-related advertisements/campaigns/websites? For example, on the TV, radio, on the internet, on a poster or in a pamphlet. Please select one option only"*, followed by tick-box selections of *"Yes", "No", "Don't know"*. If participants responded "Yes", they were presented with the open-ended question, *"If yes, did you connect with it? And why?"* Of the 34.5% of participants that had seen and/or heard of any mental health promotion activity, approximately three out of five participants (63%) personally connected with the mental health promotion activity, and almost one out of three participants (29%) connected with the delivery of the mental health promotion activity. Please see Figure 37. For a breakdown of the coding schedule used to determine the categories for the purposes of this research (as per Figure 37), please see Appendix G.

Figure 37

Percentage of participants that reported why they had connected with mental health promotion activity



In terms of the categories identified in Figure 37, definitions and examples are as follows. The *demographics* response category used here described participants who connected with the demographics represented in the mental health promotion activity they engaged with. It included responses in reference to, "gender", "sexuality", "ethnicity". Some of the responses categorised as demographics, included: "It was Pasifika focused and I had never heard of that before"; "Yes, as these mainly targeted Pasifika/Māori people especially our men."

The *personal connection* response category used here described participants who had a personal connection to the mental health promotion activity they engaged with. It included responses in reference to "personal belief(s)", "personal use of mental health service(s)", "personal awareness of mental health challenge(s)". Some of the participant responses included: "…because their content is relevant and relatable"; "Yes, because I have suffered from/suffer from mental health issues."

The *work* response category used here describes participants who connected with the mental health promotion activity because they have a professional interest in the area of mental health. It included responses in reference to "currently work in"; "want to work in". Some of the participant responses included: "I work in mental health"; "…I really want to be part of a team that advocates for trying to fix the ongoing mental health issues…"

The *delivery* response category used here described participants who connected with the delivery of the mental health promotion activity they engaged with. It included responses in reference to "language used"; "increased awareness of mental health challenge(s); "participated in the mental health promotion activity". Some of the participant responses included: "The storyline of the ad was capturing"; "Famous rugby player captured my attention and his struggle with depression."

The *did not explain* response category used here described participants who connected with the mental health promotion activity they engaged with but did not explain why.

Discussion. The majority of participants connected with the mental health promotion activity they had seen and/or heard due to a personal connection, which highlights the increased need for mental health promotion activity that is Pacific-centric as well as relatable and relevant to our Pacific communities. This could include increased Pasifika representation, greater use of Pacific languages, and greater utility of our Pacific ways of knowing and being. This could be achieved through research and/or mental health promotion activity focus groups that centre Pacific voices in the development of Pacific mental health promotion activity.

Missing from Pasifika mental health

Participants were asked, *"Do you think there is anything missing from the current mental health related advertisements/campaigns/websites? Please select one option only"*, followed by tick-box selections of *"Yes", "No", "Don't know"*. Participants were then presented with an open-ended question, *"Why do you think this?"* The majority of participants (89%) did think there was something missing from mental health promotion activity. A content analysis identified three themes related to the key areas that participants thought were missing from mental health promotion activity. The themes are outlined in more detail below, supported by quoted responses from the open-ended question:

1. **A focus on increasing awareness**
    a. Participants noted that mental health promotion activity was missing key elements of increasing awareness: recognition around mental health issues; available avenues of support; fostering a collective responsibility of care in our communities.

"Straight up info or where to go for info - I know people who are not willing to talk yet but would like to start getting information or even family members who are concerned and just want to educate themselves"

"The process of getting some help. Ads centre around talking to someone by calling or texting, but not a step by step walkthrough of how to go from speaking with someone on the phone to speaking with someone in person"

"Representation for Māori [and] Pacifica isn't the greatest, and it's hard to tell what it will be like, there's nothing that shows you how counselling works etc"

"...Let people know that you can talk, and you should talk. Talk to friends. Talk to family. Talk to doctors. Talking to a stranger might even be better/easier than the above but just as long as you never stop talking about it until you find help or until you want to stop talking about it"

"Other than advertising when it's 'mental health month' etc, it needs to be all year. Every month. Every season. Every year."

2. A focus on demographics: Age and ethnicity

a. Participants noted that mental health promotion activity was missing a focus on specific age groups. Participants reported that existing mental health promotion activity was not always translatable across age groups and activity should target specific age groups in order to be relevant. Particularly,

participants highlighted the need for activity focusing on young Pasifika who are at increased risk of mental health issues.

"Relatable material [and] resources and awareness that capture the Pacific Island and Māori youth and middle age people"

"More posters in our native languages needed for our elders and parents"

"Because children are still taking their lives and at a faster rate"

b. Participants noted that mental health promotion activity was missing a focus on ethnicity, predominantly Māori and Pasifika. Participants reported that although mental health promotion activity attempts to focus on Māori and Pasifika, it is still not doing a great job. Further, activity needs to be developed from Pasifika (or Indigenous) worldviews so that they are relatable, relevant and culturally appropriate. Participants noted that mental health promotion activity that lacked cultural inclusivity and relatable Pacific concepts became a barrier towards accessing support services. Additionally, clear and relatable mental health promotion activity would be important in enhancing understandings of mental health across Pacific communities.

"Need to include more Pasifika targeted campaigns"

"Inclusivity and diversity is lacking. What makes sense and is valued to pālagi sometimes doesn't equate to Pasifika meaning and values. Seeing POC in ads

encourages POC to seek help because it shows they aren't the only ones in this situation... We have different values, different outlooks, different epistemologies to palagi. We're also distrustful toward palagi due to colonization and their lack of understanding toward our culture and they dominate the health sector so it makes wanting to seek help scary"

"More real stories with real success! More brown faces so that a Pasifika whānau could know they're not the only person in their community and or ethnicity who has experienced this pain"

"Lack of diversity & representation in socio economic backgrounds, in culture, ethnicity etc. Mental health issues aren't a 'white western disease'"

3. A focus on breaking down stigma

a. Participants noted the stigma around mental health and how it reinforces barriers to seeking help when experiencing mental health issues. Participants indicated that mental health promotion activity could better address ways to reduce stigma in practical ways that can be implemented at a community level.

"It [mental health issues] is such a taboo subject in NZ or in general to be honest"

"Encouragement that having a mental health issue isn't bad and it can be resolved"

"I think that maybe there isn't enough sharing of positive stories. For example, explaining that in some cases, poor mental states might only be temporary so showing that people can make it through difficult times. There could also be more modelling of positive behaviours. For example, something as simple as teaching people to put words to their feelings"

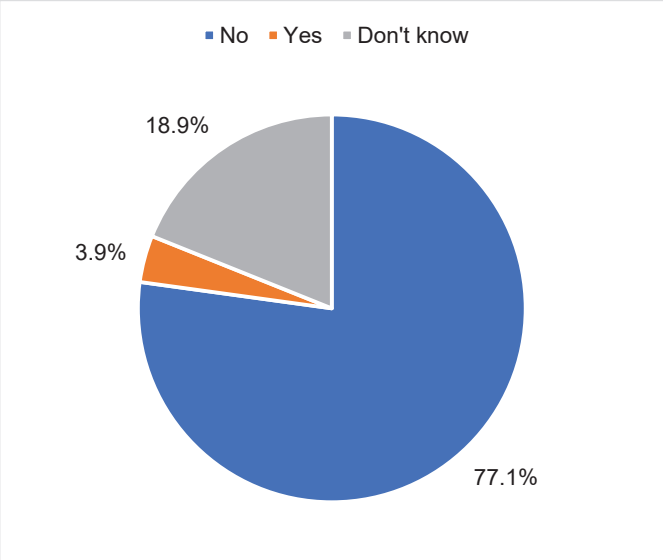
"Normalising talking about our feelings with people. i.e it's good to be vulnerable. Also, for Pacific people I think the term 'mental health' has negative connotations. I'd prefer mental wellness or hauora or a pacific term that means full wellness or something that doesn't carry historical connotations"

Meeting the mental health needs of Pasifika

Participants were asked, *"do you think the mental health needs of Pacific peoples in New Zealand are being met?"* followed by tick-box selections of *"Yes", "No", "Don't know"*. The majority of participants (77.1%) did not believe the mental health needs of Pasifika were being met in Aotearoa New Zealand. Please see Figure 38.

Figure 38

Percentage of participants in response to, "do you think the mental health needs of Pacific peoples in New Zealand are being met?"



Discussion. A little under 4% of participants believed the mental health needs of Pasifika were being met in Aotearoa NZ, highlighting a serious concern. Put simply, the mental health sector needs to do better in serving our Pacific communities. *He Ara Oranga*, a report of the Government Inquiry into Mental Health and Addiction (R. Paterson et al., 2018), drew upon the voices of Pacific peoples to highlight the constant calls for Pacific ways of enabling Pacific health and wellbeing. Our communities provided specific ways and examples of doing this. Saying that more research is needed in this area, would be a false narrative. Rather, our government and Pacific organisations need to better address and prioritise the mental health and wellbeing needs of all Pacific peoples.

Mental health advocate and Key to Life Charitable Trust founder Mike King has often been critical of the Ministry of Health's approach to mental health support, and has readily called upon the government to fund counselling for anyone under 25 years of age, "[in 2018] the Government announced $1.9 billion to spend on mental health in this country. I was full

of optimism, but over the last two years I've watched as nothing changed" (McConnell, 2021). Recently, Minister Sio (Minister for Pacific peoples) announced $28 million in Pacific Health funding, where part of this funding would be put towards wellbeing resources (Labour Pasifika, 2022). However, Brown Buttabean Motivation founder Dave Letele have criticized this funding breakdown as "it's not clear that the existing social and health service providers use the funding they do get effectively and efficiently" (Brown Buttabean Motivation, 2022). This highlights a potentially disjoined and siloed system where there is a discrepancy of what is considered effective mental health support at various levels of society. Whilst it is possible to be grateful for the government and all organisations that support the health and wellbeing of our communities, it is also possible to simultaneously critique them – it reflects a healthy community response that holds people and organisations to accountability and is the key to transparency, for the people always!

5: Understanding of depression and anxiety

In section 7 of the PMHA survey participants were asked, *"for each of the items below, please tick one option for someone who has depression/anxiety"*, followed by items with tick-box selections of *"Unsure", "Harmful", "No difference", "Helpful"*. In terms of depression, the most helpful avenues identified were seeing a counsellor (90.2%) and talking to friends (85.1%), whilst the most harmful avenues identified were using drugs (86.4%) and using alcohol (84.9%). In terms of anxiety, the most helpful avenues identified were seeing a counsellor (91.3%) and talking to friends (81.6%), whilst the most harmful avenues identified were using drugs (79.6%) and using alcohol (79.1%). Please refer to Figure 39 and 40.

Figure 39

Percentage of participants who reported what they thought was helpful, harmful, made no difference or were unsure in relation to depression

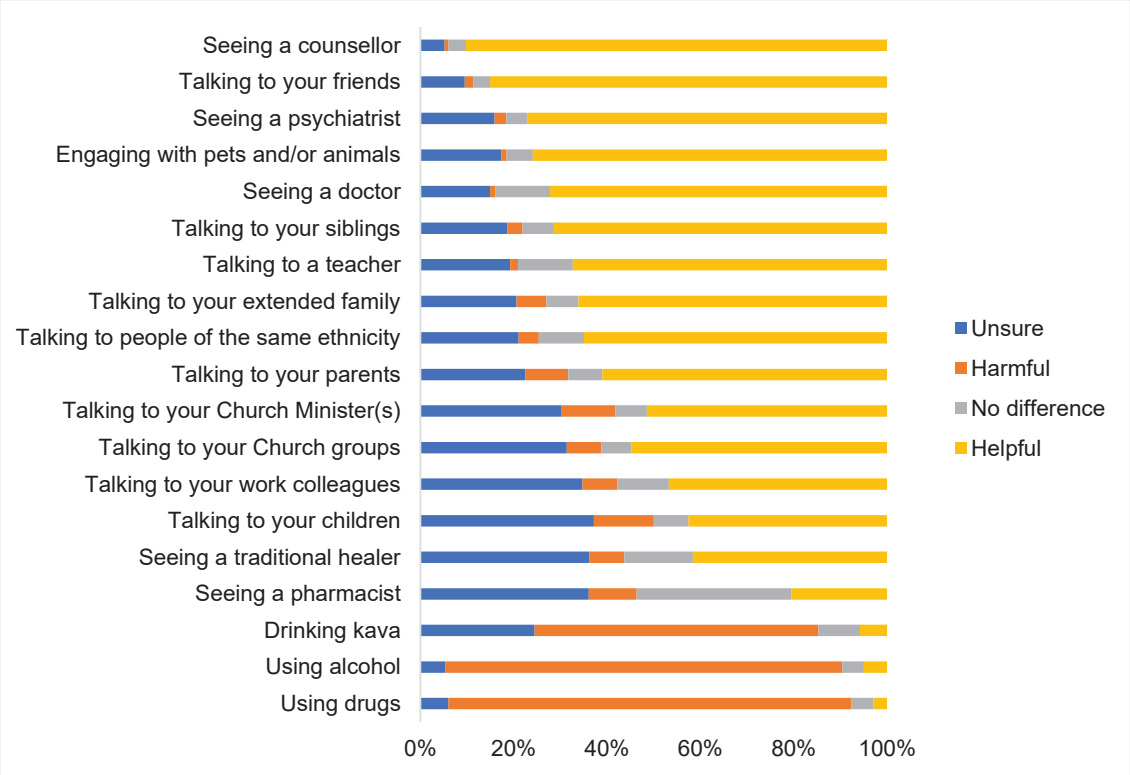
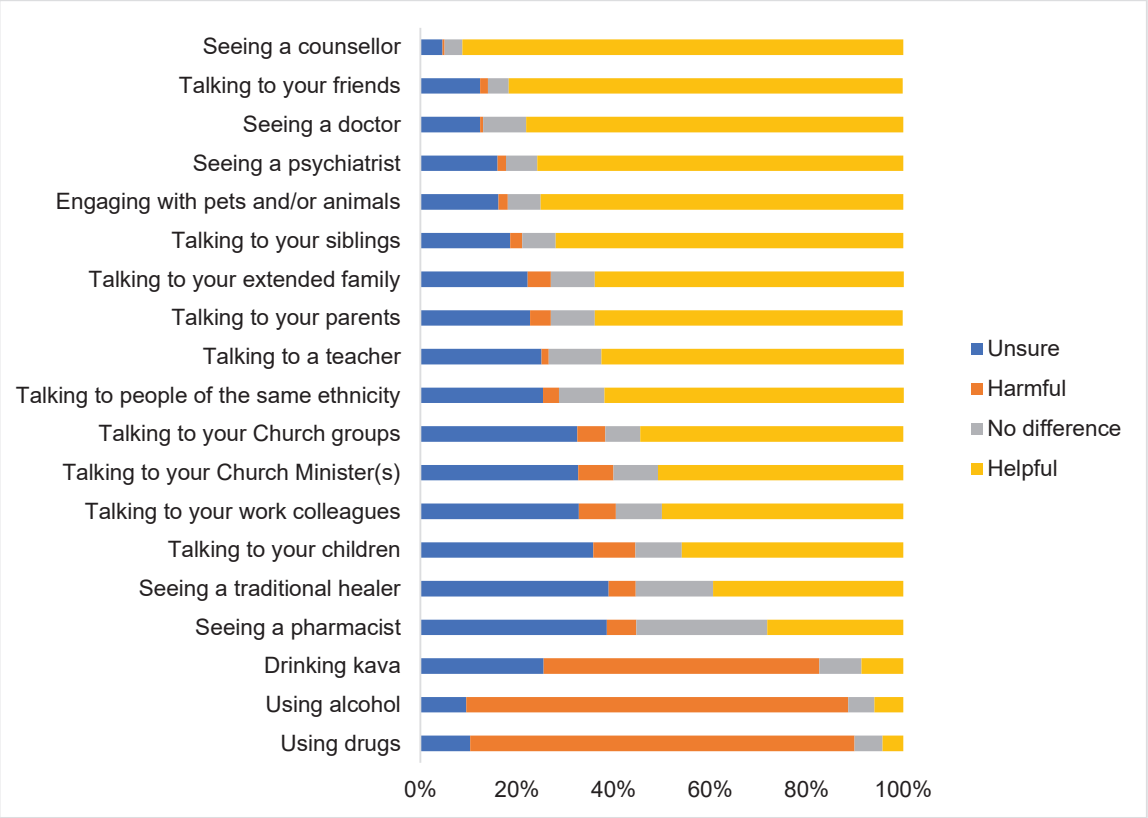


Figure 40

Percentage of participants who reported what they thought was helpful, harmful, made no difference or were unsure in relation to anxiety



Discussion. The most helpful avenues participants identified for someone experiencing depression or anxiety were seeing a counsellor and talking to friends. Whereas the most harmful were using drugs and using alcohol. Again, highlighting how therapeutic care (counsellor and/or friends) appears to be the first port of call before engaging with professional health care services i.e. psychiatrist, doctor/general practitioner. We also discussed prior, the potential for community pharmacists to be involved with mental health service support. Interestingly we see that less than 30% of participants reported *seeing a pharmacist* as helpful for both depression and anxiety. If community pharmacists were more

accessible for mental health support at a community level, increased awareness around community pharmacist accessibility would too be needed at a community level.

For a little over ¾ of participants, engaging with pets and/or animals was deemed quite helpful for both depression and anxiety. Prior research has examined the role and effectiveness of animal-assisted therapy (Nimer & Lundahl, 2007; Waite & Bourke, 2013). Thus, it would be interesting to explore the role that animals could play in mental health care or prevention-based strategies for our Pacific communities.

Overall discussion

The PMHA survey was developed to explore Pasifika MHL in Aotearoa NZ and specifically investigated the recognition of depression and anxiety; experiences with mental health; attitudes towards mental health; mental health promotion activity; understandings of depression and anxiety. This report provided a snapshot of findings from the PMHA survey and hope that it not only provided a greater insight into the mental health of our Pasifika communities, but also inspires continued research around MHL in Aotearoa NZ. A key aspect of MHL is not predetermining what should be mental health knowledge, and in this case, it is a combination of what our Pacific communities understand about mental health and ways of enhancing education around mental health. Therefore, this report (alongside the larger research project) did not aim to adopt a Eurocentric MHL framework, but rather, explore the efficacy of building towards a Pacific MHL framework. In doing so, we contribute towards an original and innovative area of research around Pacific mental health literacy, which has the potential to contribute positively to the health and wellbeing of our Pacific communities.

Section 1 of the report drew upon data from the vignettes about Tevita and Malia. Participants recognised depression (42%) and anxiety (52%) at a moderate rate but still reported great concern for Tevita and Malia, as well as reporting high awareness around psychological, emotional, and external indicators of depression and anxiety. This indicates that our Pacific communities concern for someone experiencing depression and/or anxiety combined with our knowledge around depression and/or anxiety, is not necessarily translating into recognition of a mental health issue. Whilst it is not expected that our communities have the knowledge of clinical psychologists, counsellors and/or other mental health professionals, there are existing links between recognising a mental health issue and help seeking attitudes and behaviours. Enhancing MHL could make a difference in our

Pacific communities through building connections between symptom awareness and recognition, which may lead to an increased likelihood of help seeking attitudes and behaviours. Existing programmes like the Mental Wealth project (Le Va, n.d.) and offering mental health first aid (Jorm et al., 2011) could be leveraged well in this area.

Section 2 of the report examined personal experiences of mental health. Stress, depression, and anxiety were the most experienced mental health issues where three out of five Pasifika had been diagnosed by a health professional. When we consider this in light of the already identified moderate recognition of depression and anxiety, this may highlight a need for MHL education focused on depression and anxiety. Especially if lower MHL is having a negative effect on help seeking attitudes and behaviours. Participants also largely reported health professionals and helplines as places they knew of to seek mental health support, but this does not necessarily mean they are being accessed for support. Particularly when three out of four participants reported they had turned to family and friends for mental health support and one out of four had turned to health professionals for mental health support. Given that one out of three participants had not gone to or helped someone go to a place for mental health support, this suggests that there could be issues around accessibility, stigma or other barriers to seeking support – which we know all too well from previous research. Family and friends are therefore important avenues for the development of skills and tools to support Pasifika with mental health difficulties. Especially given the psychological and cultural distance perceived of mental health services.

Section 3 of the report examined attitudes towards mental health. Participants were able to identify indicators and/or symptoms of mental health issues but not necessarily identify that these are problematic or indicative of a mental health issue. This is closely linked with what was identified in Section 1, where psychological, emotional, and external indicators of depression and anxiety were identified, but not necessarily linked with

depression or anxiety. Again, this echoes a recurrent theme across this discussion around the importance of MHL education and how it could help in not only connecting symptoms with mental health issues, but it could also help in building knowledge around avenues of support. Participants also had more positive views and lower discriminatory attitudes around mental health issues, this suggests that our Pacific communities may be more amenable to MHL education and associated positive outcomes. However, also noting that our participant sample was relatively young (M = 27.18 years; SD = 9.98 years) and predominantly born in Aotearoa NZ or other Western country (85.9%), and so these assumptions may be largely reflective of a more contemporary Pasifika community.

Section 4 examined mental health promotion activity. Participants largely reported their lack of connection and the overall inadequacy of mental health promotion activity for Pasifika. This signals the need for mental health promotion activity that is not only Pacific-centric, but is relatable, responsive to the needs of our Pacific communities, and is action-focused. Participants called for mental health promotion activity that targets common mental health issues across our Pacific communities; has an increased focus on our Pasifika children and youth; captures our Pacific cultures and incorporates our Pacific languages; and addresses each unique Pacific ethnicity, because not all Pacific cultures are the same. When we consider this alongside other findings from this report, there is grave need and opportunity to develop mental health promotion activity that better serves our Pacific communities.

Section 5 examined understandings of depression and anxiety and participants' perceptions of appropriate sources of support. Participants reported therapeutic care (seeing counsellor or talking to friends) as the most helpful for depression and anxiety. These preferred avenues of support highlight the importance of the therapeutic relationship in helping Pasifika peoples with experiences of depression and anxiety; this aligns closely with our Pasifika value of vā and potentially serves to highlight the therapeutic importance of

practices such as talanoa in this area. This also serves as a timely reminder that there are many avenues that can support or worsen mental health. Much like how individual awareness of mental health supports does not equate to engagement and use. Additionally, what is understood and deemed helpful or harmful for depression or anxiety, does not necessarily equate to use or avoidance. This is important to consider as a mental health professional; when developing mental health promotion activity; or talking with a family member or friend. However, as aforementioned, there may need to be a greater focus on connecting symptoms with mental health issues and knowing at what point to seek additional support and from where. When mental health symptoms are considered in isolation from other relevant contextual factors, they may appear inconsequential and can lead to a misattribution of these as not indicating the presence of anxiety or depression. Inadvertently, this can downplay the recognition and perceived severity of mental health issues. Challenges to overcome at the community level will be in helping our Pacific communities to identify when symptoms are indicative of mental health issues, promoting skills to be able to navigate and access services, as well as reducing emotional and perceptual barriers such as feeling fakamā (shameful) when reaching out for additional support.

Conclusion

There are positive links between MHL and mental health and wellbeing outcomes and the PMHA survey was developed to explore Pasifika MHL in Aotearoa NZ. This report presented a snapshot of descriptive results from the PMHA survey, in hopes that it not only provides an insight into the mental health of our Pasifika communities, but also inspires more research in Pasifika mental health literacy.

Bridging Comments

The PMHA survey and the development of the PMHA report has provided a significant contribution to research around Pacific mental health literacy in Aotearoa NZ. Developing the PMHA survey and putting the PMHA report together was a transformative journey – I learnt a lot, more than I could have ever imagined. I spent several hours refining drafts, learning, unlearning, entering data, cleaning files, coding, and analysing. It was a painfully beautiful, energetically exhausting, and perfectly imperfect journey. Yet, I enjoyed every moment of bringing this part of the PMHA project together. Being able to capture the voices of our Pacific communities in this way is a privilege not lost on me. I am fully aware that quantitative methods, especially survey methods have not always operated with the best interest of our Pacific communities. I wanted to develop research that (re)shaped the deficit-focused narratives about Pasifika and empower our communities with knowledge – Tauhi ho'o laka pea 'e tauhi koe ho'o lakanga (A Tongan proverb meaning to assiduously pave your path so wherever you land, shall provide for you).

As a Tongan researcher who values relationships and having worked with my fair share of survey data, looking at survey responses always makes me feel like I am involved in a one-way conversation. I see the responses, but I am always left with more questions. The beauty of qualitative research is that we *can* ask more questions using practices like talanoa, which honour tauhi vā – a value that is central to who I am. No matter how hard I try to explain it in English, the transliteration just does not give it justice. Tauhi vā means more than maintaining and understanding relationships, because it understands that relationships are not always linear. It is multi-dimensional. It is fluid. It crosses generations. It cuts geographical boundaries. It carries memories of a time and place, where kindness is reciprocated, remembered, honoured, and passed on. It understands there is a time to be served and time to serve. It triggers our *why* – and this is what can lead to beautiful outcomes.

So, this is part of my journey. Just as I had expected, as the PMHA survey responses began to flow in and I began to review the responses, I was overcome with a sea of questions. But I was excited at this point because I had developed the PMHA project in a way which allowed me to explore the sea of questions which I had anticipated would be rushing through my mind at this point in my research journey – alas, the beauty of sequential mixed methods. I quickly noted that the participant open-ended responses to the vignettes reflected the gender of the character presented in the vignette. As one can imagine, my mind was bursting with questions around this – Why were the characters perceived in this way? What has influenced these perceptions? How do these perceptions translate into the real world? With that said, the next piece of research explored Pasifika perceptions of Pacific men and women in relation to experiences of mental health challenges.

The research chapter that follows has been prepared for publication. The following citation is proposed:

Kapeli, S. A. (2021). *Pasifika perceptions of Pacific men and women and its interrelationship with mental health in Aotearoa New Zealand.* [Unpublished manuscript]. School of Psychology, University of Auckland.

Pasifika perceptions of Pacific men and women and its interrelationship with mental health in Aotearoa New Zealand

Abstract

Research exploring Pacific peoples' views of mental health is growing and this study contributes to this space as part of a larger research project around Pasifika Mental Health in Aotearoa (PMHA). The PMHA project was a two-phased sequential mixed methods project that comprised a PMHA survey (phase 1) and a PMHA e-talanoa (phase 2; Faleolo, 2021). The PMHA e-talanoa formed the foundation of this study and explored participant views in response to vignettes that presented a Pacific male experiencing depression and a Pacific female experiencing anxiety. In relation to the vignettes, participants perceived Pacific men as stoic and emotionless caretakers that were more likely to suppress emotions and uphold the hegemonic Polynesian masculine ideals of being a leader, provider, and protector. Whereas participants perceived Pacific women as emotional nurturers that were more likely to be emotionally expressive and navigating roles of caregiving, providing empathetic support, and looking after the home. Overall, this research contributes significantly to Pacific mental health research and highlights the need for more nuanced and intersectional approaches towards Pacific mental health, which can contribute to improved mental health and wellbeing for our communities.

Introduction

Pacific mental health in Aotearoa New Zealand

Pacific peoples have a strong and growing presence in Aotearoa New Zealand (NZ) (Statistics NZ, 2018) and achieving equitable health and wellbeing outcomes is vital to the prosperity of our communities (Ministry of Health, 2020b). As a contribution towards this, our research draws upon e-talanoa findings with Pacific men and women as part of a larger project exploring Pacific mental health literacy led by the author/researcher. E-talanoa

describes a talanoa that has been shifted to an online space (Faleolo, 2021), in this case, facilitated via Zoom (video conference software). Pacific mental health research continues to be a growing yet broad area, with significant development since the 1980s (Kapeli, Manuela, & Sibley, 2020b). There is vast evidence outlining the barriers that Pacific peoples experience towards accessing mental health services (Fa'alogo-Lilo & Cartwright, 2021); higher prevalence rates of mental health challenges (Ataera-Minster & Trowland, 2018); and the tragic rate of suicide deaths (Tiatia-Seath, Lay-Yee, & Randow, 2017b). For a broader overview of Pacific mental health in Aotearoa New Zealand and identified areas for greater research, see Kapeli and colleagues (2020).

A greater research focus is needed towards exploring Pacific perceptions of mental health (Kapeli, Manuela, & Sibley, 2020b), adding to existing work across a diverse range of Pacific ethnicities (Loan et al., 2016; Tamasese et al., 2005; Vaka et al., 2016); within a sporting context (Marsters & Tiatia-Seath, 2019); experiences of migration (Foliaki, 1997) and mental health service delivery (Suaalii-Sauni et al., 2009). Most recently, research in Australia identified how exploring Pacific perceptions of mental health are key in enhancing mental health and wellbeing across Pacific communities (Ravulo et al., 2021). Ravulo and colleagues (2021) highlighted five key Pacific perceptions of mental health: 1) mental health concerns are historically aligned with spiritual forces and/or conceptualised as curses; 2) mental health is pathologized; 3) derogatory perceptions are associated with those experiencing mental health concerns; 4) lack of mental health development strategies; 5) lack of cultural connection.

The larger project that this research is part of included a quantitative mental health literacy survey, the Pasifika Mental Health in Aotearoa (PMHA) survey. The PMHA survey included two vignettes with follow up questions – one vignette described a 44 year old Pacific man (Tevita) experiencing depression, the other vignette described an 18 year old

Pacific woman (Malia) experiencing anxiety (see Appendix A for vignettes). An overview of descriptive data from the survey has been compiled into a research report (Kapeli, n.d.). Where moderate recognition rates of depression were identified across genders (42.3%; men: 41.8%; women: 42.6%) and anxiety (52%; men: 45.6%; women: 52.8%) with similar rates seen between Pacific men and women. The majority of participants reported medium to high levels of mental health knowledge (82.3%) with similar findings between Pacific men (85.8%) and women (81.7%). Stress (71%; men: 73.4%; women: 70.3%), depression (54.9%; men: 51.9%; women: 55.5%), and anxiety (40.3%; men: 39.2%; women: 40.4%) were the most reported mental health issues identified by participants, with similar trends seen between Pacific men and women. Main sources of mental health support were reported as family (64.1%; men: 67%; women: 63%) and friends (50.9%; men: 48%; women: 51%).

Gender and Pacific mental health

Data across the current literature consistently suggests that Pacific men and women have differing experiences of mental health issues. Overall, Pacific women are more likely to experience a mental health issue. Specifically, Pacific women are more likely to experience internalised mental health issues, such as anxiety, depression, and eating disorders. Whereas Pacific men are more likely to experience externalised mental health issues, such as substance abuse (Foliaki et al., 2006; Ministry of Health, 2008; Oakley Browne et al., 2006). Further differences are seen with higher prevalence rates for intentional self-harm among Pacific women, however, hospital stays associated with intentional self-harm were higher for Pacific men (Tiatia-Seath, Lay-Yee, & Randow, 2017a). From 1996 to 2013, suicide deaths were significantly higher for Pacific men (77.6% versus 22.4% for Pacific women), with the highest prevalence of suicide deaths being among Pacific men between the ages of 15 to 24 years old (Tiatia-Seath, Lay-Yee, & Randow, 2017b). From 2014 to 2020 (including provisional data from 2019 and 2020), suicide deaths remained significantly higher for

Pacific men (averaging 19.1 suicide deaths per year) versus Pacific women (averaging 4.7 suicide deaths per year). Overall, Pacific suicide death rates have decreased from 10.3 in 2009 to 5.8 in 2020 (New Zealand Mortality Collection & Ministry of Justice's case management system, 2021).

The reasons for these differences in mental health issues, suicidal ideation and death by suicide, may in part be due to social expectations placed on men and women. Research on gender and mental health suggests that perceptions of masculinity and femininity are major risk factors for internalizing and externalizing problems, including the different nature of the type of stressors that men and women are exposed to, the coping strategies they use, the social relationships they engage in, and the personal resources and vulnerabilities they develop (Rosenfield & Mouzon, 2013). Gender roles often position Pacific women as being responsible for activities in and around the home (i.e. caring for the home and family) whereas Pacific men are often positioned as holding roles that focus on activities outside of the home (i.e. working as the primary financial earner; Griffen, 2006; Kapeli, Manuela, Milojev, et al., 2020). Such gender representations are reflected across contemporary Aotearoa NZ where Pacific women are most likely to be employed as carers and aides and Pacific men are most likely to be employed as store workers or labourers. Pacific men also have a higher annual median income in comparison to Pacific women, who are also more likely to do unpaid activities, such as childcare, or caring for someone who is ill or has a disability (Ministry for Pacific Peoples, 2016; Roughan & Taufa, 2019).

As Pacific women tend to engage in more relationally heavy roles (i.e., as carers), it is no surprise that Pacific women report receiving higher levels of social support than Pacific men across the lifespan (Kapeli, Manuela, Milojev, et al., 2020). Given Pacific men tend to engage less in unpaid activities and receive higher incomes (albeit lowest comparatively to other ethnic groups in Aotearoa NZ), it is likely that this may further contribute to several

factors that increase the risk of experiencing mental health issues including reduced social support and/or increased financial responsibility as primary income earners. However, it has been suggested that mental health challenges that are internalised for women and externalised for men can be regarded as functionally similar, due to their relative impacts. In other words, they can be seen as comparable expressions of psychological distress (Hill & Needham, 2013). It is also important to highlight that the stressors that Pacific men and women experience can vary due to cultural expectations and understandings. For instance, in our Tongan culture we have a relationship ranking structure of *'eiki* (high rank) and *tu'a* (low rank). In particular, sisters *'eiki* (or outrank) their brothers; older siblings *'eiki* younger siblings of the same gender; and the father's side of the family *'eiki* the mother's side (Filihia, 2001). In essence, an individual's rank comes with additional responsibilities and/or pressures as well as entitlements.

As mentioned, the PMHA survey was drawn upon to develop a report that provides a descriptive overview of the survey findings around Pacific mental health literacy for Pasifika in Aotearoa NZ. In addition to this, the vignettes used as part of the PMHA survey were accompanied by questions with open-ended responses. Participant responses to the vignettes reflected the gender of the character in the vignette. For example, responses to the Pacific male character (Tevita) referred to qualities that implied stoicism and emotional unavailability, qualities that are usually associated with masculinity. Whereas responses to the Pacific female character (Malia) referred to qualities around nurturing and emotional availability, which are usually associated with femininity.

> *"Males in our Pasifika community do find it hard to articulate their emotions and feelings as it has become the norm. As [Pacific] women, those who find it quite easy*

to share, we should be more willing to just assure that we are listening" (Sāmoan woman in their 20s).

Responses also articulated how behaviours associated with experiencing mental health challenges were perceived as 'typical' for Pacific men (Tevita) but perceived as a personal 'responsibility' for Pacific women (Malia).

"Tevita's story is typical of many Pasifika men. It's so hard to share about how you are feeling when you are the head of the family… He is a father and provider for the family. In a Pasifika family hierarchy, he is at the top. Where do you go for help when you are at the top of the hierarchy?" (Sāmoan man in their 20s)

"She is taking on too many responsibilities as a young Pacific woman" (Cook Island-Māori-Tahitian-Pālagi woman in their 20s)

The patterns of participant responses to the Pacific male (Tevita) and Pacific female (Malia) characters in the vignettes warranted further investigation to understand why participants described the characters in the way that they did. This in turn shaped the development of the PMHA e-talanoa guide used as part of this study – in efforts to better understand how Pacific perceptions of Pacific men and women interrelate with mental health.

Pacific perceptions of gender

Dominant representations of Pacific masculinity and femininity have in part been shaped through the impacts of colonisation, which has sought to redefine Pacific notions of gender through a Western lens. This has narrowed the representations of Pacific masculinity

and femininity, and whilst it is not the only representation of gender that exists, it has influenced dominant understandings of masculinity and femininity that are more commonly expressed or understood by Pacific peoples living in Aotearoa NZ. Whereby Pacific men are perceived as leaders and contributing to roles outside of the home and Pacific women are perceived as nurturers and contributing to roles in and around the home. Yet the focus of this study is on perceptions of Pacific men and women in Aotearoa NZ. Gender diversity within the Pacific is far more diverse, including MVPFAFF+[1], PRC[2], and LGBTIQA+[3]. Please see Thomsen and colleagues (2021; Thomsen & Brown-Acton, 2021) for a more comprehensive review of Pacific genders.

When exploring mental health, perceptions of gender can reveal intricacies that may be overlooked. Drawing upon social constructionism (Willig, 2001), a Pasifika social constructionist epistemology attends to Pasifika perceptions of their lives and how they see the world. Drawing upon critical realism (Willig, 2001), a Pasifika critical realist ontology recognises that Pacific worldviews are real and true and shape people's lives in meaningful ways. It also acknowledges that Pacific worldviews can be shaped through colonialism, capitalism, and migration. Although social constructionism and critical realism have been critiqued by Pacific scholars, when paired together, researchers can be provided with a way of exploring Pasifika ways of knowing, being, and understanding. However, researchers must also acknowledge the cultural complexity and diversity in experiences across the Pacific. Thus, our expressions of gender are fluid, and socially constructed, but also informed by our Pacific worldviews in different ways. In this way, subjective understandings of gender will be different and not epistemologically or ontologically singular. Exploring gender in this way

[1] MVPFAFF+ refers to Mahu (Hawai'i and Tahiti), Vaka sa lewa lewa (Fiji), Palopa (Papua New Guinea), Fa'afafine (Sāmoa), Akava'ine (Cook Islands), Fakaleiti (Tonga), Fakafifine (Niue), plus all Pacific peoples who have another gender identity or sexual orientation
[2] PCR refers to the Pacific Rainbow Community
[3] LGBTIQA+ refers to Lesbian, Gay, Bisexual, Transgender, Intersex, Queer or Questioning, Asexual, plus all people who have another gender identity or sexual orientation

can help us to understand that diverse expressions of masculinity and femininity exist across the Pacific, however, there are dominant representations of masculinity and femininity more commonly understood by Pasifika in Aotearoa NZ. Therefore, how gender is understood within Pacific cultures and communities can influence how individuals, families and communities are affected by mental health.

Pacific peoples as a collective do share cultural similarities but there are also differing aspects of gender and gender identities that exist across some Pacific cultures and not across others. For example, in the Eastern and Northern parts of the Pacific, hierarchy can be more important than gender. This means that "elder sisters take precedence over men in cultural matters and women can hold high rank with paramount titles" (Underhill-Sem, 2010, p. 13). However, in some Pacific cultures gender can be more important and women are "explicitly treated as property to be transferred between kin groups" (Underhill-Sem, 2010, p. 13). With the rising influence of education and increased awareness of legal and social rights for women, dominant representations of Pacific gender roles have begun to evolve (Macpherson, 2001). This change has been apparent across Pacific communities in Aotearoa NZ, where "opportunities for women to work and to earn extended their economic and political influence within family and village networks and within congregations" (Macpherson, 2001, p. 73). It is also important to note that within Pacific cultures, changes in gender representation have affected men's roles too, especially towards normalising (to an extent) shared gender roles and the increased contribution to childcare and household chores (Sua'ali'i, 2001).

For the purposes of this research, dominant gender representations of Sāmoan and Tongan cultures are highlighted due to their cultural prominence across our research participants. Sāmoan culture sees gender relations operate across two domains – siblingship and conjugality (Schoeffel, 2014). Historically, the relationship between brothers and sisters

was considered sacred, where the status of sister was ranked higher than wife (Sua'ali'i, 2001). This in turn meant that women as sisters had a very strong influence on matters of importance. It also meant that brothers were to protect the chastity of their sisters, as a way of protecting family status. Thus, unmarried women predominantly had responsibilities within the home whilst men largely had responsibilities outside of the home (Lilomaiava-Doktor, 2020; Sua'ali'i, 2001). During the mid-19th century, the place that Sāmoan women occupied in the gender-power structure was displaced as political agendas saw the need for a male-dominated church structure (Pulotu-Endemann & Peteru, 2001). The change disintegrated the importance of the brother-sister relationship in favour of the husband-wife relationship, whereby husbands gained higher rank and wives were deemed subordinate to their husband. Consequently, women as sisters and daughters still retained equal rights to family land but women as wives only had access to and use of their husbands' lands whilst married (Sua'ali'i, 2001).

In our Tongan culture, as outlined earlier, we have a relationship ranking structure. Women hold higher social status within Tongan society because of the *fahu* system within families, where the eldest sister (or another chosen sister) holds a place of honour and respect and plays an important role in family decision-making. Even though the Tongan society is patriarchal, sisters are ranked higher than their brothers in certain contexts, provided that a woman has a brother and her brother (or brothers) has a child (Government of the Kingdom of Tonga, 2019). Dominant Tongan gender representations are similar with those of other Pacific Island countries, where women's roles are based around the home, family, and extended family, predominantly in caring and nurturing, while men's roles include providing food, income and security for the home and family as well as in leadership and politics. Tongan women also do not hold any rights to the family home or land, which will be inherited by their eldest brother or brothers. In Aotearoa NZ, gender roles for Sāmoans and

Tongans, like many other Pacific communities, have become more fluid in recent years in response to the economic and social conditions of NZ's mainstream society (Helu, 1995; Sua'ali'i, 2001). In both Sāmoan and Tongan cultures, like many Pacific cultures, it could be argued that the differences in the roles and power between men and women promote gender inequity. Whilst this may be true in more contemporary settings, being aware of these gender dynamics may help to better understand the multiplicity of mental health experiences across the Pacific.

Dominant colonial representations of masculinity and femininity have filtered across the Pacific where men are perceived as protectors and are promoted as superior, whereas women are seen as nurturers and are denigrated as inferior (Chen, 2014). Lilomaiava-Doktor (2020) discusses how Sāmoan women have "adapted and transplanted their power or power sharing roles into new social and political structures imposed by colonialism and the church" (p. 80). However, any improvements in gender relations are not shared by all women and tend to benefit those with higher education and those living in more urban areas. On the other hand, the patriarchal influence of colonialism and Christianity has "distorted and limited women's participation in decision-making" (p. 80).

Although there is limited research exploring Indigenous and Pacific femininities, Grande (2003) highlights that Indigenous and Pacific women have more in common with Indigenous and Pacific men than any other subcategory of women. However, there is growing literature around Indigenous and Pacific masculinities, particularly insinuating the dehumanising and hypermasculine perceptions around identity development and behavioural norms for young Pacific men (Hokowhitu, 2017; Rodriguez & McDonald, 2013).

Recent studies have found that hypermasculine norms increase internalised stigma towards depressive or low moods, restrict ways of coping, and promote the masking of emotions that can lead to self-destructive behaviours (Doherty et al., 2016; Horton, 2014;

Valkonen & Hänninen, 2013). Literature by Hokowhitu (2004), Rodriguez (2012), and Teaiwa (2019) highlighted similar findings regarding hypermasculine attitudes towards Pacific male athletes, and outline in greater depth the origins, influencing factors, and impact of such attitudes on the psyche and norms of young Pacific men today. For example, Teaiwa (2019) explains how Pacific men are at the forefront of sports such as rugby where they are marketed as hypermasculine spectacles, which both glorify and demonise primitive hypermasculinity. A contemporary Pacific view prioritises a specific type of masculinity while other types are marginalised or even repressed. Chen (2014) describes three expressions of Pacific men: Polynesian warriors, male hula, and feminine men. The latter two expressions are often marginalised or repressed by society. Chen (2014) argues that colonialism has reconstructed a discourse that favours a Polynesian warrior masculinity which promotes hegemonic Polynesian masculinity.

Integrating aspects of gender into research is valuable. It recognises how different roles, contributions, priorities and needs of women and men are essential to the ongoing talanoa around mental health in our Pacific communities, and across the wider mental health care sector. When our Pacific communities talanoa and share their perceptions, we are privileged to gain insight into Pacific worldviews that are essential to taking our Pacific communities positively forward. As researchers, we need to provide better opportunities to engage and work alongside our Pacific communities so that our research goals and outcomes are Pacific-centric. In this way, we put our Pacific communities and their aspirations at the centre, which allows us to work collaboratively to address challenges in a meaningful way.

Overview of the current study

This study builds upon findings from the PMHA survey, which included two vignettes describing a Pacific male experiencing depression (Tevita) and a Pacific female experiencing anxiety (Malia). The participant responses to the vignettes reflected the genders

of the characters in the vignettes. The responses to the vignette guided the direction of the e-talanoa to better understand why participants described the characters the way they did. I used e-talanoa due to its cross-relational understanding across Pacific culture and research, which involved having one-on-one virtual talanoa based meetings via Zoom between the lead researcher and the participant.

Method

Methodology

Talanoa

Talanoa is commonly used across Pacific research, largely due to its cross-cultural understanding across the Pacific and its phenomenological approach (Vaioleti, 2013). As a Pacific research approach, talanoa serves as both a method (to collect data; Vaioleti, 2006) and methodology (to provide the lens through which analysis occurs; Vaioleti, 2013). This is achieved through promoting an open way of building relationships, sharing ideas, and seeking solutions (Vaioleti, 2006). In this way, talanoa not only guided our data collection but it informed the analysis process. Talanoa as a method (data collection) allows for open discussion (Vaioleti, 2006, 2013), utilises appropriate cultural practices (Vaioleti, 2013) and is underpinned by ‘ulungaanga faka-Tonga. Talanoa as a methodology (analysing data) acknowledges Pacific ways of knowing and being (Hindley et al., 2020), centres the experiences and aspirations of our people (Fa’avae, 2019), and is also underpinned by ‘ulungaanga faka-Tonga. Further, adopting a thematic talanoa analysis allows participant voices to be centred whilst theory and interpretations are built around them (Thomsen et al., 2021; Thomsen, 2020).

The practice of talanoa being underpinned by ‘ulungaanga faka-Tonga (Tongan cultural principles) fosters vā between researchers and participants engaging in talanoa (Vaioleti, 2013). These include faka’apa’apa (respectful, humble, considerate), anga lelei

(kindness, tolerance, helpful, calm, dignified), mateuteu (well prepared, hardworking), poto he anga (knowing what to do and doing it well), and ‘ofa fe’unga (compassion, empathy, love). I honoured these principles in the research process by creating a culturally safe and open space for talanoa to be carried out face to face; fostering reciprocity; dismantling power dynamics; encouraging a participant-led talanoa, and allowing ‘ulungaanga faka-Tonga to guide the overall analysis (Vaioleti, 2006, 2013).

Talanoa is also inclusive of various dimensions that can be applied singularly or simultaneously (Vaioleti, 2013). For this research I moved fluidly between a combination of *talanoa vave*, informal fast verbal exchanges to confirm or reconfirm an understanding of what was shared; *talanoa tevolo*, engaging with emotion and spirit to allow sharing of spiritual experiences; *talanoa faka’eke’eke*, closely aligned to an interview style where questions posed can connect or build upon answers; *pō talanoa*, describes more social conversation and is integral to fostering tauhi vā (relationships); *talanoa’i*, purposeful conversations with intent to solve problems where both researcher and participant co-construct knowledge.

From talanoa to e-talanoa

Due to the global COVID-19 pandemic and the ongoing restrictions across Aotearoa NZ, holding in-person talanoa presented a challenge. As a result, I adapted to using e-talanoa, an extension of talanoa, which essentially shifts talanoa to an online space (Faleolo, 2021). The use of e-talanoa is not new (Faleolo, 2021). There has been an increasing want and need to create e-talanoa spaces to increase accessibility to connect and engage across an array of areas (both inside and outside of the academy), which has only been exacerbated by the COVID pandemic. The e-talanoa format still aspires to the same protocols and values of an in-person talanoa despite being conducted online, such as using video conferencing software to enable face to face engagement. Traditional in-person cultural Pacific practices including

kai (food) and me'a'ofa (gifts) are shared as a token of appreciation for a participant's time, knowledge and contribution to the research. Due to the online nature of e-talanoa, I was unable to share this in the same way. However, each participant was encouraged to bring their own kai (food) to the e-talanoa and me'a'ofa (gifts) was also sent out via post after the e-talanoa. I strived to uphold Pacific practices and cultural values across the entire research process. Not only to foster positive and meaningful relationships with our research participants, but as a service to our wider Pacific community, for whom our research is for.

Development of the e-talanoa guide

The e-talanoa guide comprised a series of focus questions to facilitate discussions around Pacific understandings of mental health (see Appendix B). The focus questions followed a semi-structured design to ensure consistency between interviews but also allowed participants to have autonomy over how they expressed and conveyed their ideas, experiences and/or thoughts. This approach allowed for a gathering of rich and contextual data of participant's views and perceptions related to mental health. The e-talanoa focus questions were developed after an analysis of the PMHA survey (Kapeli, n.d.), a review of research evidence, and in consultation with experts in the area of Pacific mental health. This study draws upon e-talanoa data that focused on participant views in response to vignettes presenting a Pacific male experiencing depression and a Pacific female experiencing anxiety.

Researcher's positionality

Talanoa is a relational process and as the author/researcher who hosted each e-talanoa, I was intricately involved in its process. As a Tongan woman, tauhi vā (keeping the relationship ongoing, alive, and well), 'ofa (love, care, and kindness), and faka'apa'apa (acknowledging and returning respect) guides how I connect with others and are fundamental in honouring Pacific spaces such as this (Faleolo, 2021). It is also integral to the research process to continuously acknowledge that mental health is a sensitive and often tapu (sacred)

topic to discuss. Part of upholding tauhi vā requires being able to share who I am and my understandings, in order to create a comfortable and safe space for our participants to share. In essence, talanoa is not about the researcher extracting information, it is about building relationships with participants. Talanoa is an exchange between people, and although I am part of this process, the analysis is based predominantly on our participants' responses.

Data analysis

A Pasifika critical realist thematic talanoa analysis was used to analyse e-talanoa transcripts. All interviews were transcribed verbatim by the author/researcher. Critical realism is ontologically realist (reality exists independently of our perceptions) and epistemological relativist (our understanding of reality is constructed by our own perspectives). Thus, many understandings of one reality can exist (Maxwell, 2012). This study aims to gather knowledge of a reality but acknowledges that the data gathered may not provide direct access to this reality. A critical realist approach to research assumes that data is informative of reality but does not straightforwardly mirror it, rather it needs to be interpreted to provide access to the underlying structure of the data (Willig, 2012).

A Pasifika critical realist ontology recognises that Pacific worldviews are real, true, and shape people's lives in meaningful ways. But also recognises the impacts of colonisation, capitalism, and migratory experiences and how these have shaped and/or influenced our Pacific worldviews. Pacific worldview(s) are holistic in nature, via the incorporation of links and relationships between nature, people, non-living, and living things (Tamasese Ta'isi, 2007 as cited in Ponton, 2018). In this way, there is no single Pacific worldview but there are shared and recognised values across Pacific cultures that are reflected in Pacific worldviews, such as holism, vā, relationality. More importantly, acknowledging Pacific worldviews ensures that our research practice(s) and approach(es) are culturally appropriate to the community we work alongside (Vaioleti, 2006).

In this study, one-on-one e-talanoa were held with members of our Pacific community. The e-talanoa data reflects one person's perspective and the analysis is an interpretation made by the researcher who constructed the findings based on their own understanding, experience and knowledge. As such, the analysis is constructed by the lens in which the data is viewed. Pacific worldviews combined with the understanding, experience and knowledge of the author/researcher was integral to data analysis. This approach further emphasizes how colonisation and the influences of capitalism and Westernisation affect the ways in which people perceive the world. It also recognises how Indigenous worldviews, including Pacific, have been positioned as inferior. This approach was used to validate and emphasize that Indigenous and Pacific knowledges provide a solid foundation for research.

Thematic analysis can be applied across many epistemological frameworks, including realism. It is a qualitative research method utilised for identifying, analysing, organizing, describing, and reporting themes within a data set (Braun & Clarke, 2006). There are few studies that explore Pasifika perceptions of Pacific men and women in relation to mental health, thus, this research is exploratory. For the purposes of this research, thematic analysis was deemed to provide the most useful methodological framework as theories can be applied to it flexibly (Braun & Clarke, 2006; Clarke & Braun, 2013; Willig, 2001). The researcher is able to interpret individual accounts of their experiences and remain close to them, and is useful in examining individual perspectives, highlighting similarities and differences and generating unanticipated insights (Braun & Clarke, 2006; King, 2004). Thematic analysis also guides the handling of data, enables a summary of key features of a large data set, and supports production of a clear and organised report (King, 2004).

A reflexive thematic approach was used, taking both an inductive and deductive way of theme development (Braun & Clarke, n.d.). Deductive in the way that theme development occurred prior to each e-talanoa, drawing upon the researcher's personal understandings and

experiences. Inductive in the way that transcripts were read and interpreted to develop concepts. Using this approach, each e-talanoa session offered an individual Pacific perception. Themes were then identified so that findings could be transferable and be more generalisable across our Pacific communities. The findings were reviewed in light of previous literature, which reflected consistencies. This research provided a platform for our Pacific communities to share their understandings around mental health. Therefore, this research provides important information with useful implications.

In this way, Braun and Clark's (2006) six-step method of thematic analysis was adopted by the author to familiarise with the transcriptions using NVivo version 1.3 (575). Although NVivo has the potential to compartmentalise themes, NVivo helped me to navigate the data whilst conceptualising the talanoa as a *whole conversation*. Drawing upon the concept of thematic talanoa throughout analysis also helped in retaining the intricacies of the talanoa by centring participant voices whilst theory and interpretations were built around them (Thomsen et al., 2021; Thomsen, 2020).

Data analysis focused on gaining insight of the Pasifika perceptions of Pacific men and women and how these interrelate to mental health. The data were coded, and the codes were examined. By exploring Pasifika perceptions of Pacific men and women, the data naturally fell into two broad datasets, *Pasifika perceptions of Pacific men* and *Pasifika perceptions of Pacific women*. Further thematic talanoa analysis was conducted on each dataset and a total of four themes were identified and defined for Pacific men (see Figure 41), and a total of three themes were identified and defined for Pacific women (see Figure 42). The themes were then reviewed manually in NVivo and through talanoa with project advisors. The data analysis process was also reviewed regularly during the process of analysis to finalise themes.

Study design

This research is part of a larger doctoral research project led by the author that explored Pacific mental health literacy. As part of this project, the PMHA survey was developed and explored Pacific recognition, knowledge and attitudes around mental health. Using sequential mixed methods, this paper describes a follow up PMHA e-talanoa study based on findings from the PMHA survey. More specifically, the PMHA survey included two vignettes describing a Pacific man (Tevita) experiencing depression and a Pacific woman (Malia) experiencing anxiety. The responses to the questions related to these vignettes reflected the gender of the vignette characters. This guided the development of the PMHA e-talanoa guide and this study specifically focused on e-talanoa participant responses in relation to the vignette characters. Ethics was approved by The University of Auckland Human Participants Ethics Committee on 29 October 2018 until 29 October 2021. Reference number 022137.

Recruitment

Participants had already completed the PMHA survey and had indicated their interest to participate in future research about Pacific mental health beliefs via a face to face interview. Of the 548 PMHA survey participants, 220 participants indicated that they would be interested in follow up research. Emails were then sent out requesting participation in a one-on-one e-talanoa. Recruitment ceased once 10 participants had agreed to participate and e-talanoa session times were then confirmed.

A Participant Information Sheet and Consent Form outlining the details of the study was sent electronically to each participant via a link from Qualtrics (survey-based software), this allowed participants to download the information and provide their consent ahead of the e-talanoa. Participation was voluntary and each participant was given the opportunity to ask

questions before their e-talanoa. Participants were also able to opt out freely from the study at any point. Upon meeting prior to the e-talanoa, the study details were clarified once again.

Data collection

The one-on-one e-talanoa sessions were conducted across May to July 2020 through Zoom (video conference software). Participants and the researcher worked together to arrange a suitable time for the e-talanoa. As well as ensuring that each participant had or was able to have access to Zoom. Each e-talanoa lasted between 30 to 90 minutes and were audio recorded via Zoom with the participant's permission. All e-talanoa were conducted in English.

Results

Participants

In total, 10 participants (5 men, 5 women) participated in this study. The youngest participant was in their 20s and the oldest participant was in their 60s. To uphold confidentiality and privacy, exact ages have been omitted from the study. The ethnic makeup of participants included those who identified as Sāmoan-Māori-Pālagi (n=1), Fijian-Indian (n=1), Sāmoan-Pālagi (n=1), Sāmoan (n=2), and Tongan (n=5). Please see Table 13.

Participants described their perceptions of Pacific men and Pacific women through e-talanoa. By adopting a critical realist thematic talanoa analysis, four core perceptive themes were identified of Pacific men (see Figure 41) and three core perceptive themes were identified of Pacific women (see Figure 42).

Table 13

Demographic summary of participants

Participant number	Country of birth	Ethnicity	Gender	Age bracket
1	Aotearoa NZ	Sāmoan-Māori-Pālagi	Woman	30s
2	Fiji	Fijian-Indian	Woman	20s
3	Aotearoa NZ	Sāmoan	Man	20s
4	Aotearoa NZ	Tongan	Woman	40s
5	Aotearoa NZ	Tongan	Woman	40s
6	Tonga	Tongan	Man	60s
7	Aotearoa NZ	Sāmoan-Pālagi	Woman	30s
8	Aotearoa NZ	Sāmoan	Man	40s
9	Aotearoa NZ	Tongan	Man	20s
10	Aotearoa NZ	Tongan	Man	30s

Figure 41

Summary illustrating core perceptive themes of Pacific men and corresponding codes

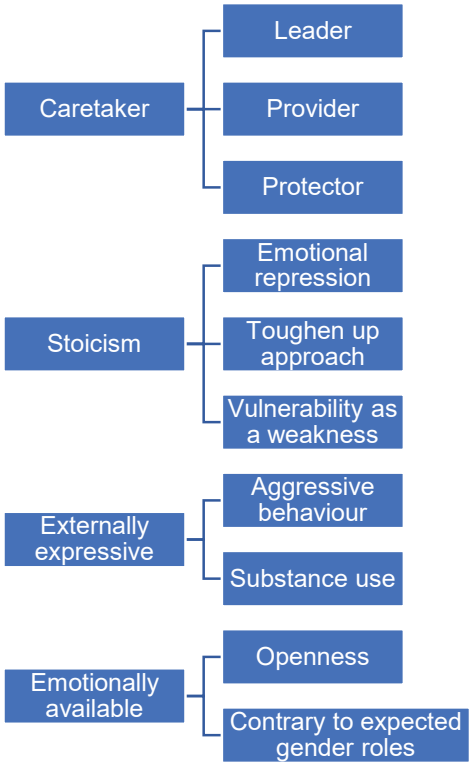
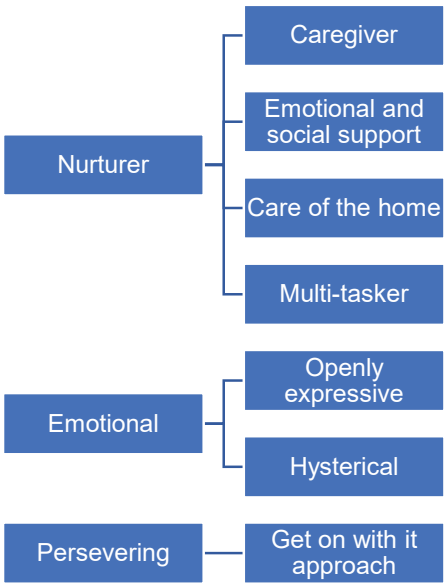


Figure 42

Summary illustrating core perceptive themes of Pacific women and corresponding codes



Dataset one: Pasifika perceptions of Pacific men

Four themes identified from the analysis of dataset one is presented here, regarding Pasifika perceptions of Pacific men discussed during e-talanoa. The perceptions of Pacific men are from all participants and are not separated by gender.

Caretaker

Pacific men were positioned as caretakers where their ultimate role is to take care of their families. Participants viewed caretaking as both an individual thing to do and also an expectation of Pacific men, reflecting the discourse of hegemonic Polynesian masculinity (Chen, 2014).

> *"…if he [Pacific man] can't do his, so called job, or support his family, he doesn't want everybody else in the family to go [experience] the same as himself"* **(**Tongan man in their 60s)

The broad theme of *caretaker* was also discussed in more nuanced ways, as a leader, provider, and protector. This reflects what has socially and culturally been described as men having a role that occurs outside of the home but contributes to the running of the home, such as providing food, income, and security for the family.

> *"Pacific Island men…that real stereotypical view of like they have to have it all together. They have to be the leader of the family…"* (Sāmoan-Māori-Pālagi woman in their 30s)

"The [Pacific] woman, their lifestyle is different, because when they brought up, they rely on the [Pacific] man as a leader in the house, to provide" (Tongan man in their 60s)

"There's still sort of that really big pressure for the men to make sure that everything in the house is running well, like financially and all that." (Fijian-Indian woman in their 20s)

Stoicism

Pacific men were described as repressing their emotions, taking a toughen up approach, and avoiding vulnerability due to fear of being perceived as weak. Stoicism and its associated sub-themes were viewed as a personal attribute but also as an expectation of Pacific men. Again, this reflects a normative hypermasculine perception that Pacific men are expected to uphold.

"... as a Pasifika, you assume that if you are male, and if you're the head of the family, then you're just expected to take on everything and not show your feelings and emotions" (Tongan man in their 30s)

"...for both my Father and my Father in-law. Both very stoic, you know like, lovely, very friendly, and will talk to anyone, but when it comes to emotions and talking about that stuff out loud, it's like, no thanks. And definitely not in an open environment with everyone around" (Sāmoan-Māori-Pālagi woman in their 30s)

"I definitely think that there is still an expectation for Pacific men to be more stoic and to be less vocal about their mental health and less forth coming about it. And in that sense, I feel like their perceptions might be shaped in that way, where maybe it's not always as salient for them as it might be for me, as a [Pacific] woman, and that would probably be shaped around our society and our families" (Fijian-Indian woman in their 20s)

Hypermasculine norms have been found to increase internalised stigma and promote masking of emotions lending to a lack of openness and/or willingness to be open (Doherty et al., 2016; Horton, 2014; Valkonen & Hänninen, 2013).

"I guess from personal experience. I've seen a lot of other [Pacific] males in my family, go through things and you can see the hurt on their face, but they're not willing or they don't feel comfortable enough to express themselves" (Sāmoan man in their 20s)

"For the [Pacific male] Islander. His feeling he has to keep to himself" (Tongan man in their 60s)

"My Grandad, my Dad, even my Uncles, they never really talked about mental health. So we didn't" (Tongan man in their 30s)

"...I think a lot of [Pacific] men are not comfortable opening up and having what they think is deficits about them or having problems and having issues. I feel like

they're far less likely to want to open up to their mates, in case they're seen as weak" (Sāmoan-Māori-Pālagi woman in their 30s)

This in turn can influence the way Pacific men cope with mental health challenges. For example, being more inclined to suppress emotions and/or hinder help-seeking to avoid vulnerability (Chen, 2014; Horton, 2014; Marsters, 2017).

Externally expressive

Pacific men were described as more likely to be externally expressive through aggressive behaviour or substance use. We know that Pacific men are more likely to experience externalised mental health challenges that can lead to external coping mechanisms such as substance use.

"I think about my Grandpa on my Mum's side, who was a lot more closed off. I look at my Uncles on that side, and the first thing they do when sensitive topics come up is they joke, they joke or they go outside for a smoke or they drink or something of that sort…" (Sāmoan man in their 20s)

"For example, my Dad loves to, his way of coping with and keeping his mental health in check is socializing with my Uncles drinking kava…" (Fijian-Indian woman in their 20s)

Prior research also indicates that normative hypermasculinity promotes internalised stigma towards depression, hinders coping, and encourages emotional repression that can

lead to self-destructive behaviours (Doherty et al., 2016; Horton, 2014; Valkonen & Hänninen, 2013).

> ***"****Back then, it was more the physical side of things. Just get a hiding. That's how I thought mental health was."* (Sāmoan man in their 40s)

> *"My Dad was like the tough one giving tough love. My Mum was more the emotional side of things. So, like the old man would give us a hiding and the old lady would say things that you know, more plays on your emotions."* (Sāmoan man in their 40s)

> *"So it's like being a man is talking with your fists, right. So not discussing it and not doing it, but it's about action. It's about showing. It almost felt like the more violent you were the more valued you were as a man, because you could protect. Even just the idea of talking, talking through things, acknowledging feelings, was dismissed almost immediately."* (Sāmoan man in their 20s)

Emotionally available

Participants described Pacific men as comfortable being open and expressive with their emotions and how they are feeling through personal anecdotes. These stories were often shared in ways that participants felt that it was contrary to expectations of being stoic and emotionally distant. In this way, Pacific men were described as being emotionally available and having a willingness to move outside of the normative socio-cultural gender roles expected of them.

"...I guess that's where I feel a lot more privileged in how I was brought up because I have a Dad who's a lot more communicative. Who didn't growl me for crying, for example, or for sharing things that made me feel scared, or feel sad, or feel worried. I don't know if that's the main reason why mental health might be in that state when it comes to Pacific males." (Sāmoan man in their 20s)

"...I feel like we blur the gender roles a bit because my partner is a really actively hands on Dad... He's very domestic, he'll do lots of things around the house. So I feel like he takes the stigmatism away from it, like only Mum does those jobs or only Dad does those jobs..." (Sāmoan-Māori-Pālagi woman in their 30s)

"I can honestly say that there's a lot of banter, and a lot of mocking that goes on amongst the boys. But I feel like it wasn't until the boys experienced their own loss that they were able to then tell each other they loved each other in a scenario of like being on a group chat or being around each other... And I think that's part and parcel of that vulnerability and seeing these people they know and love taking their own lives, it puts it into perspective. So, yeah, it definitely makes them more vulnerable, but more open to that vulnerability, rather than trying to hide it and be like, 'nah I'm tough gee', like, they're shifting that perception that they have to be okay" (Sāmoan-Māori-Pālagi woman in their 30s)

Dataset two: Pasifika perceptions of Pacific women

Three themes identified from the analysis of dataset two are presented here**,** regarding Pasifika perceptions of Pacific women discussed during e-talanoa. The perceptions of Pacific women are from all participants and are not separated by gender.

Nurturer

Pacific women were positioned as nurturers in the way took upon many roles such as caregiving, providing social support, and looking after the home. This was considered in addition to any further paid or unpaid work that was also carried out. This further demonstrates the socio-cultural reflection of Pacific women and their role inside of the home through organising the home and caring for children and/or family members. This enables Pacific men to fulfil their role outside of the home as providers. As discussed, we see this across contemporary Aotearoa NZ where Pacific women receive lower incomes and are more likely to carry out unpaid activities (such as caregiving) in comparison to Pacific men (Ministry for Pacific Peoples, 2016; Roughan & Taufa, 2019).

> *"There are most definitely gender roles that parents play… So the Mums would do a lot of the work, in terms of running the household, organizing their household, talking to the kids… But it's very much the Mum organizing the heart of the home and having the more meaningful conversations or having more in depth conversations with the kids around loss and grief."* (Sāmoan-Māori-Pālagi woman in their 30s)

> *"The roles that we play in society, all of the motherly roles are very much nurturing roles. So my Mum's a teacher. I do [a sport's] Chairman [role]. And I'm an administrator for a youth trust so I help with disadvantaged, or at risk youth. And then my Mother in-law works with a Public Housing agency, so she's helping again with our most vulnerable people. So I guess… We are playing stereotypes of what a [Pacific] woman should be good at, the communication, and the nurturing, and the looking after people. Whereas the Dad's all fulfil different roles. So like sales, clerical police officer, very much like male roles"* (Sāmoan-Māori-Pālagi woman in their 30s)

As highlighted across many of the comments around Pacific women, their role has been consistently described synonymously with multi-tasking and nurturing. In this way, Pacific women are perceived and expected to care for many people, provide emotional support, look after the home often at the risk and potential sacrifice of their own wellbeing.

"I feel like there's a lot of other areas of mental health that isn't being addressed for Pasifika women. I think one of the big areas that I've seen in my work is caregiver burden. They take it upon themselves to, or they get placed in a role where it's their job to look after Mum and Dad or grandparents. It's not often acknowledged how much that takes out of their own wellbeing, how much it impacts them. So even that it's something that's culturally entrenched and it's not looked at, because there again, we look at the roles that they serve in this society and not so much their needs as a person or their mental health" (Sāmoan man in their 20s)

"…this is your role, you should be able to do it, like high expectations about performance. About being able to keep composure, being able to balance multiple roles. I feel like it's a lot more complicated for Pasifika women because of the multiple roles that they can hold, versus men. I always feel like the expectation for men is just to work. It makes me feel like the comments might start to reflect more, you should be able to look after yourself because Mums are the carers. Which feels horrible to say." (Sāmoan man in their 20s)

Emotional

Pacific women were described as emotional, both subjectively and as an expectation of Pacific women. Being emotional was described in the way Pacific women use talking (with family and/or friends) to express themselves or as a coping strategy for navigating internalised challenges.

> *"... there was a perception that [Pacific] men would perceive mental health as something that they didn't really talk about whereas when we think about our Pacific women, that's kind of the only thing they talk about, their feelings, their thoughts, their emotions."* (Tongan man in their 30s)

> *"As [Pacific] ladies, we get into our groups and we talk. We talk all the time… And with dealing with mental health, we have people that we talk to, we have our friends and our female relatives that we talk to all the time about stuff…"* (Tongan woman in their 40s)

It was also highlighted that approaching Pacific women (rather than Pacific men) to discuss mental health challenges was preferred due to a perception that they are more likely to respond with more emotional and compassionate consideration than Pacific men.

> *"... as a kid coming up, I used to think if I was going to approach someone about feeling depressed or feeling suicidal, I'd definitely approach my Mum, rather than my Pacific male role models in my family. Because I think they [Pacific women] would have more of a compassionate and a loving side. Rather than this tough like, harden up from the guys…"* (Tongan man in their 30s)

However, the perception of being *emotional* was not always described in a positive way as indicated by the association with *hysteria* and its acceptable expression and expectation of Pacific women. This is unsurprising as historically, hysteria was constructed as a feminine disease and promoted a patriarchal system that supported male dominance and female irrationality and in turn, inferiority (Gilman et al., 1993).

> *"I think it sounds sad but it feeds into the stereotype of hysteria for women. Which I think is such a horrible stereotype but it's the idea that it's okay for women to be emotional, because that's their role, to be emotional. It's their role to look after kids and kids are emotional, so you have to be emotional back. Compared to being a Pacific male, I feel like there's a lot less pressure [for Pacific women] to hold back [their emotions]"* (Sāmoan man in their 20s)

Persevering

Pacific women described subjective experiences of being encouraged to adopt a persevering approach. This was often expressed in the way that feelings are dismissed and in lieu of working hard and getting on with it. This contrasts from previous perceptions of Pacific women being described from a general stance of acceptance and as highly emotional nurturers. Interestingly, each experience describes a daughter-parent relationship and the persevering approach fostered in each circumstance may be more indicative of a relational influence rather than a perception or expectation of Pacific women.

> *"…my Mum who's Sāmoan would just be like, when you're going through something, 'just do it, it doesn't matter how you're feeling, just get along with it'. Where like my*

Pākehā Dad is more, 'you have to deal with your feelings', and like it's different…" (Sāmoan-Pālagi woman in their 30s)

"…Anxiety is not even a word in our household like that, we don't know what that means. And it can often be likened to, 'just being dramatic' or, 'just get on with it', or 'what is this'. You know, 'you can't concentrate because you're not trying hard enough'… I've always grown up with the, 'well you should be busy', 'you should be working hard', 'you should be building, working hard, so that you can have a better life than we did'…" (Fijian-Indian woman in their 20s)

"It's interesting because, although it's more acceptable for women to express their emotions… but if you do it too much, you're still complaining." (Fijian-Indian woman in their 20s)

Discussion

This study explored Pasifika perceptions of Pacific men and women and its interrelationship with mental health through e-talanoa. More specifically, our study analysed two datasets, the first related to Pasifika perceptions of Pacific men and four core perceptive themes were identified: caretaker; stoicism; externally expressive; and emotionally available. The second dataset related to Pasifika perceptions of Pacific women and three core perceptive themes were identified: nurturer; emotional; and persevering. Pacific perceptions of gender have in part been shaped through broader social discourses and has influenced how masculinity and femininity are more commonly expressed or understood by Pacific peoples living in Aotearoa NZ. Our discussion serves not to homogenise participants' views, but rather, to explore the commentary and examples provided; that aid in uncovering the ways in

which perceptions of gender intersects with mental health for Pacific peoples who participated in this research. Thus, the overall discussion is guided by participant statements extracted from the e-talanoa.

"The responses show a lot of the expectations around the stereotypes that we still hold about Pacific peoples and what it means to be a Pacific man versus a Pacific woman"

This research extends the conversation to think about how Pacific perceptions of gender relate to mental health at all levels. Our participants described Pacific men as stoic protectors who were less likely to engage in conversations around mental health. Whereas Pacific women were described as emotional nurturers who were more likely to engage with and provide emotional support. These perceptions are narrow but clear. Pacific men are expected to be and are therefore perceived as leaders, tough, dominant, and unemotional to name a few. On the other hand, Pacific women are expected to be and are therefore perceived to have characteristics of (but not limited to) being nurturing, compassionate, softer, and emotional. From a young age we also learn the place of masculine and feminine qualities, often with the underlying implication that non-masculine (or feminine) qualities are undesirable amongst men but women are expected to uphold standards of femininity. These limited sets of expectations do not allow for much deviation and in turn, men are often penalised more than women for violating gender expectations.

"And this is where tradition sort of comes into it"

The participants discussed *tradition* as the shared knowledge of cultural customs and/or beliefs that have been passed between generations. Whereby a tacit knowing or understanding of the roles and expectations of men and women in Pacific spaces has been developed from a young age. For Pacific men this looked like having roles outside the home including mowing the lawns, working at the plantations, making sure the home and family are being looked after financially. For Pacific women, this looked like caring duties within

the home. Further, participants, generally noted that it is expected and normal to see and hear our Pacific women being emotionally expressive through audible crying and wailing, but not seen or expected of our Pacific men. Given the dominant gender ideologies across our Pacific communities and wider in our overall community, I also extend this talanoa to consider the impact of colonisation.

Until recently, research around masculinity has largely focused on Western discourses of masculinity. Colonial and post-colonial history has also been tacitly infused with a Western masculine worldview (Hokowhitu, 2017). Colonisation has been highlighted as a gendered movement and one that aggrandized the settler heterosexual male as the epitome of power and human reason, and therefore was perceived to represent the interests of humanity (Hokowhitu, 2017). In this way, the colonial impact and Western influence across our Pacific communities has promoted an idealised European masculinity that not only silenced the power of Pacific women but fostered a patriarchal dividend.

"Gender roles are definitely present in my household but I think we do blur them"

Our participants also discussed how dominant norms of gender upheld within their own families and wider community, have slowly diverged over time. This divergence was described as a product of a myriad of factors including, but not limited to, education, media, and intergenerational mobility. We see this expressed through the themes of *emotionally available* identified for Pacific men and *persevering* for Pacific women, which recognises that there is space for diverse understandings and expressions of masculinities and femininities. *Blurring gender roles* allows us to make connections between Pacific men and women. For example, the *emotionally available* perception of Pacific men is a counter point to masculinity which connects to a feminine representation. This is reflected in a similar way where the *persevering* perception of Pacific women as taking a 'get on with it' approach connects to a masculine representation. This shows us that there can be and that there is

fluidity between expressions of gender, and we should not be confined to the static representations of what is normatively expected of a Pacific man or woman.

"It is important that we start to share and talanoa and conversate around what we're going through"

Participants highlighted the importance of open communication, especially for our Pacific men that are expected to be tough and to not show emotion. There were discussions across the e-talanoa sessions around the need to reduce the stigma around talking about our thoughts, feelings, and seeking help, as well as the importance of enhancing our understanding around mental health in a way that serves our Pacific communities. This is vital because our Pacific peoples experience a significant burden of mental health challenges in Aotearoa NZ, with higher reports of mental health challenges but also lower reports of diagnosis and in turn, help-seeking (Ataera-Minster & Trowland, 2018). This may be a reflection of accessibility to mental health supports and cultural understanding of mental health.

Prior research indicates that Pacific women are more likely to internalise emotions, which can lead to withdrawal, anxiety and depression. Whereas Pacific men are more likely to externalise emotions, which can lead to aggressive, impulsive, coercive and noncompliant behaviour (Ataera-Minster & Trowland, 2018; Foliaki et al., 2006; Ministry of Health, 2008; Oakley Browne et al., 2006). Knowing this can also help in developing more effective prevention, intervention and treatment strategies. However, it is important that such strategies do not solely focus on internal or external expressions. For example, strategies to stop men from being aggressive, as this can also fuel an expectation or stereotype that men are violent. Additionally, it is also important to consider that Pacific peoples are relatively low users of mental health care and services in comparison to their non-Pacific counterparts (Ataera-Minster & Trowland, 2018). Thus, there is a need to further explore the driving factors

around why this is consistently seen and reported across literature. There is also limited research on the effectiveness of talking therapies with Pacific peoples although these have been found to be ineffective with Indigenous Māori men (Hokowhitu, 2007). This may be a reflection of the Western concepts these therapies draw upon and their direct nature. As it is well acknowledged that holistic, culturally responsive and circular (indirect) approaches are important when working alongside Pacific peoples (Te Pou o te Whakaaro Nui, 2010; Vaka, 2021).

"New Zealand has come a long way… but there's still a lot that needs to be done"

For change to happen in Aotearoa NZ, the intersections between culture, gender, and mental health must be considered at all levels (within policy, research, and front-line services) of mental health. Andermann (2010) highlighted that specific services (i.e. targeted towards specific groups such as women or minority groups) do need to be studied further. However, such services are not as prevalent in the community as they are often harder to sustain due to the required expertise not always being available. Additionally, the priorities of larger organisations do not always support their development and continuation. There is also the idea that 'specialisation leads to marginalisation', resulting in specialised care for minority populations rather than enhancing cultural competency across the board (Lo & Chung, 2005; Satel, 1998). However, specialised services have been highlighted as vital because attending to specific needs promotes good practice for everyone (Burman et al., 2002; Kohen, 2001; Seeman & Cohen, 1998).

Strengths, limitations and future directions

As far as I am aware, this is the first study of its kind that explored Pacific perceptions of Pacific men and women and its interrelationship with mental health. By doing so, I provide a unique and significant contribution to the research literature. This study also adds to existing research demonstrating how e-talanoa can be used safely and respectfully with our

Pacific communities. I also acknowledge the limitation in focusing on Pacific peoples as a collective, but I hope this research also serves as a reminder for not only more ethnic-specific Pacific research but the signal for more ethnic-gender-specific Pacific mental health research and approaches, including gender diverse Pacific peoples. As mentioned, this research forms part of a larger research project and there is additional e-talanoa research data to be explored outside of this research paper. For example, e-talanoa analysis also identified themes related to recognition of mental health challenges; the needs of our Pacific communities; and experiences during COVID lockdown in March 2020 – there is an aim to share more of this research in due course. Finally, in addition to the future directions of my own research aspirations, I hope this research can be used to inform policy and practice to promote positive health and wellbeing outcomes for our Pacific communities.

Conclusion

Using a Pasifika critical realist approach to thematic talanoa analysis, I identified common themes that participants talked about in regard to their perceptions of a Pacific male vignette character experiencing depression and a Pacific female vignette character experiencing anxiety. Not only does this significantly contribute to the research literature around Pacific perceptions of gender, but it highlights an area for consideration in the development of future policy and practice around mental health for our Pacific communities. So, as the author/researcher, I am inspired by the late Epeli Hau'ofa, a renowned Tongan scholar who wrote, "My writing, therefore is not something only for a quiet reading in bed or in a library. It is meant to be read aloud so that some of the beautiful and not so beautiful sounds of the voices of the Pacific may be heard and appreciated" (Hau'ofa, 1990, p. 253).

Bridging Comments

The PMHA e-talanoa provided unique insights into the experiences of our Pacific communities and their perceptions around Pacific men and women and its interrelationship with mental health. I cannot put into words, although I will try, how it felt being able to talanoa with our community around mental health. We shared stories, tears, and laughter. We connected over prayer and similar lived experiences. It is an honour to share the words of our talanoa in a respectful and responsive way to ensure *our* research is meaningful and will make a difference in the lives of our Pasifika – a true blessing.

As I journey into the final section of this thesis, I must reflect on where I have been. In Section 1, I provided an overview of Pacific mental health and discussed the relevance of building towards a Pacific mental health literacy framework. In Section 2, I demonstrated how Western survey data can be used. Although such data was not designed with or for our Pacific communities, I was able to draw parallels between the data with our Pacific worldviews. In this way, I gave power to the Pacific data by (re)claiming it for our Pacific peoples and not relinquishing it solely to Western interpretations. In Section 3, I demonstrated how to build innovative Pacific mental health literacy research drawing upon Western and Pacific methods to create tools that can be used and applied across our contemporary Pacific communities in Aotearoa NZ.

Now, as I move into Section 4, I weave together all of the research elements discussed in this thesis. In doing so, I extend our research around Pacific mental health and demonstrate the importance of Pacific mental health literacy and a way towards a Pacific mental health literacy framework.

SECTION 4

Overall Discussion

Firstly, fakamālō atu (to give thanks) for getting to this point in my thesis. It has been a labour of love to say the least. As I write this section, it feels almost like a dream. Upon embarking on my doctoral journey in June of 2018, I never could have envisioned what the next three years and 10 months would hold. This doctoral journey has seen me work, travel, teach, mentor, share at conferences, develop a survey and receive responses from 548 Pasifika, talanoa with members of our Pasifika community, farewell loved ones (rest in eternal love to Aunty Malia Tupou Vaiata Mahafutau Sevelo, Uncle Sitani Selao Kapeli Kautai, Grandad Joseph Vincent Watson, Uncle Kelekolio Kautai), become an Aunty to so many beautiful babies, give birth to my son and daughter, move house four times, navigate the COVID-19 pandemic, support ill family members, secure a position as a Pacific lecturer at the University of Auckland. Taken together, I can truly say that it really has been a colourful journey, but one that I would not change. Through the highs and lows, the twists and turns, here I am, having carried out some incredible and innovative research alongside our Pasifika communities. I am excited to carry on my journey in academia and looking forward to contributing more extensively across areas of research, teaching, and service.

This thesis presents five pieces of research that not only helps extend existing research around Pacific mental health but has contributed significantly to building a platform to explore Pacific mental health literacy. The first piece of research, *Understanding Pasifika mental health in Aotearoa – A review of the literature*, was guided by the PRISMA statement (Moher et al., 2009) and provided an overview of Pacific mental health research in Aotearoa. The review showed how our evidence base around Pacific mental health has evolved through the years, and although it has improved greatly, there is still plenty of opportunity to strengthen equity across the mental health sector for our communities. The review also

highlighted the role that education, cultural responsivity, and engaging community activities could play in preventing further mental health disparity among Pasifika. As a result, the review resulted in our recommendation that all of these areas could be addressed and promoted through developing Pasifika mental health literacy as a way towards enhancing mental health and wellbeing outcomes within and across our Pacific communities.

The second piece of research, *Higher levels of social support predict lower psychological distress for Pacific peoples living in Aotearoa New Zealand*, drew upon existing Pacific data from the NZAVS and examined changes in Pasifika experiences of psychological distress over time in Aotearoa NZ. Prior research had examined changes in psychological distress over time across general populations, as well as Pasifika experiences of psychological distress cross-sectionally. However, there was no existing research that examined Pasifika experiences of psychological distress over time. Our research found that experiences of psychological distress for Pasifika predict experiences of psychological distress one year later. Further, that lower levels of social support predict experiences of psychological distress one year later. This study provided a unique and innovative contribution towards Pacific research through connecting a Western survey measure of social support, with a Pasifika understanding of vā.

The third piece of research, *A latent profile analysis of Pacific health values*, also drew upon existing Pacific data from the NZAVS and utilised LPA to examine the link between Pacific cultural values and Pasifika experiences of psychological distress in Aotearoa NZ. Whilst exploring how inclusive our Pacific models of health are for our Pacific peoples, this research identified four subgroups of Pacific peoples with varying orientations towards Pacific cultural values and associations with psychological distress. Further, results revealed the largest proportion of Pacific peoples whom identified strongly with Pacific cultural values were also less likely to experience psychological distress than any other

subgroup. This suggests that Pacific cultural values and the utility of Pacific health models are an appropriate way of framing health and wellbeing for a large proportion of Pacific peoples in Aotearoa NZ. However, it is important to recognise the incredible diversity among our Pacific communities and be understanding and accommodating of the diverse ways that Pacific peoples can express what they consider valuable.

The second and third pieces of research demonstrated how Pacific knowledges and understandings can be connected with conventional Western survey data, as a way towards (re)claiming sovereignty over our Pacific data. This is important because historically, Western research methods have not always served our Pacific communities and have often negatively framed our Pasifika. These pieces of research show how we can (re)shape such deficit-focused narratives whilst also developing pivotal knowledge that can advance research and be used to support community, policy and/or other research endeavours. These studies also privilege our Pacific worldviews and their importance in navigating our mental health and wellbeing. An important distinction to highlight is that the data that these studies were based upon were not developed for or with Pacific peoples in mind. However, these pieces of research showcased innovative approaches that can be used in future research. Thus, our research highlights the importance of developing a framework around Pasifika mental health literacy that is Pacific led, Pacific governed, and Pacific strong.

With that in mind, the next pieces of research focused on developing research with and for our Pacific peoples. The second and third pieces of research continued to extend knowledge around Pacific mental health. However, they did not explore recognition, knowledge and attitudes towards mental health, which are key elements of a Western understanding of mental health literacy. As I highlighted in Section 1 of this thesis (see Figure 6, page 30), Pasifika mental health literacy is not about instructing Pacific peoples what they should know about mental health, it is about recognising what our Pacific

communities understand about mental health and determining the best ways to uplift and enhance education around mental health. This leads onto the fourth and fifth pieces of research that adopted this Western understanding of mental health literacy (Jorm et al., 1997; O'Connor et al., 2014) and applied a Pacific lens.

The fourth piece of research, *Pasifika Mental Health in Aotearoa New Zealand: Findings from the Pasifika Mental Health in Aotearoa Survey*, is a descriptive report based upon a summary of findings from the PMHA survey. Key findings from the report highlight that our Pacific communities have moderate recognition rates of depression and anxiety, are more likely to turn to family and friends for mental health support, have fair knowledge around mental health issues, and do not think mental health promotion activities are positively serving our Pacific communities. In this way, the report provided information around conventional Western facets of mental health literacy – recognition, knowledge, and attitudes around mental health. However, it still acknowledged that Pasifika have different views and understandings of mental health, particularly in comparison to Western ideas of mental health. This difference is particularly important to highlight as it guided the direction of the PMHA e-talanoa that explored the gendered responses to the vignettes used as part of the survey through talanoa.

The fifth piece of research, *Pasifika perceptions of Pacific men and women and its interrelationship with mental health in Aotearoa New Zealand*, is based upon the PMHA e-talanoa and provided insight into Pacific perceptions of a Pacific man experiencing depression and a Pacific woman experiencing anxiety. This research found that participants described Pacific men as stoic and emotionless caretakers that were perceived as more likely to suppress emotions and uphold the hegemonic Polynesian masculine ideals of being a leader, provider, and protector of their family. Whereas Pacific women were described as emotional nurturers that were perceived as more likely to express themselves with family and

friends as a coping strategy, as well as navigating the many roles of caregiving, providing social support, and looking after the home.

The talanoa highlighted the contrast of the expectations around what it means to be a Pacific man versus a Pacific woman. This was described by participants as partly influenced by Pacific cultural traditions but also the colonial influence across the Pacific and adopting a Western lifestyle in NZ. However, participants also discussed an intergenerational shift that has seen the blurring of Pasifika gender expectations through influences such as education, media, and intergenerational mobility. More importantly, participants placed a great emphasis on continuing the talanoa around mental health with a view of continuing to break down the expectations tied to understandings of gender and the associated stigma towards engagement with mental health services and supports. Thus, this research provides incredible insight into the diverse and intersectional approaches that are needed towards developing a Pasifika mental health literacy framework.

In summary, this doctoral research builds upon a tapestry of knowledge around Pasifika mental health (Section 1) by providing a roadmap of where we have been and how we can move forward. This was then extended further through analysing Western survey data (Section 2) and demonstrating how Western measures can be connected with Pasifika worldviews to (re)claim our Pacific data sovereignty. However, both of the studies in Section 2 did not provide information around recognition, knowledge, and attitudes around mental health – pre-established Western facets of mental health literacy. Thus, the PMHA project (Section 3) was developed and comprised the PMHA survey and PMHA e-talanoa, which explored the mental health literacy of our Pacific peoples in Aotearoa NZ. Together, these pieces of research not only provide a link between mental health and mental health literacy, but they provide a blueprint towards developing a mental health literacy framework for our Pasifika.

Pacific mental health literacy

Jorm and colleagues (1997) defined mental health literacy as the knowledge and beliefs about mental health issues, which aid in their recognition, management or prevention. O'Connor and colleagues (2014) extended this to incorporate recognition, knowledge, and attitudes around mental health as part of a mental health literacy framework. Whilst this is important and much needed research, *Pasifika mental health literacy* cannot simply be defined in the same way. It is not just about knowledge and beliefs that Pasifika have around mental health issues. I recommend moving beyond the discussion around the mental health literacy *of* Pasifika and moving towards a discussion that centres on *Pasifika mental health literacy* as a concept that has been developed alongside Pasifika communities and our Pasifika worldviews. This is because Pasifika mental health literacy is and must be multifaceted. It must incorporate our Pacific worldviews – our Pacific knowledges, our Pacific understandings, our Pacific experiences. It must accommodate the fluidity and diversity of our cultures and identities. Pacific mental health and wellbeing are holistic and largely grounded upon our Pacific cultural values that connect to our family, our culture, our spirituality, and our land. Pasifika mental health literacy needs to incorporate all these elements to be relevant and appropriate across and within our Pacific communities in Aotearoa NZ.

Rather than adopting a Eurocentric understanding of mental health literacy, I take this opportunity to define *Pasifika mental health literacy* as the understandings and beliefs around mental health under a Pasifika lens, which shapes recognition, knowledge, and attitudes around mental health for Pacific peoples. Therefore, moving towards developing a Pasifika mental health literacy framework would entail exploring Pasifika understandings and beliefs around mental health and ways of enhancing education around mental health that are relevant and appropriate for Pasifika (please refer back to Figure 6). This is not to say that a Pasifika

mental health literacy framework will accommodate every person who identifies as Pasifika. Much like the utility of Pacific models of health, a framework would need to accommodate the diversity of Pasifika cultures and identities and their fluidity across time. However, there is a need for an extension beyond the framework, which can include the skillset of the researcher, practitioner, educator, or other community member – in understanding and accommodating the diverse ways that Pasifika express their culture and identity.

Importantly, such a framework will be unique to the landscape in which it is developed. Our Pacific demography in Aotearoa NZ is representative of a youthful, largely Aotearoa-born, and urban living population (Statistics NZ, 2018b). There is an interactive connection between Pacific cultures and identities developing within Aotearoa NZ to the wider Pacific region. The process of developing *Pasifika mental health literacy in Aotearoa NZ* needs to be reflective of this unique experience. It will also utilise approaches that are culturally appropriate and are sensitive to Pasifika conceptualisations of mental health and its challenges, whilst also accommodating the diversity across and within our Pasifika population. As such, enhancing Pasifika mental health literacy in Aotearoa NZ will aim to strengthen Pasifika mental health literacy across a number of ways including (but not limited to) building knowledge to connect symptoms with mental health issues, promoting skills to navigate and access mental health services, and reducing emotional and perceptual barriers to seeking mental health support. In this way, building Pasifika mental health literacy in Aotearoa NZ will contribute to mental health and mental health literacy research.

The importance of this research

Previous research literature has consistently demonstrated the positive links between mental health literacy and mental health and wellbeing outcomes. I have demonstrated the importance of mental health literacy and how this needs to be (re)developed with our Pacific communities in mind. Given the mental health disparities between Pacific peoples and non-

Pacific peoples in Aotearoa NZ, a focus on building Pasifika mental health literacy has seriously positive implications for our Pacific communities. With my research to date, I have laid a foundation to further explore Pasifika mental health literacy in Aotearoa NZ, where its growth can be led by our Pacific communities whilst not having to rely solely on Western conceptions of mental health literacy.

The PMHA research project connected Western conceptions of mental health literacy with Pasifika understandings, knowledges, and perceptions. Although there is merit in doing so, this research highlighted the importance and necessity of understanding mental health literacy from a Pasifika perspective and within the context of Aotearoa NZ. Going forward, rather than applying a Pacific lens to existing models and measures of mental health literacy, we need to change existing models and measures of mental health literacy to be Pacific based. The PMHA research project has highlighted how building Pasifika mental health literacy in Aotearoa NZ can lead to:

- Building Pasifika knowledge of the connections between symptom awareness and recognition of mental health issues to encourage help seeking attitudes and behaviours.
- Focusing on family and friends as avenues for the development of mental health skills and tools to support our Pasifika communities.
- Developing education and prevention tools and/or programmes that are structured, specific to Pasifika, evidence-based, and promote interactivity and experiential learning.
- The development of mental health promotion activities that serve the best interests of our Pasifika communities.
- An all-inclusive space to talanoa about mental health that does not omit people based on the socio-cultural expectations of our society.

- Pasifika perceptions of mental health shaping and enhancing the future of Pasifika mental health.

It has also been incredibly important to reflect upon the PMHA project and how it can be refined for the future, which aligns with Mālie (step 5) and Māfana (step 6) of the KRF (Chu et al., 2013; Fua, 2009; Thaman, 1997). As mentioned, developing tools with our Pacific communities in mind whilst relying on existing Western tools to do so is an important critique of this work. For instance, the PMHA survey vignettes drew upon Jorm and colleagues work (1997). As the vignettes did align with the DSM-5 criteria for depression and anxiety, and were shaped with the guidance of the PAT, I recommend taking an even more culturally nuanced approach to developing vignettes when further exploring Pasifika mental health literacy. Specifically, aiming to develop vignettes that explore what depression (or other mental health issues) looks like for our Pasifika. This in turn may affect how participants respond to questions concerning recognition of mental health issues or their understanding of mental health more generally. There is also the potential to develop survey measures (or other research tools) for exploring Pasifika mental health literacy that are Pacific centric and more reflective of our Pacific populations in Aotearoa NZ.

The doctoral research projects' innovative approach towards exploring Pasifika mental health and its relationship with mental health literacy has provided a significant contribution to Pacific research. Another key aspect of this project has been connecting Pasifika understandings with Western research methods as a way towards (re)claiming sovereignty over our Pacific data. I realise the potential to (re)develop research tools that are culturally responsive to our Pacific populations in Aotearoa NZ. As such, it is my hope that this doctoral research project has laid a foundation to also build more research around Pasifika mental health literacy. Further, I hope that it is done so in a way that will lead to the development of a Pasifika mental health literacy framework for our Pasifika that shares

practical tools to inspire, educate, and enhance the mental health and wellbeing outcomes for our Pasifika in Aotearoa NZ.

Implications and future directions

An obvious implication of this research is the potential to develop a Pasifika mental health literacy framework. As mentioned, a key factor I have highlighted around Pasifika mental health literacy has been to not predetermine what should be mental health knowledge, but rather, it is a combination of what Pacific communities understand about mental health as well as ways of enhancing education around mental health. In this way, a Pasifika mental health literacy framework would privilege Pacific worldviews and not solely look through a Eurocentric lens. A combination of approaches may be beneficial. A Pasifika mental health literacy framework could provide a steppingstone towards building education tools and mental health promotion activities that are relevant and culturally responsive to our Pacific peoples.

There is also great potential to develop a longitudinal research project focused on mental health, an opportunity that has existed since Te Rau Hinengaro was conducted in 2006. A mental health focused longitudinal research project would have many benefits such as being able to examine cause and effect relationships and developmental changes across the lifespan. However, longitudinal research projects can be incredibly time consuming, expensive and tend to experience high attrition rates. Such a project would require a team that could be flexible in its research approaches and the ability to build a participant sample that is reflective of the Aotearoa NZ population.

The PMHA project developed as part of this doctoral research project also has a wealth of research data that has yet to be disseminated. I plan to continue working on the PMHA project research data and build upon the research around Pasifika mental health literacy. As a Pacific researcher, I feel privileged with the honour of telling our peoples'

stories, in a way that reflects and represents our communities holistically. I have a duty to advocate for our Pacific communities through the space of research and I am reminded that research can be transformative in its design, approach and dissemination to positively impact legislation, policy and practices to help improve Pacific peoples' health and wellbeing.

Strengths and limitations

The doctoral research project considered Pacific peoples as a collective group and I acknowledge that this approach overlooks the nuances of each Pacific ethnicity and culture. Taking a broad approach complemented research incorporating the pan-Pacific frameworks and working with smaller sample sizes. Also realising that from a Pacific population in Aotearoa NZ of over 300,000 people, our sample sizes were relatively small in comparison and there is a need for Pacific research that is more representative of our Pacific communities. Our Pacific community is also youthful, and my research excluded anyone below 18 (Section 2 research) and 16 years of age (Section 3 research). This does highlight, yet again, the need for more targeted Pacific mental health literacy research that explores specific experiences (i.e. that of mental health service users, experiences of mental health issues) and/or demographic indicators (i.e. individual Pacific ethnicity, gender, birthplace, age).

A major strength of this doctoral research project has been taking a mixed methods approach, particularly a sequential mixed methods approach for the PMHA project. This allowed me to show how quantitative and qualitative research methods can create a meaningful union in Pacific research, as well as strengthening my skills as a Pacific researcher so that I can better serve our Pacific communities. Another unique and innovative part of this research has been the ability to converge Pasifika and Western worldviews, particularly as Pacific peoples are increasingly Aotearoa NZ born. Pacific and Western approaches can co-exist and mutually reinforce each other. This allowed me to connect our

Pasifika understandings with Western research measures as a way towards (re)claiming sovereignty over our Pacific data. Having a combination of knowledge systems, multiple sources of information, and multiple ways in which we can see understanding is important. Making these connections early on in my doctoral research journey guided me as I developed the PMHA project to be inclusive, responsive, and appropriate for our Pacific communities.

Contributions to Pacific psychologies

Pacific psychologies allow us to explore how Pacific knowledges and Pacific worldviews shape and are shaped by our Pacific communities to make meaning of and respond to a broad range of areas relevant to psychology. More importantly, this allows us to not only explore Pacific knowledges and Pacific worldviews but to privilege them in a Western dominated area. The importance of Pacific psychologies for our Pacific communities in Aotearoa NZ is seen through the mental health disparities between Pacific peoples and other ethnic groups, in that Pacific peoples have higher rates of diagnosable mental health issues and suicidal behaviour compared to the general population of Aotearoa NZ. Pasifika communities are also repeatedly underrepresented in mental health service user data due to low access to services and disparities in outcomes (Ataera-Minster & Trowland, 2018). Additionally, in the recent Government Inquiry into Mental Health and Addictions (R. Paterson et al., 2018), Pacific peoples asked for Pacific ways and worldviews to be reflected in mental health and addiction support services. Not only is the research highlighting the importance and validity of Pacific psychologies, but our people are voicing this too.

With the well documented and positive link between mental health literacy and mental health outcomes (Jorm, 2000, 2012; Jorm et al., 1997; O'Connor et al., 2014), building upon Pacific psychologies to explore Pasifika mental health literacy is a promising step forward. Pasifika mental health literacy refers to the understandings and beliefs around mental health under a Pasifika lens, which shapes recognition, knowledge, and attitudes

around mental health for Pacific peoples. Thus, I promote the development of a Pasifika mental health literacy framework that explores Pasifika understandings and beliefs around mental health with the aim of looking at ways of enhancing education around mental health that are relevant and appropriate for Pasifika in the context of Aotearoa NZ. This doctoral research project has provided a foundation of knowledge and resources to build off in pursuit of such a framework, including a myriad of relevant methods and approaches.

Pacific psychologies intentional plurality represents the diversity of our Pacific peoples and the diversity needed for our psychological approaches. My positionality as Tongan-Pālagi alongside my experiences, my understandings, and the space I flow through in the Pacific realm has shaped the psychological approaches I take and has therefore shaped the approaches towards my research. In this way, designing culturally responsive Pacific psychological research meant using multiple research methods and connecting multiple worldviews. As Tongan-Pālagi I constantly navigate between the Pacific and Western worlds where I can hold space in both. Yet, my freedom to do so also acknowledges that both of these worlds do not share the same privileges. So, my priority lies with uplifting and honouring the diversity of our Pacific worldviews and working towards (re)building culturally responsive research for our Pacific peoples.

My research has contributed to the talanoa around Pacific mental health, and more importantly, has started the talanoa around Pasifika mental health literacy in Aotearoa NZ. Taking a mixed methods approach has provided a significant contribution to Pacific psychologies, an approach that has very rarely been taken. The combination of quantitative and qualitative research methods has provided a contextual voice (qualitative) to the numbers (quantitative). Unlike quantitative methods, talanoa has a relational approach that fosters the development of rich, contextual, and meaningful research. Thus, when quantitative and qualitative research methods are used collaboratively through a mixed methods approach, we

see the fruits of a valuable and meaningful union – one that this doctoral research project aimed to provide.

The mixed methods approach has also assisted in weaving together the similarities and differences across all the elements of this thesis. Differences referring to the different approaches utilised in each section with the view of extending and exploring Pasifika mental health literacy. Similarities referring to the common goal of each section – to promote the efficacy of a Pasifika mental health literacy framework. By demonstrating the ability to merge Pacific and Western research methods I have also shown how we can connect and make meaning across different research methods and different worldviews as a way towards developing culturally responsive research. More importantly, Pacific research is not just about holding frameworks over the voices, experiences, and or understandings of our Pacific peoples. It is ensuring that the mana (power) of our people is consistently maintained and that their voices are not lost in over interpretation, misinterpretation, or interpretation with an agenda. In this way, being able to work alongside our research participants to ensure that research outputs are centred around them and not centred around those who hold the pen. This also validates Pacific psychological research that is openly accessible and presented in spaces that privilege Pacific and Indigenous activism and scholarship and is why I prioritise research dissemination in the same way – kia ta'e 'ua mai te ū e te meri (a Cook Island Māori proverb that translates to let the milk and honey freely flow) meaning to share what you have with others.

Final comments

As I begin to write my final comments as a mark towards the end of this doctoral research journey, I can definitely claim that the destination has been complemented by the journey. Carrying out this research and working alongside our Pacific communities has been a restorative journey. As a Tongan-Pālagi researcher I have been privileged with the task of showing how our cultural worlds can be connected, integrated, and shared. At times, navigating the many worlds that I hold space in has been tricky, especially in the academic arena. But through this research experience I have learnt a lot and grown a lot. This now sees me almost at the end of my doctoral journey and embarking on a new academic journey as a lecturer.

I am a Pacific psychological researcher. I have shared unique and innovative approaches towards Pacific research around Pasifika mental health literacy. In doing so, I have laid a foundation of research to further explore Pasifika mental health literacy in Aotearoa NZ that can be built upon by our Pacific communities whilst not having to solely rely on Western conceptions of mental health literacy. I hope that this will inspire and empower more Pacific researchers to not only (re)write but to (re)create our Pacific narratives through developing Pacific-centric research.

If anything, developing the PMHA project as part of my doctoral research project has shown me that as Pacific researchers, we have the ability to enable, mediate, and advocate for our Pacific communities through policy and practices informed by research. This research has further inspired me and reminded me that knowledge is power but that it also must be translated in ways that connect to a range of audiences and decision makers, otherwise we end up creating another report or research paper collecting dust rather than unleashing real world solutions to real world problems.

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Appendix A

PMHA survey

SCIENCE
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Pasifika Mental Health in Aotearoa

WHAT THIS QUESTIONNAIRE IS ABOUT

Talofa lava, Kia Orana, Mālō e lelei, Ni sa bula vinaka, Fakaalofa lahi atu and warm Pacific greetings. My name is Sarah Kapeli and I am a New Zealand-born Tongan who is passionate about the health and wellbeing of Pacific Peoples in New Zealand. This questionnaire forms part of a study for my PhD research that focuses on Pacific mental health.

The following questionnaire is for Pacific Peoples living in New Zealand and asks about yourself and your understanding of mental health. All the information you give is in confidence and will be used only for the purposes of the study. If any of the questions raise concerns for yourself or someone else, and you would like support, please refer to the help services at the end of this questionnaire. If you have any questions or concerns regarding your participation in the study, please do not hesitate to contact myself, Dr. Sam Manuela, Prof. Chris Sibley, Prof. Suzanne Purdy or the Ethics Committee (details below).

The questionnaire is anonymous and no identifying information (including IP addresses if completed online) will be gathered or used in this research. Participation in the study is your choice, and by submitting your questionnaire, this confirms your choice to participate. Once the questionnaire is submitted and because it is anonymous, we will not be able to withdraw you from the study.

Mālō aupito and thank you for choosing to take part in this study.

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For any concerns regarding ethical issues you may contact:
The Chair
The University of Auckland Human Participants Ethics Committee
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Approved by the University of Auckland Human Participants Ethics Committee on the 29-OCT-2018 until 29-OCT-2021. Reference number: 022137.

You can complete an online version of this questionnaire instead at:
https://auckland.au1.qualtrics.com/jfe/form/SV_b49ZCDRllmKz4R7

The QR code below also links to the online version of this study:

Today's date: DD / MM / YY

SECTION 1. Please take the time to record your personal information:

A. What Pacific ethnic group(s) do you belong to? (Please choose more than one if needed)

☐ Samoan ☐ Cook Islands Māori ☐ Tongan ☐ Niuean ☐ Fijian ☐ Tokelauan

☐ Tuvaluan ☐ Kiribati ☐ Māori (New Zealand) ☐ Other (please state)

a. If you also belong to a non-Pacific ethnic group(s), please list:

B. How old are you?

C. In what town or city do you live in NZ?

D. What country were you born in?

a. If you were not born in New Zealand, how old were you when you moved to New Zealand?

E. In which language(s) could you have an everyday conversation about a lot of everyday things?

☐ Samoan ☐ Cook Islands Māori ☐ Tongan ☐ Niuean ☐ Fijian ☐ Tokelauan

☐ Tuvaluan ☐ Kiribati ☐ Te Reo ☐ English ☐ Please tick if English is your first language

a. Other languages:

F. How would you describe your gender? *e.g. woman, man, transgender, fa'afafine, fakaleiti etc.*

G. How would you describe your sexual orientation? *e.g. straight, bisexual etc.*

H. Are you currently employed?

☐ Yes ☐ No

a. If yes, what is your job?

I. Are you a student/studying?

☐ Yes ☐ No

a. If yes, at what level? *e.g. NCEA Level 2, Bachelor's degree etc.*

J. What is your highest level of academic qualification?

K. What is your current relationship status? *E.g. single, in a relationship but not living together, de-facto, married, divorced*

L. Do you identify with a religion?

☐ Yes ☐ No

a. If yes, what religion?

M. Do you identify with a spiritual group?

☐ Yes ☐ No

a. If yes, what spiritual group?

SECTION 2. Below is a story about Tevita, please read it and answer the questions that follow. There is no right or wrong answer. (Please note – this story is not based on a real person or true life events):

Tevita is 44 years old, married, and has 5 children between the ages of 5 and 15. Tevita has been feeling really sad for the last few weeks. Tevita feels tired all the time and has had trouble sleeping nearly every night. Tevita does not feel like eating and has lost weight. Tevita's wife Siu, has asked him about his strange behaviour but Tevita says it is because he is busy. Tevita is a bank manager and has been unable to keep his mind on his work, and puts off making decisions. Even daily tasks seem too much for him. This has come to the attention of Tevita's boss, who is worried about Tevita's work and lack of leadership.

Below are some questions based on the story about Tevita. Please take the time to read all questions, and if you feel uncomfortable answering a question, please leave it blank.

A. In 15 words or less, why do you think Tevita feels this way?

B. What part(s) of Tevita's story tell you this?

C. How worried would you be about Tevita? (Please select one option only)

 I would not be worried I would be a little bit worried I would be quite worried I would be extremely worried

a. If you are worried about Tevita, what would you be worried about?

D. Do you think Tevita needs help? (Please select one option only)

 Yes No Don't know

a. If yes, please say how you think Tevita could be helped:

E. If you were Tevita, what would you do?

F. Is there anything else you would like to say after reading Tevita's story?

SECTION 3. Below is a story about Malia, please read it and answer the questions that follow. There is no right or wrong answer. (Please note – this story is not based on a real person or true life events):

Malia is 18 years old and is in her second year at University. Malia is also a part of her church youth group, works part-time at McDonald's and plays netball. Within the last 12 months, Malia has been avoiding youth group and has found it hard to relax. Malia has also felt nervous about all the work she has to do at University. Over the last 6 months, Malia has found it hard to concentrate at University and has also found herself breathing fast and shaking for no reason. Malia thinks this is because she is so busy and not sleeping much. Last week at church, Malia's mother found her in the church bathroom breathing fast, shaking and crying, but Malia's mother did not know what to do and is now very worried.

Below are some questions based on the story about Malia. Please take the time to read all questions, and if you feel uncomfortable answering a question, please leave it blank.

A. In 15 words or less, why do you think Malia feels this way?

B. What part(s) of Malia's story tell you this?

C. How worried would you be about Malia? (Please select one option only)

 I would not be worried I would be a little bit worried I would be quite worried I would be extremely worried

a. If you are worried about Malia, what would you be worried about?

D. Do you think Malia needs help? (Please select one option only)

 Yes No Don't know

a. If yes, please say how you think Malia could be helped:

E. If you were Malia, what would you do?

F. Is there anything else you would like to say after reading Malia's story?

SECTION 4. Please take the time to read and answer some general questions about your personal experiences with mental health.

Please note. ***Some of the questions below are sensitive, if any of these questions raise concerns for yourself or someone else, please refer to the help services at the end of this questionnaire. If at any time you do not feel comfortable answering a question(s), please leave it blank:***

A. Have you ever had any of the following mental health issues? (Please choose more than one if needed)

☐ Depression	☐ Anxiety disorder	☐ Schizophrenia	☐ Gambling Addiction	☐ Post-Traumatic Stress Disorder (PTSD)
☐ Stress	☐ Personality Disorder	☐ Alzheimer's disease	☐ Bipolar disorder	☐ Psychosis
☐ Autism	☐ Attention Deficit Hyperactivity Disorder (ADHD)	☐ Eating disorder	☐ Obsessive Compulsive Disorder (OCD)	☐ Alcohol/ substance Abuse

B. If any of the above were diagnosed by a doctor, which ones?

C. Over the last 2 weeks, how often have you been bothered by any of the following problems? (Please tick one for each question below)

	Not at all	*Several days*	*More than half the days*	*Nearly every day*
Little interest or pleasure in doing things	☐	☐	☐	☐
Feeling down, depressed, or hopeless	☐	☐	☐	☐
Trouble falling or staying asleep, or sleeping too much	☐	☐	☐	☐
Feeling tired or having little energy	☐	☐	☐	☐
Poor appetite or overeating	☐	☐	☐	☐
Feeling bad about yourself – or that you are a failure or have let yourself or your family down	☐	☐	☐	☐
Trouble concentrating on things, such as reading the newspaper or watching television	☐	☐	☐	☐
Moving or speaking so slowly that people could have noticed? Or the opposite, being so fidgety or restless that you have been moving around a lot more than usual	☐	☐	☐	☐
Thoughts that you would be dead or better off hurting yourself in some way	☐	☐	☐	☐

D. During the last 30 days, how often did… (Please tick one for each question below)

	None of the time	*A little of the time*	*Some of the time*	*Most of the time*	*All of the time*
…you feel tired out for no good reason	☐	☐	☐	☐	☐
…you feel nervous	☐	☐	☐	☐	☐
…you feel so nervous that nothing could calm you down	☐	☐	☐	☐	☐
…you feel hopeless	☐	☐	☐	☐	☐
…you feel restless or fidgety	☐	☐	☐	☐	☐
…you feel so restless you could not sit still	☐	☐	☐	☐	☐
…you feel depressed	☐	☐	☐	☐	☐
...you feel that everything was an effort?	☐	☐	☐	☐	☐
...you feel so said that nothing could cheer you up?	☐	☐	☐	☐	☐
…you feel worthless	☐	☐	☐	☐	☐

E. Are there places and/or people you would turn to for support? (Please select one only)

 Yes No Don't know

a. If no or don't know, why?	b. If yes, what are the places and/or people?	c. If yes, why could you turn to these places and/or people?

F. What places are you aware of if you need mental health support?

G. Have you ever used a mental health service? Or are you thinking about using one? (Please select one option only)

 Yes No Don't know

a. If yes, please say what the place(s) was:	b. How did you find this place(s)?

H. Have you ever helped someone go to a place for mental health support? (Please select one option only)

 Yes No Don't know

a. If yes, please say what the place(s) was:	b. How did you find this place(s)?

SECTION 5. Please take the time to read and answer some general questions about your personal attitudes towards mental health. If at any time you do not feel comfortable answering a question(s), please leave it blank:

A. Please tick all the boxes of what you think is a mental health issue:

☐ Depression	☐ Lack of appetite	☐ Schizophrenia	☐ Bipolar disorder	☐ Drug addiction	☐ Spiritual possession
☐ Negative thoughts	☐ Difficulty sleeping	☐ Hallucinations	☐ Gambling addiction	☐ Alcohol addiction	☐ Hearing voices
☐ Anxiety	☐ Feeling sad	☐ Confusion	☐ Grief	☐ Tiredness	☐ Stress

B. For the following statements, please tick one option only:

	Don't know	*Agree strongly*	*Agree slightly*	*Neither agree or disagree*	*Disagree slightly*	*Disagree strongly*
Most people with mental health problems want to have paid employment.	☐	☐	☐	☐	☐	☐
If a friend had a mental health problem, I know what advice to give them to get professional help.	☐	☐	☐	☐	☐	☐
Medication can be an effective treatment for people with mental health problems.	☐	☐	☐	☐	☐	☐
Psychotherapy (e.g. talking therapy or counselling) can be an effective treatment for people with mental health problems.	☐	☐	☐	☐	☐	☐
People with severe mental health problems can fully recover.	☐	☐	☐	☐	☐	☐
Most people with mental health problems go to a healthcare professional to get help.	☐	☐	☐	☐	☐	☐

C. For the following statements, please tick one option only:

	Don't know	*No*	*Yes*
Are you currently living with, or have you ever lived with, someone with a mental health problem?	☐	☐	☐
Are you currently working with, or have you ever worked with, someone with a mental health problem?	☐	☐	☐
Do you currently have, or have you ever had, a neighbour with a mental health problem?	☐	☐	☐
Do you currently have, or have you ever had, a close friend with a mental health problem?	☐	☐	☐

D. For the following statements, please tick one option only:

	Don't know	*Agree strongly*	*Agree slightly*	*Neither agree or disagree*	*Disagree slightly*	*Disagree strongly*
In the future, I would be willing to live with someone with a mental health problem.	☐	☐	☐	☐	☐	☐
In the future, I would be willing to work with someone with a mental health problem.	☐	☐	☐	☐	☐	☐
In the future, I would be willing to live nearby to someone with a mental health problem.	☐	☐	☐	☐	☐	☐
In the future, I would be willing to continue a relationship with a friend who developed a mental health problem.	☐	☐	☐	☐	☐	☐

SECTION 6. Please take the time to read and answer some general questions about advertisements, campaigns and/or websites related to mental health. If at any time you do not feel comfortable answering a question(s), please leave blank:

A. Over the last year, have you seen or heard any New Zealand mental health related advertisements/campaigns/websites?
For example, on the TV, radio, on the internet, on a poster, or in a pamphlet.
(Please select one option only)

 Yes No Don't know

a. If yes, what were they?	b. If yes, where did you see them?	c. If yes, did you connect with it? And why?

B. Do you think there is anything missing from the current mental health related advertisements/campaigns/websites? (Please select one option only)

 Yes No Don't know

a. Why do you think this?

C. Do you think the mental health needs of Pacific Peoples in New Zealand are being met? (Please select one option only)

 Yes No Don't know

a. Why do you think this?

SECTION 7. Please take the time to read and answer some questions relating to specific mental health issues. If at any time you do not feel comfortable answering a question(s), please leave it blank:

A. What do you think 'depression' is? And why do you think this?	B. If you or someone you know has depression, what do you think is the best thing to do? And why?	C. What do you think are the causes of depression?

D. For each of the items below, please tick one option for someone who has depression:

	Unsure	*Harmful*	*No difference*	*Helpful*
Seeing a doctor	☐	☐	☐	☐
Seeing a counsellor	☐	☐	☐	☐
Seeing a pharmacist	☐	☐	☐	☐
Seeing a psychiatrist	☐	☐	☐	☐
Talking to a teacher	☐	☐	☐	☐
Seeing a traditional healer	☐	☐	☐	☐
Engaging with pets and/or animals	☐	☐	☐	☐
Talking to your parents	☐	☐	☐	☐
Talking to your siblings	☐	☐	☐	☐
Talking to your children	☐	☐	☐	☐
Talking to your extended family i.e. Grandparent, Aunty, Cousin	☐	☐	☐	☐
Talking to your friends	☐	☐	☐	☐
Talking to people of the same ethnicity	☐	☐	☐	☐
Talking to your Church Minister(s)	☐	☐	☐	☐
Talking to your Church groups i.e. Youth group	☐	☐	☐	☐
Talking to your work colleagues	☐	☐	☐	☐
Using alcohol	☐	☐	☐	☐
Using drugs	☐	☐	☐	☐
Drinking kava	☐	☐	☐	☐

E. What do you think 'anxiety' is? And why do you think this?	F. If you or someone you know has anxiety, what do you think is the best thing to do? And why?	G. What do you think are the causes of anxiety?

H. For each of the items below, please tick one option for someone who has anxiety:

	Unsure	*Harmful*	*No difference*	*Helpful*
Seeing a doctor	☐	☐	☐	☐
Seeing a counsellor	☐	☐	☐	☐
Seeing a pharmacist	☐	☐	☐	☐
Seeing a psychiatrist	☐	☐	☐	☐
Talking to a teacher	☐	☐	☐	☐
Seeing a traditional healer	☐	☐	☐	☐
Engaging with pets and/or animals	☐	☐	☐	☐
Talking to your parents	☐	☐	☐	☐
Talking to your siblings	☐	☐	☐	☐
Talking to your children	☐	☐	☐	☐
Talking to your extended family i.e. Grandparent, Aunty, Cousin	☐	☐	☐	☐
Talking to your friends	☐	☐	☐	☐
Talking to people of the same ethnicity	☐	☐	☐	☐
Talking to your Church Minister(s)	☐	☐	☐	☐
Talking to your Church Groups i.e. Youth group	☐	☐	☐	☐
Talking to your work colleagues	☐	☐	☐	☐
Using alcohol	☐	☐	☐	☐
Using drugs	☐	☐	☐	☐
Drinking kava	☐	☐	☐	☐

THANK YOU VERY MUCH FOR TAKING PART IN THIS STUDY.

If any of the questions contained in the questionnaire have raised concerns in your own or someone else's life and you would like extra support, please contact your local health service(s), your doctor, or call:

Youthline: 0800 376 633
Lifeline: 0500 543 354
Healthline: 0800 611 116

If completed on a paper copy, please post back your completed questionnaire using the included freepost return envelope from anywhere in New Zealand.

Please feel free to pass on the researcher's details or the questionnaire link to anyone else who may be eligible and interested in this study.

Please see the next page if you are interested in:

- Being a part of a prize draw
- A summary of this research
- Participating in future research.

Mālō 'aupito and thank you for your time.

Approved by the University of Auckland Human Participants Ethics Committee on the 29-OCT-2018 until 29-OCT-2021. Reference number: 022137.

I would like to…

(Please tick all that apply)

- ☐ Enter into a draw to be into win 1 of 20 $100 Westfield vouchers
- ☐ Receive a summary of this study's findings
- ☐ Be involved with future research about Pacific mental health beliefs via a face to face interview

If you ticked yes to any of the above, please give your details below:

Name: _____

Phone: _____

Email: _____

PLEASE NOTE: THIS PAGE WILL BE SEPARATED FROM YOUR QUESTIONNAIRE ANSWERS.

Approved by the University of Auckland Human Participants Ethics Committee on the 29-OCT-2018 until 29-OCT-2021. Reference number: 022137.

Appendix B

PMHA e-talanoa guide

Pasifika Mental Health in Aotearoa e-Talanoa guide

[Prompts and variations of the e-talanoa guide are included in [] closed brackets if required]

Introduction

[Welcome and lotu (prayer) from Researcher]

Talofa lava, Kia Orana, Mālō e lelei, Ni sa bula vinaka, Fakaalofa lahi atu and warm Pacific greetings. My name is Sarah and I will be hosting our talanoa today. I am a New Zealand-born Tongan who is passionate about the health and wellbeing of Pacific peoples in New Zealand [or other brief intro from Research Assistant/Researcher if required]. Our talanoa session today forms part of a study for my [or Sarah Kapeli's] PhD research that focuses on Pacific mental health and I look forward to hearing your thoughts around this. I also want to stress that anything you say during this session will have absolutely no impact on your relationship with the University of Auckland, or any health care or social service provider. We really care what you have to say and value your honest opinion, whether it be something that you may think is good or bad.

For this talanoa phase of the research, we are interested in understanding Pacific perceptions around mental health. Within the last year, you would have completed the questionnaire *Pasifika mental health in Aotearoa*, and you might remember that there were two stories about Tevita and Malia, followed by questions about what you thought about their experiences. Each story presented distinct experiences and through using talanoa today, we want to understand what Pasifika men know and think about Pacific mental health for both women and men.

Ultimately, we want to better understand Pasifika mental health in New Zealand. There are no right or wrong answers, and I encourage you to be honest when sharing. We are interested in ALL thoughts and experiences. In saying so, I would like to remind you that whatever is between you and I is to remain confidential.

I will be recording our talanoa as what you will say will be very helpful and will not be able to write down notes fast enough. This recording will only be accessed by myself, and the researchers who have all signed a confidentiality agreement. Please remember that you are free to choose not to answer any question(s) at any time, or you may turn off your video or move away from the screen if you need too, as I will not be able to turn off or pause the recording.

All of this is outlined on the Participant Information Sheet and Consent Form that you received earlier. Before we go any further, I ask if you could please follow the link [provide qualtrics link to Participant Information Sheet and Consent form] to reread the Participant Information Sheet and Consent Form again. Please take your time to go through all the information, ask any questions, and finally provide your consent if all is okay. Once completed, we will formally being our online talanoa.

[Allow time for questions and answers and Participant Information Sheet and Consent Form to be read, consented to and received online]

You have provided consent after reading the Participant Information Sheet and Consent Form, thank you! I also want to declare that I have given a verbal declaration of the research project to you and have answered any questions you have. I also believe you understand the study and have given informed consent to participate. Before we get started, I would like to reiterate that this is your final opportunity to withdraw from the talanoa, because once the talanoa commences and the recording begins, I will not be able to withdraw any information you have contributed to the talanoa. I would also like to remind you that the talanoa will be transcribed (typed out) by myself or one of the researchers and you will be identified by a false name or number. Then it will be sent to you for review where you can request any changes within 14-days.

[Allow time for any further questions and answers]

Before we start discussing our talanoa topic, let us begin by getting to know each other a little bit first. This will not be included as part of the research analysis. If you do not feel comfortable sharing, that is ok! Please share whatever you feel comfortable with.

[Allow time for introductions – Researcher goes first]

Talanoa begins

Now we are ready to begin our talanoa. But before we get underway, just a reminder that it is your choice to contribute as much or as little as you want, or even not at all. Please regard our talanoa as a safe space for discussion.

Today the focus of our talanoa is exploring Pasifika male and female understandings of Pacific mental health. So, I want to understand how Pacific [men/female] understand mental health. For example, understandings of mental health have been shown to differ between Pasifika men and women, as well as, Pacific and non-Pacific peoples.

Focus questions

[Please note that these are guided questions only, and will be dependent upon the flow of the conversation during the talanoa]

- As a Pacific [man/woman], what are your perceptions/thoughts/experiences around mental health?
- How do you think your thoughts (answers pertaining to the previous question) contrast with Pacific [men/women] – so what do you think are Pacific [men's/women's] perceptions around mental health?

- If you could describe Pacific men's mental health in one word, what would you say?
- If you could describe Pacific women's mental health in one word, what would you say?

- If you could tailor a service to meet the mental health needs for Pacific men, what would this look like? What would this like for Pacific women?
- Do you think New Zealand is currently addressing the mental health needs for Pacific men? For Pacific women? Please explain.

- Now I am going to provide you with the stories of Tevita and Malia used in the *Pasifika Mental Health in Aotearoa* questionnaire, and we will discuss these [share story on screen and allow time to read each story]:
    - From the survey, we received over 500 responses. Tevita's story describes depression and Malia's story describes anxiety, based on the questionnaire results – 42% of Pacific peoples identified that Tevita was experiencing depression and 50% of Pacific peoples identified that Malia was experiencing anxiety.
        - What do you think of these results?
        - Do you think the results could be better? Why?
        - What do you think we can do to improve the recognition of mental illness?
    - Several comments for each story were centered around gender. For example, Tevita's experiences were described as due to "having too much responsibility as a Pacific Island Father" and "as the man of the family, it is better to keep his emotions bottled up".
        - What do you think about these comments?
        - Why do you think these comments were made?
        - Do you think the comments made would change if the story was changed to a female person? i.e. Tevita becomes Tupou. Why do you think this?
    - Malia's experiences were described as due to being "a young woman, and her emotions are wild and free", "taking on a lot for a young girl, concentrate on one thing at a time" and because she is "a minority, female, and person of colour".
        - What do you think of these comments?
        - Why do you think these comments were made?
        - Do you think the comments made would change if the story was changed to a male person? i.e. Malia becomes Mone. Why do you think this?

<u>Talanoa ends</u>

Thank you for very much for sharing your thoughts, experiences and stories today. We will now bring our talanoa to an end with a prayer.

[Closing prayer]

Appendix C

Coding schedule for PMHA survey responses for why participants think Tevita feels the way he does

Level 1		Level 2	
1	**Don't know**		
2	**Normal**		
3	**Psychological**		
		31	Depression Mental
		32	Distress/Distress
		33	Trauma/Tragedy
		34	Crisis/Mid-life Crisis
		35	Anxiety
4	**Emotional**		
		41	Overwhelmed
		42	Burnout
		43	Sad/Unhappy
		44	Stress
		45	Dissatisfied
5	**Physical**		
		51	Fatigue
		52	Illness
		53	Lack of appetite
6	**External**		
		61	Family Pressure
		62	Job Pressure
		63	Lack of self care
		64	Lack of communication

Appendix D

Coding schedule for PMHA survey responses for why participants think Malia feels the way she does

Level 1	Level 2		
1	**Don't know**		
2	**Normal**		
3	**Psychological**		
	31	Depression	
	32	Mental Distress/Distress	
	33	Trauma/Tragedy	
	34	Crisis/Mid-life Crisis	
	35	Anxiety	Panic attacks
4	**Emotional**		
	41	Overwhelmed	
	42	Burnout	
	43	Sad/Unhappy	
	44	Stress	Worry
	45	Dissatisfied	
	46	Confused	
	47	Fear of failure	
5	**Physical**		
	51	Fatigue	
	52	Illness	
	53	Lack of appetite	
	54	Young age	
6	**External**		
	61	Family pressure	
	62	Job pressure	
	63	University pressure	
	64	Church pressure	Youth group
	65	Too much pressure	Taking on too much
	66	Lack of communication	
7	**Other**		
	71	Substance abuse	

Appendix E

Coding schedule for PMHA survey responses for the places and/or people participants would turn to for support

Level 1		Level 2	
1	**Work**		
		11	Colleagues
		12	Boss/Supervisor
		13	EAP Counselling services
		14	OSH
2	**Health Service**		
		21	Langima'a
		22	University health service nfd
		23	Waimarino
		24	Segar House
		25	Hauora Waikato
		26	Hospital
		27	LeVa
		28	Health Service nfd
3	**Other Service**		
		31	ACC
		32	Police
		33	nfd
4	**Health Professional**		
		41	Counsellor/Therapist
		42	Psychologist
		43	Doctor/GP
		44	Psychiatrist
		45	Social Worker
		46	Teacher
		47	Nurse
		48	nfd
5	**Support Groups**		
6	**Technology**		
		61	Social media
		62	Internet/Online
7	**Religious/Spiritual**		
		71	Faith
		72	Prayer
		73	Religious/Spiritual being
		74	Religious/Spiritual leader
		75	Religious/Spiritual book
		76	Religious/Spiritual place
		77	Religious/Spiritual group
8	**Family**		
		81	Partner (Husband/Wife)
		82	Partner (boyfriend/girlfriend)

		83	Children
		84	Siblings
		85	Parents
		86	Grandparents
		87	Cousins
		88	Aunty/Uncle
		89	Family nfd
9	**Friends**		
		91	Someone I can trust nfd
10	**Health/Wellbeing Practices**		
		101	Gym/Fitness
		102	Sport
		103	Social Activity
		104	Meditation
		105	Nature
		106	Art
		107	Writing
		108	Cultural Practice
11	**Helpline**		
		111	1737
		112	Lifeline
		113	Youthline
12	**Other Outlet**		
		121	Animals/Pets
		122	Home/Bed
		123	Shopping
		124	Other mentor nfd
		125	Car/Driving
		126	Eating/Food
		127	Cemetary - visit loved ones
		128	Isolation/Keep to self

Appendix F

Coding schedule for PMHA survey responses to mental health support places participants are aware of

Level 1		Level 2	
1	**None/Don't Know/Unsure**		
2	**Work**		
		21	EAP Counselling services
3	**Health Service**		
		311	Health Service nfd
		312	Hospital
		313	University health service nfd
		314	Segar House
		315	Hauora Waikato
		316	Waimarino
		317	Vaka Tautua
		318	Lotofale
		319	Faleola Services
		320	CADS
		321	Toko collaboration group
		322	CAMHS
		323	Whirinaki
		324	ETU Pasifika
		325	LeVa
		326	Langima'a
		327	Supporting families
		328	Like Minds, Like Mine
		329	Anxiety Trust
		330	Mental Health Foundation
		331	Emerge
		332	Fonua Ola
		333	Te Rawhiti
		334	The Fono
4	**Other Service**		
		41	Other service nfd
		42	Police
		43	School
		44	ACC
		45	Winz
		46	Salvation Army
		47	Friendship house
		48	CAB
5	**Health Professional**		
		51	Counsellor/Therapist
		52	Psychologist
		53	Doctor/GP
		54	Psychiatrist
		55	Social Worker

		56 Teacher
		57 Nurse
		58 Health Professional nfd
6	**Technology**	
		61 Social media nfd
		62 Internet/Online nfd
		63 Depression.org
		64 Betterhelp.com
		65 Chop sui
		66 The Low Down NZ
		67 SPARX
		68 7cups.com
		69 My RIVR
7	**Religious/Spiritual**	
		71 Religious/Spiritual leader
		72 Religious/Spiritual place
		73 Religious/Spiritual group
8	**Family**	
		81 Family nfd
		82 Partner (boyfriend/girlfriend)
		83 Children
		84 Siblings
		85 Parents
		86 Grandparents
		87 Cousins
		88 Aunty/Uncle
9	**Friends**	
		91 Friends
		92 Someone I can trust nfd
10	**Health /Wellbeing Practices**	
		101 Gym/Fitness place
		102 Nature
11	**Helpline**	
		111 Helpline nfd
		112 Lifeline
		113 Youthline
		114 What's Up?
		115 1737
		116 Heathline
12	**Other Outlet**	
		121 Community nfd
		122 Support group nfd
		123 Phone book
		124 Substances

Appendix G

Coding schedule for PMHA survey responses outlining participants reasons for connecting with mental health promotion activity

Level 1		Level 2	
1	**Demographics (connected with the demographics represented in the MHPA)**		
		10	Culture
		11	Sexuality
		12	Youth
		13	Gender
		14	Ethnicity
2	**Personal connection (had a personal connection to the MHPA)**		
		200	Personal beliefs
		201	Personal connection not otherwise stated
		202	Personal interest
		203	Personal awareness of mental health challenges
		204	Want to support others
		205	Connection through the experience of someone they know
		206	Personal experience of mental health challenge
		207	Personal use of mental health service
3	**Work (connected with the MHPA because they have a professional interest)**		
		30	Want to work in
		31	Currently work in
4	**Delivery (connected with the delivery of the MHPA)**		
		40	Language used
		41	Accessible MHPA
		42	Overall delivery
		43	Presence of public figures
		44	Use of social media platform
		45	Increased awareness of how to seek help
		46	Increased awareness of mental health challenge
		47	Participated in the MHPA
5	**Other**		
		50	Unexplained

Note. MHPA = Mental Health Promotion Activity