



# ***Te Oranga Hinengaro – Māori Mental Wellbeing***

Results from the New Zealand Mental Health Monitor  
& Health and Lifestyles Survey

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# Ngā Kitenga Matua (Key Findings)

*Te Oranga Hinengaro uses Māori mental health data from three population surveys to highlight findings about whanaungatanga<sup>1</sup> and belonging, cultural connectedness and reconnection, and cultural identity for Māori mental wellbeing.*

Overall, the findings show that most Māori feel positive about their lives. This is despite many also experiencing considerable difficulties on a daily basis that are disproportionate to non-Māori. Besides a higher burden of depression, anxiety and psychological distress, for example, a significantly higher proportion of Māori than non-Māori also consider the last 12 months as being among their most difficult ever.

Added to these disparities is the likelihood of being socially isolated or excluded. At least two in five Māori indicate some degree of recent social isolation (also considered as loneliness) and exclusion, and those who have experienced mental distress at any point in their lives are significantly more likely than those without such experiences to report such social isolation or exclusion.

Te Oranga Hinengaro findings also highlight where gains in Māori mental health may be made. Keeping in contact with whānau and friends, and having access to the support they provide, for example, is important to Māori, and having good social support helps Māori feel better about life in general. Those who can rely on a friend or whanaunga for support are significantly less likely to experience symptoms of psychological distress than those without such support, and those with strong relationships with and among their whānau and friends are significantly less likely to feel isolated.

Alongside strong familial relationships and good social support, being able to manaaki others is another indicator of wellness for Māori that may protect against social isolation (or loneliness). Those who find it easy to provide help to others in need are significantly less likely to report feeling socially isolated.

Mounting Māori research evidence supports the notion that a secure cultural identity derived from cultural and social connection is key for better Māori mental wellbeing. Te Oranga Hinengaro findings confirm that Māori culture is important to Māori and proficiency in te reo Māori especially, has a strong relationship with this connection. Those who feel strongly connected to their culture are more likely to speak te reo Māori, be connected to their tūrangawaewae, practice manaakitanga, and know their pepeha. Those with greater knowledge of their pepeha are also significantly less likely to report feeling isolated, supporting the idea that cultural connectedness is a pathway for social inclusion for Māori.

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<sup>1</sup> This document makes frequent use of Māori words and terminology. A glossary of Māori terms has been provided on page 4 for ease of reading.

# He Whakamihi (Acknowledgements)

**Nāu te rourou, nāku te rourou, ka ora ai te iwi**

*With your basket and my basket the people will live.*

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# Papakupu (Glossary Of Te Reo Māori)

Awa	<i>River/s</i>
Hauora hinengaro	<i>Mental health</i>
Hauora hinengaro Māori	<i>Māori mental health</i>
Kanohi ki te kanohi	<i>Face-to-face</i>
Kaumātua	<i>Elder/s</i>
Kaupapa	<i>Topic/s, matter/s for discussion, subject/s, issue/s</i>
Kaupapa Māori	<i>A philosophical Māori approach, incorporating the knowledge, skills, attitudes and values of Māori society</i>
Mākutū	<i>To inflict physical and psychological harm and even death through spiritual or supernatural powers</i>
Mana	<i>Prestige, authority, spiritual power</i>
Manaakitanga	<i>The process of showing respect, generosity and care for others</i>
Mātauranga Māori	<i>Traditional Māori knowledge/expertise</i>
Maunga	<i>Mountain/s, peak/s</i>
Mauriora	<i>Cultural identity and access to Te Ao Māori</i>
Moana	<i>Sea/s, ocean/s</i>
Mokopuna	<i>Grandchild/ren</i>
Ngā manukura	<i>Community leadership</i>
Pakeke	<i>Adult/s</i>
Pepeha	<i>Tribal 'saying' or 'motto' based on whakapapa identification</i>
Rangatahi	<i>Youth</i>
Rangatahi Māori	<i>Māori youth</i>
Rangatiratanga	<i>Chieftainship, leadership</i>
Tangata whenua	<i>Indigenous people (people of the land)</i>

Tangi	<i>Funeral/s (shortened form of tangihanga)</i>
Taonga	<i>Prized treasure/s or possession/s</i>
Tapu	<i>Restricted, sacred, forbidden, confidential, prohibited</i>
Te Ao Māori	<i>The Māori world</i>
Te mana whakahaere	<i>Autonomy</i>
Te oranga	<i>Participation in society</i>
Te reo Māori	<i>The Māori language</i>
Te taha hinengaro	<i>Mental health</i>
Te taha tinana	<i>Physical health</i>
Te taha wairua	<i>Spiritual health</i>
Te taha whānau	<i>Relationships with family and community</i>
Tikanga	<i>The customary system of values and practices that have developed over time and are deeply embedded in the social context</i>
Tīpuna/tūpuna	<i>Ancestors</i>
Toiora	<i>Healthy lifestyles</i>
Tūrangawaewae	<i>Place where one has the right to stand through whakapapa</i>
Waiora	<i>Environmental health, protection and connection</i>
Wairuatanga	<i>Spirituality</i>
Waka	<i>Canoe/s</i>
Whakapapa	<i>Genealogy, lineage, descent</i>
Whakawhanaungatanga	<i>Process of establishing relationships, relating well to others</i>
Whanaunga	<i>Family member/s</i>
Whanaungatanga	<i>Relationship, sense of connection</i>



# He Whakarāpopototanga (Executive Summary)

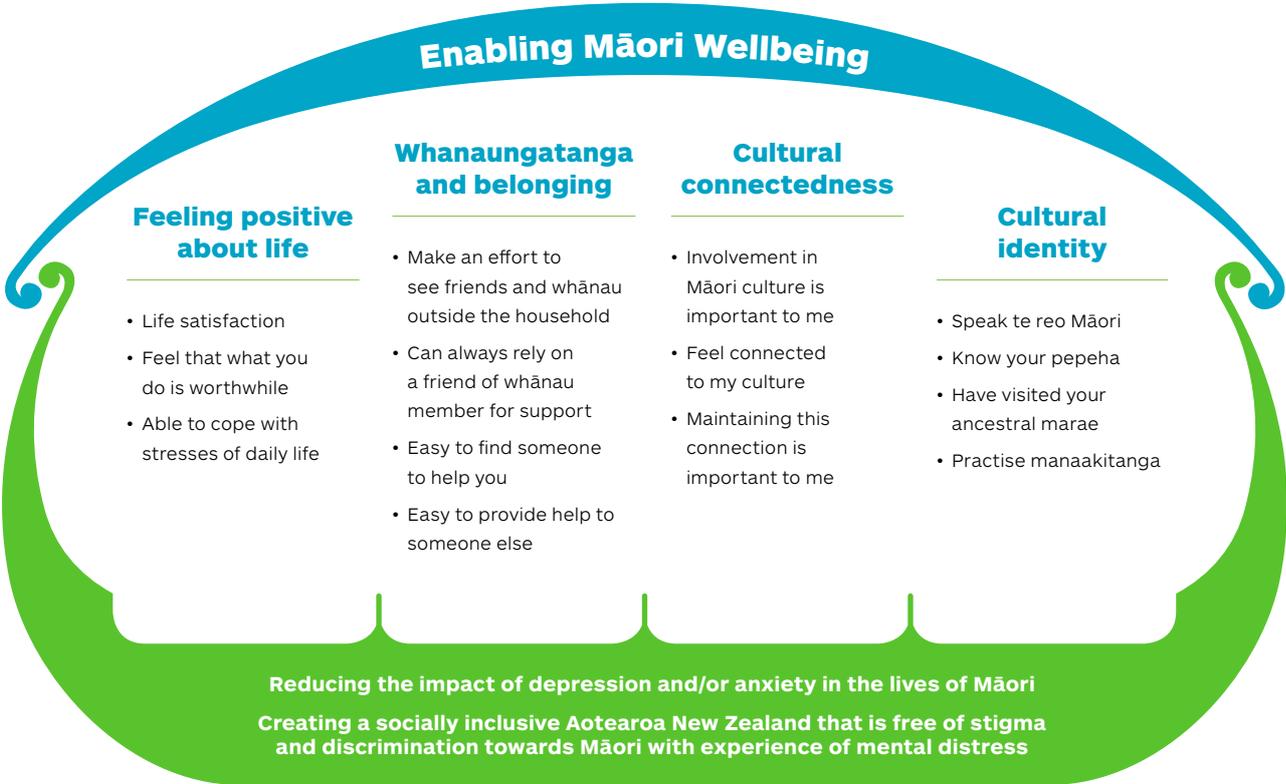
Te Oranga Hinengaro reports on the mental wellbeing of Māori. In particular, it provides insight into how Māori experience three aspects of wellbeing considered important in reducing the impact of depression and/or anxiety on them, improving their social inclusion, and addressing mental health inequalities:

- Whanaungatanga and belonging
- Cultural connectedness and reconnection
- Strength of cultural identity.

## Data and measures

HPA collected mental health information from 6,777 adult respondents to three nationwide, face-to-face surveys in 2015 and 2016: the 2015 and 2016 New Zealand Mental Health Monitors (NZMHMs), and the 2016 Health and Lifestyles Survey (HLS). Te Oranga Hinengaro reports on analyses of data from the 1,515 Māori respondents to these surveys.

Figure 1. Mental wellbeing measures used in Te Oranga Hinengaro<sup>2</sup>



2 The measure used to assess 'Practicing manaakitanga' under 'Cultural identity' comes from a question under 'Whanaungatanga and belonging'. Specifically, the question related to ease of providing someone else help.

## Key findings

Analyses of data using a number of wellbeing measures (Figure 1) resulted in findings focused on Māori respondents' reflections about their lives as a whole, and key cultural factors considered important in addressing inequitable mental health outcomes for Māori: whanaungatanga and belonging, cultural connectedness and cultural identity.

### Reflections on life

- **Most Māori feel positive about their lives.** The majority (86%) of Māori respondents reported that the things they did in their lives were worthwhile, 84% indicated that they felt able to cope with everyday stresses of life, and 77% reported feeling satisfied or very satisfied with life as a whole these days.
- **Despite the positivity, many Māori also experience significant difficulties in their daily lives.** More than a third (38%) of all Māori respondents reported that the last 12 months had been among the most difficult in their lives – a significantly higher proportion than non-Māori (27%).
- **Rangatahi Māori who experience more difficult times also find it harder to cope.** Almost one quarter (24%) of Māori respondents who reported that the last year had been particularly tough also indicated they were not coping with the everyday stresses of life, and rangatahi Māori (aged 15 to 24 years) were significantly more likely to report feeling this way.
- **Being socially isolated or excluded is not uncommon for Māori.** At least two in five (42%) Māori respondents indicated some degree of recent social isolation (also considered as loneliness) and exclusion. Those who reported current or previous experience of mental distress were significantly more likely than those without such experience to report social isolation (69% versus 36%) or exclusion (45% versus 26%).
- **Māori have a higher burden of depression, anxiety and psychological distress than non-Māori.** Compared with non-Māori, Māori respondents were more likely to experience symptoms of depression (34% versus 24%), anxiety (36% versus 22%), or psychological distress (34% versus 22%).
- **There is a positive relationship between individual and whānau wellbeing for Māori.** Māori respondents were significantly more likely to report higher levels of life satisfaction when they thought their whānau were doing well and getting along with one another. Those who thought their whānau were doing well were also 35% more likely to be coping with the everyday stresses of life, compared with those who believed their whānau were not doing well.

### Whanaungatanga and belonging

- **Keeping in contact with whānau and friends is important to Māori.** The majority (81%) of Māori respondents reported that they made an effort to see whānau or friends outside of their households. Even in cases where whānau were thought to be getting on badly, almost half (49%) of Māori reported they still personally made this effort to see those they did not live with.
- **Māori have good access to social support.** Almost all (94%) of Māori respondents agreed or strongly agreed they could consistently rely on a friend or whanaunga for support if they needed it, and the majority (87%) also felt it would be easy or very easy to find someone to help them in times of need.
- **Having good social support helps Māori feel better about life in general.** Māori respondents who reported that it was easy to find someone to help them in times of need had higher levels of life satisfaction than those who experienced difficulty in finding help. Those who felt they could rely on a friend or whanaunga for support were also significantly less likely to experience symptoms of psychological distress.
- **Having strong familial relationships, good social support and being able to manaaki others may help protect Māori from social isolation (or loneliness).** Māori respondents were significantly less likely to report social isolation when whānau relationships were strong and they could both give and receive support.

## Cultural connectedness

- **Māori culture is important to Māori.** Over three-quarters (77%) of Māori respondents reported feeling strongly connected to their culture, and over two-thirds (71%) felt maintaining this connection was important. Over 90% of respondents also indicated that it was at least somewhat important to them to be involved in things to do with Māori culture.
- **Some Māori need help with cultural reconnection.** One in ten (10%) Māori respondents who felt it was important to be involved in things to do with Māori culture did not feel connected to their culture. One in five (20%) rangatahi Māori (aged 15 to 24 years) felt this way, suggesting an unmet need for cultural connectedness and reconnection. When respondents felt that being involved in Māori culture was important to them and they also felt connected to their culture, they were significantly more likely to feel that the things they did in life were worthwhile.

## Cultural identity

- **Māori who feel strongly connected to their culture are more likely to speak te reo Māori, know their pepeha, be connected to their tūrangawaewae, and practice manaakitanga.** Māori respondents who could speak te reo Māori in day-to-day conversation, who knew much of their pepeha, had visited their ancestral marae, and found it easy to provide help to others, were more likely to report feeling connected to their culture. For example, almost two thirds (62%) of those who indicated a strength of cultural connection, spoke te reo Māori well or very well, compared with only 2% of those who indicated a weak cultural connection.
- **Proficiency in te reo Māori may help Māori feel connected to their culture.** The 26% of Māori respondents who could talk about “almost anything”, “many things” or “some things” in te reo Māori were highly likely to report feeling connected to Māori culture, but below these levels of proficiency (those who could only talk about “simple/basic things” or “a few words or phrases”), respondents were less likely to feel connected.
- **Most Māori know their iwi and other aspects of their pepeha.** The vast majority (93%) of Māori respondents reported knowing their iwi, although fewer (86%) were able to name their iwi. Those who reported they did not know their iwi (14%) were significantly less likely to feel strongly connected to Māori culture, compared with those with iwi knowledge. Most respondents also reported knowing their tīpuna (76%), hapū (73%), maunga (72%), awa or moana (72%) and waka (65%). Around half (54%) knew all these aspects of their pepeha, while only 5% knew none.
- **Most Māori have been to their own marae.** Overall, 85% of Māori respondents reported they had visited their ancestral marae. These respondents were 63% more likely to report that they felt connected to their culture than those who had not visited their own marae.
- **Being able to manaaki others is an indicator of wellness for Māori.** When Māori respondents found it easy to provide help for someone else in need, they were significantly less likely to report feeling isolated from others in the last four weeks.





# Ngā Pitopito Kōrero (Background)

## Whāia te hauora hinengaro kia pu

*There is no health without mental health*

The focus of Te Oranga Hinengaro is less on the current state of hauora hinengaro Māori as it is on enabling Māori wellbeing. Referencing the wellbeing approach of the Health Promotion Agency/Te Hiringa Hauora (HPA) (McBride-Henry, 2017), Te Oranga Hinengaro recognises that for there to be balance between the interacting dimensions of te taha wairua, te taha hinengaro, te taha tinana and te taha whānau, there must be strengthening of mauriora, waiora, toiora, te oranga, ngā manukura and te mana whakahaere. Te Oranga Hinengaro contributes to the work of HPA in:

- reducing the impact of depression and/or anxiety in the lives of Māori, by strengthening the individual, whānau and social factors that help Māori recognise and meet the challenges of depression and/or anxiety, and build wellbeing and resilience
- creating a socially inclusive Aotearoa New Zealand that is free of stigma and discrimination towards Māori with experience of mental distress.

## Why is it important to report on Māori mental wellbeing?

While some gains have been made towards improving health equity in Aotearoa New Zealand, more needs to be done to achieve this for Māori. Inequitable Māori mental health outcomes, in particular, prevent Māori experiencing the same levels of wellbeing as the rest of the population of Aotearoa New Zealand. Improving Māori health outcomes is, therefore, an integral component of the *New Zealand Health Strategy: Future Direction* (Minister of Health, 2016) and the associated Māori Health Strategy, *He Korowai Oranga* (Ministry of Health/Manatū Hauora, 2014).

HPA collects national data about the mental wellbeing of those living in Aotearoa New Zealand, including Māori, and produces associated research reports, such as this. It also co-ordinates two national mental health promotion programmes that include a specific aim of targeting priority populations, including Māori:

- The National Depression Initiative (NDI), a programme aimed at reducing the impact of depression and anxiety on the lives of those in Aotearoa New Zealand by aiding early recognition, appropriate support options, and recovery.
- The Like Minds, Like Mine programme, aimed at increasing social inclusion, decreasing social exclusion, and ending discrimination towards people with experience of mental distress.
- Longstanding health promotion initiatives such as these have helped changed society's conceptualisation of mental wellbeing, knowledge of what is available to support those who experience mental distress, and expectations of response. As these changes have occurred, so has the importance of investment in Māori mental wellbeing increased.

In January 2018 the government launched an Inquiry into Mental Health and Addiction, following widespread concern among mental health service users, their whānau, those bereaved by suicide, iwi, and others about mental health service provision. Poorer mental health outcomes for Māori were noted as a major concern, with continued dislocation of Māori from their whānau, communities and iwi recognised as a risk factor.

## How do Māori define and measure mental wellbeing?

It is important to understand Māori mental wellbeing from the perspective of the population in question – both in terms of their traditional and cultural beliefs, and in relation to how they disproportionately experience mental distress in contemporary society.

Māori, alongside other Indigenous groups, hold a holistic view of mental wellbeing that recognises the interdependence of good mental health on good physical, social and spiritual health. Strong cultural identities, a healthy physical environment, healthy lifestyles, being able to participate in society, community leadership and autonomy are also understood as important contributors to the promotion of Māori mental wellbeing (Durie, 1998; 1999).

Colonisation is recognised as playing a key role in contemporary representations of mental distress among Māori, not the least through the creation and maintenance of the notion of mental distress itself (Gordon, Davey, Waa, Tiatia & Waaka, 2017). Mātauranga Māori suggests that historically, mental distress was relatively unfamiliar to Māori, although it is unlikely that Māori were completely unaffected by those conditions now termed 'mental disorders' (Kingi et al., 2018).

Traditionally, mental distress was understood differently. It was believed to have derived from transgression of sanctity through breaches of tapu or mākutu (Sachdev, 1989; Chaplow, 1993; Beaglehole, 1947, Pere, 2006), resulting in unusual manifestations of the mind. These uncommon 'states of mind' are differentiated, however, from 'illnesses of mind' (Kingi, 2002).

Mental distress was also not always of major concern to Māori (Kingi et al., 2018). The comparatively high rates of mental distress now experienced by Māori are a recent phenomenon influenced by a number of drivers including environmental factors such as colonisation, racism, and socio-economic stressors.

*“... High rates of unemployment, low incomes, poor educational achievement, and substandard housing are ... known precipitators of mental ill-health ... which disproportionately impact upon Māori.” (Kingi et al., 2018:14)*

The process and impact of urbanisation, in particular, has resulted in cultural isolation and social alienation for many Māori from those structures that traditionally protected and nurtured them. This has resulted in the weakening of traditional ties and cultural expectations in such a way that connection for some has been lost and the reliance on whānau to manaaki each other can no longer be guaranteed. Increased susceptibility to mental distress is believed by many to be a resultant inevitability (McFarlane-Nathan, 1994).

Colonial oppression of Māori and other acts of colonisation that have resulted in cultural dispossession have also manifested in contemporary trauma. The link between Māori mental distress and historical, colonial and collective trauma is well recognised by Māori mental health, addictions and social service providers, clinicians and healers, and researchers.

*“While trauma is an experience that can impact on all people, Māori experience trauma in distinct ways that are linked to the experience of colonisation, racism and discrimination, negative stereotyping and subsequent unequal rates of violence, poverty and ill health.”*

(Pihama et al., 2017:18)

Addressing the cultural, environmental, socio-economic and historical factors that have impacted the mental wellbeing of Māori, through cultural paradigms such as whakawhanaungatanga, has been the domain of Kaupapa Māori mental health services for decades. Māori, like other Indigenous peoples, have long understood the holistic nature of wellbeing and the significance of relationships for maintaining it. Indigenous relationality recognises that without the ability to practice reciprocity, to manaaki others, and to ensure whānau and other social relationships remain intact, hauora hinengaro Māori is threatened.

Indigenous peoples similarly regard the establishment of a positive cultural identity as protective for mental wellbeing and suicide prevention (Dee, 2016; Mila Schaaf, 2013, 2011; Pere, 2006; Durie, 2001; Edwards, 1999).

According to Edwards (1999) the search for identity is not a new experience for Māori.

*“All iwi ... can recount from their own histories, stories of parents, children or siblings searching for each other and within these stories are located our histories, values and beliefs of what it is to be who we are, Māori.”* (Edwards, 1999:20)

Māori history tells of Tāne travelling the skies in search of the baskets of knowledge, of Māui seeking out his parents, and of Rupe and his search for his sister Hinauri. Tāne, Māui and Rupe’s “journeys and quests for knowledge were inextricably linked to finding out not only where they came from but also most importantly, who they were” (Edwards, 1999:19).

Fluctuating formations and understandings of cultural identity is also not new to Māori (Edwards 1999). Hine-nui-te-pō formed her understanding of her own identity through the discovery of her whakapapa:

*“Tāne-nui-a-rangi, according to Māori mythology, created the first woman. Her name was Hine-ahu-one. Together they produced a child called Hine-tītama. Hine-tītama did not know that Tāne-nui-a-rangi was her father, and they produced children. When Hine-tītama found out that Tāne-nui-a-rangi was her father she was distraught by this and banished herself to the underworld known as Rarohenga and changed her name to Hine-nui-te-pō, the goddess of death. By these acts of discovery Hine-nui-te-pō took on a new identity.”* (Awatere, 1984)

Sir Apirana Ngata’s famous 1949 ‘E tipu e rea’ autograph for Rangi Bennett implied that a Māori identity was essentially derived from the past and that in a rapidly moving world it could provide a stabilising force in the face of change (Pere, 2006). Durie (2001) argues however, that a Māori identity does not derive entirely from the old times. It draws as much on the recent past and is shaped by the adaptations that are necessary for survival in a contemporary, complex world. It is intrinsically woven into the changing circumstances of Māori.

Irrespective of origin, Edwards (1999:viii) contends that “many Māori without knowledge of their cultural identity may not lead as full and meaningful lives as they might should they possess a sounder knowledge of their culture and cultural identity”. He notes that “the acquisition of this knowledge is a major life learning process largely ignored by many Western societies” and although for many Māori this cultural identity may be a non-issue, for the majority of Māori this is the issue (Edwards, 2000:1).

# Ko Te Tukanga Rangahau (Research Method)

*Data from 1,515 Māori living in Aotearoa New Zealand, who were aged 15 years and older (rangatahi, pakeke and kaumātua), were collected through three nationwide surveys (the 2015 and 2016 NZMHMs and the 2016 HLS) conducted in people's homes using Computer Assisted Personal Interviewing.*

The combined pooled dataset comprised 270 Māori respondents to the 2015 NZMHM, 341 to the 2016 NZMHM and 930 to the HLS. Reported results are statistically weighted to be representative of wellbeing and mental distress in the full Aotearoa New Zealand population. The fieldwork for all three surveys took place over a 17-month period, from July 2015 to December 2016, with their overall unweighted response rates being 59%, 71% and 75%, respectively (Trowland, 2017).

The New Zealand Ethics Committee approved the 2015 and 2016 NZMHMs in April 2015. The 2016 HLS survey was approved by the New Zealand Ethics Committee in May 2016.

Specific details on the survey methodologies, including the sampling, recruitment, selection processes and interviewing procedures, can be found in the following three methodology reports published on HPA's website (Trowland & Thimasarn-Anwar, 2016; Wynne-Jones, 2015a; Trowland, Thimasarn-Anwar, Squire & Tee, 2017).

## Questionnaires

Questionnaires for the NZMHMs and HLS are also published on HPA's website (Trowland & Russell, 2016; Wynne-Jones, 2015b; Squire, 2017).

The NZMHMs included several psychometric scales designed to monitor community-based stigma towards those experiencing mental distress, measure psychological distress rates, gauge social connectedness, and appraise societal knowledge of mental distress (see Appendix A for details).

The NZMHMs also used the OECD (2013) subjective wellbeing measure to give a measure of life satisfaction, as well as the standardised measure of Māori wellbeing which includes whanaungatanga or social connectedness, developed by Statistics New Zealand/Tatauranga Aotearoa (2014): *Te Kupenga 2013: A survey of Māori wellbeing* (see Appendix B for details).

The HLS is a biennial monitor of the health behaviours and attitudes of people who live in Aotearoa New Zealand. Te Oranga Hinengaro uses data from the 2016 HLS to assess experience, knowledge and opinions about mental wellbeing among Aotearoa New Zealand adults, both overall and among different social and population groups.

## Pooled data

Details on the methods used in pooling these survey data together can be found on HPA’s website (Trowland, 2017). That report provides a reference list of the questions in each of the three surveys, indicating whether each question was included in one, two or three surveys. This information can be used to identify the sample sizes of the analyses in Te Oranga Hinengaro, which varied depending on whether questions could be combined across surveys (Table 1).

**Table 1. Sample sizes in the original and pooled datasets**

Group	Original datasets			Pooled dataset	
	2015 NZMHM	2016 NZMHM	2016 HLS	Items from 2015 and 2016 NZMHM only	Items from NZMHM and HLS
Māori	270	341	930	607	1,515
All respondents	1,377	1,646	3,854	3,002	6,777

## Data analysis and reporting

Statistical analyses were conducted using STATA SE (version 15.0) software. To ensure that the sample accurately represented the Aotearoa New Zealand population aged 15 years and over, responses were weighted to the estimated resident population for 2016. Proportions were first calculated using the delete-a-group jack-knife method. Differences between demographic groups were then assessed using a generalised linear model. Unadjusted and adjusted risk ratios and 95% confidence intervals were calculated using a log-linear model, using the jack-knife method of variance estimation.

Given the complexity of the causal pathways in mental health and the cross-sectional design of the surveys, caution has been exercised in inferring causation and in assigning a direction of effect to the associations reported on in Te Oranga Hinengaro. For this reason, re-examining previously reported causal conclusions about the contribution of social or cultural connectedness to mental health outcomes for Māori was considered beyond the scope of analyses for this report. However, several such associations could be detected in the data and some are noted.

Measuring cultural connection and cultural identity is also challenging in quantitative research due both to restrictive questionnaire items used in surveys and the complexities of what Māori identity and connectedness consists of. Further qualitative research is recommended to explore these concepts in relation to Te Oranga Hinengaro findings.



## Identification of Māori

Some analyses presented in Te Oranga Hinengaro include only the 1,360 respondents who identified as Māori but not Pacific or Asian, as an estimate of sole Māori ethnicity. These analyses are indicated where relevant. All other analyses relate to the total 1,515 respondents (or subsets of this number) who identified as either sole or mixed Māori ethnicities.

One of the limitations of the data is that, although they were collected through kanohi ki te kanohi interviews, Māori respondents were not necessarily interviewed by Māori interviewers. This may have altered how some Māori answered the questions.

## Iwi identification

Māori respondents to the 2016 NZMHM were asked to identify their iwi or tribe. While only being given the option of identifying one iwi, 294 (86%) of the 341 Māori respondents did so, identifying connection to 60 different iwi (see Appendix C for details). One quarter (n=74) identified connection to Ngāpuhi, the largest iwi in Aotearoa New Zealand. Once truncated into combined iwi identifications<sup>3</sup> (for example, combining numbers of Ngāti Kahungunu ki Te Wairoa, Ngāti Kahungunu ki Wairarapa, Ngāti Kahungunu ki Heretaunga, Ngāti Kahungunu (region unspecified), and Ngāti Kahungunu ki Te Whanganui-a-Orotu) the four next largest iwi identifications were Ngāi Tahu/Kāi Tahu (n=20), Tainui (n=19) and Ngāti Kahungunu including ki Te Wairoa, ki Wairarapa, ki Heretaunga, and ki Te Whanganui-a-Orotu (n=19).

These numbers are obviously too small to confidently provide iwi-specific mental health findings. In recognition of the aspiration of Māori to understand the impact of investment in positive mental health, however, it is anticipated that as more data are gathered through the 2018 NZMHM and the 2018 HLS, HPA might be better able to respond to iwi calls for iwi-specific mental health information.

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<sup>3</sup> Due to the clustered sampling methodology used, the numbers of some large iwi groupings were not well represented.



# Ngā Kitenga (Findings)

*“A sense of belonging is ... you know, very important ... For me it is, yeah. See because in my whānau, I am something because of them. For example, I've got a sister – that makes me a brother. I've got a nephew – that makes me an uncle. I've got an uncle – that makes me a nephew ... I've got a wife – that makes me a husband. So it's because of these other people that I am who I am.”* (Quote from doctoral research participant, September 2003, cited in Pere, 2006:247)

Results begin with an overview of Māori survey respondents' reflections about their lives as a whole. They then focus on key aspects of Māori mental wellbeing that previous research (Dee, 2016; Durie, 2001, 2011; Pere, 2006; Kingi, 2002; Edwards, 1999) recognises as important in influencing outcomes:

- Whanaungatanga and belonging
- Cultural connectedness
- Cultural identity.

## Reflections on life: An overview of Māori wellbeing and distress

The general wellbeing of Māori respondents was measured using questions focused on the extent to which they felt the things they did in their lives were worthwhile, how difficult the last year had been for them, their ability to cope with everyday stresses, and their overall life satisfaction (Statistics New Zealand/Tatauranga Aotearoa, 2014; OECD, 2013).

The mental distress of Māori respondents was measured using questions from a number of psychometrically validated scales based on self-reported depressive symptoms and levels of anxiety over the previous two weeks (Kroenke, Spitzer & Williams, 2001; Spitzer, Kroenke, Williams & Löwe, 2006), and self-reported levels of psychological distress over the previous four weeks (Kessler et al., 2002) (see Appendix A for details).

### Feeling positive about life

It is evident from the responses to questions focused on general wellbeing that most Māori feel positive about their lives.

When asked to rate the extent to which they felt the things they did in their lives were worthwhile, the majority (86%) of the 607 Māori respondents (to the 2015 and 2016 NZMHMs) indicated feeling positive about this. Just 1% felt their lives' activities were 'not at all worthwhile'.

Over three-quarters (77%) of Māori respondents also indicated they were either 'satisfied' or 'very satisfied' with their lives as a whole these days. Very few (3%) reported overall dissatisfaction. In addition, the majority (84%) indicated they felt able to cope with life's everyday stresses.

## Sometimes life is tough

This positive outlook was predominant in spite of difficulties respondents faced. More than a third (38%) of all Māori reported that the last 12 months had been among the most difficult of their lives – a significantly higher proportion than non-Māori (27%).

Experiencing difficult times was also shown to be significantly associated with the coping ability of Māori. Almost one quarter (24%) of those who indicated that the last year had been particularly tough also reported that they were not coping with the everyday stresses of life, compared with 11% of those whose last year was not as tough. Ability to cope varied with age. Rangatahi Māori (aged 15 to 24 years) were significantly more likely than other age groups to report feeling unable to cope.

It should also not be overlooked that in addition to feeling unable to cope with the stress of daily life, between 3% and 6% of all Māori respondents also indicated they would find it difficult to find someone to help them in times of need, or rely on anyone for support when they needed it.

Overall analyses of NZMHM and HLS data (not Māori-specific) has found that feeling isolated from others, or lonely, is common, and a key component of mental distress (Kvalsvig, 2018). Over two in five (42%) of the Māori respondents indicated some degree of recent social isolation (or loneliness) and exclusion.

Further, 8% of all Māori respondents indicated they had felt isolated from others most or all of the time in the previous four weeks. Māori who reported current or previous experience of mental distress were significantly more likely than those without such experience to report social isolation (69% versus 36%) or exclusion (45% versus 26%); a disparity confirmed by Gordon et al. (2017) who noted the compounded social exclusion in particular, experienced by Māori with experience of mental distress.

## Mental distress

Disparities in Māori mental wellbeing are evident across the spectrum of mental disorders and their prevalence rates. Over a decade ago, *Te Rau Hinengaro – The New Zealand Mental Health Survey* (Oakley-Browne, Wells & Scott, 2006:57) reported, for example, that even after adjustment was made for age and sex, Māori still had “significantly higher hazard ratios for lifetime risk of all disorder groups compared with the Other composite ethnic group” and “higher hazard ratios for lifetime mood disorders and substance use disorders compared with Pacific people”.

*“Māori experience the highest levels of mental disorder for overall disorder and for disorder groups. Māori also were more likely to have a serious mental disorder when compared with ‘Other’ [non-Māori non-Pacific].” (Baxter, 2008:18)*

Māori are also more likely to be assessed or treated under the Mental Health Act subject to community and inpatient treatment orders (sections 29 and 30 respectively), and are more likely than non-Māori to be secluded (Ministry of Health/Manatū Hauora, 2017; Elder & Tapsell, 2013). Further, Māori suicide rates remain significantly higher than for other ethnic groups in Aotearoa New Zealand (Durie, 2017).

*“Among Māori males the suicide rate was 21.7 per 100,000; 1.4 times that of non-Māori. For Māori females, the suicide rate was 1.5 times that of non-Māori females.” (Ministry of Health/Manatū Hauora, 2016: <https://www.health.govt.nz/publication/suicide-facts-2014-data>)*

Te Oranga Hinengaro does not focus on these experiences of Māori mental distress, however, concentrating mental health data collection instead on the NDI programme focus of experiences of depression and anxiety. The most recent snapshot of Māori health data released by the Ministry of Health/Manatū Hauora (2015:47) reports that Māori adults are “about one-and-a-half times as likely as non-Māori adults to report a high or very high probability of having an anxiety or depressive disorder (relative risk (RR) 1.56, 95% confidence interval (CI) 1.24–1.97)”. Te Oranga Hinengaro findings similarly show a higher prevalence of self-reported depressive symptoms among Māori than non-Māori.

Māori respondents reported significantly higher depressive symptoms over the previous two weeks than non-Māori respondents (PHQ-9 scores age-adjusted RR 1.26; 95% CI 1.04 – 1.52). Over one-third (34%) of Māori reported at least mild levels of depression symptoms in the last two weeks, compared with 24% of non-Māori (Figure 2).

**Figure 2. Levels of depression (measured using the PHQ-9 scale) for Māori compared with non-Māori respondents**

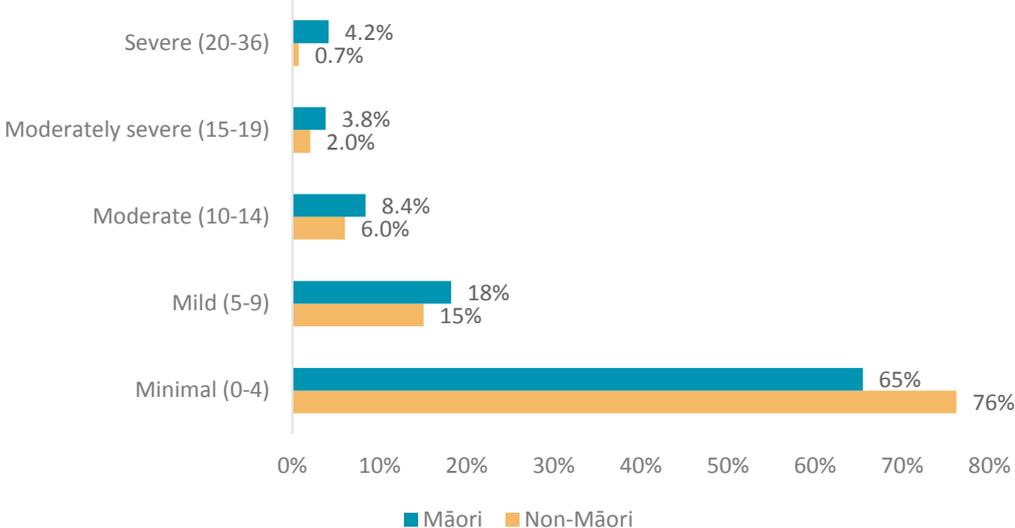


Figure 3 shows a similarly higher proportion of Māori than non-Māori self-reporting at least mild levels of anxiety symptoms over the previous two weeks (36% versus 22%). Māori respondents reported significantly higher symptoms of anxiety than non-Māori respondents (GAD-7 scores age-adjusted RR 1.30; 95% CI 1.11 – 1.54).

**Figure 3. Levels of anxiety (measured using the GAD-7 scale) for Māori compared with non-Māori respondents**

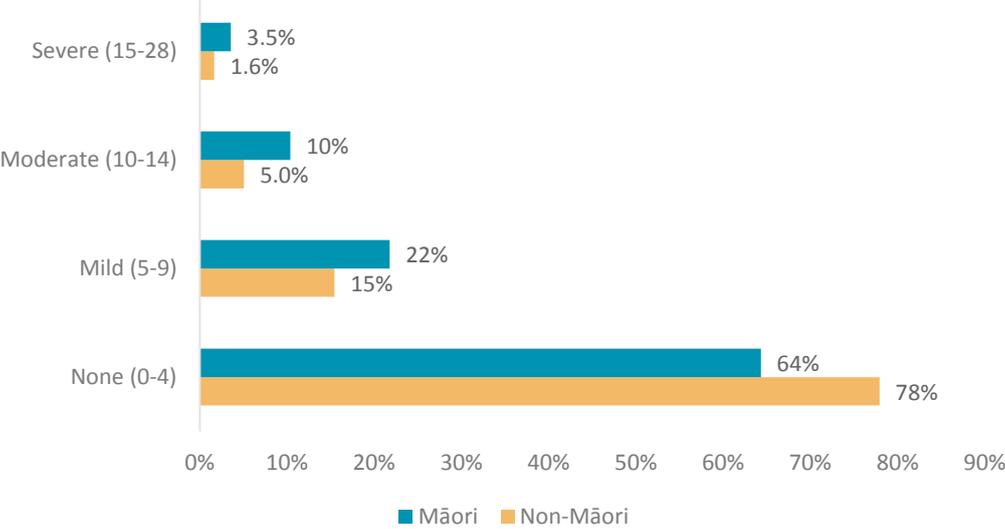
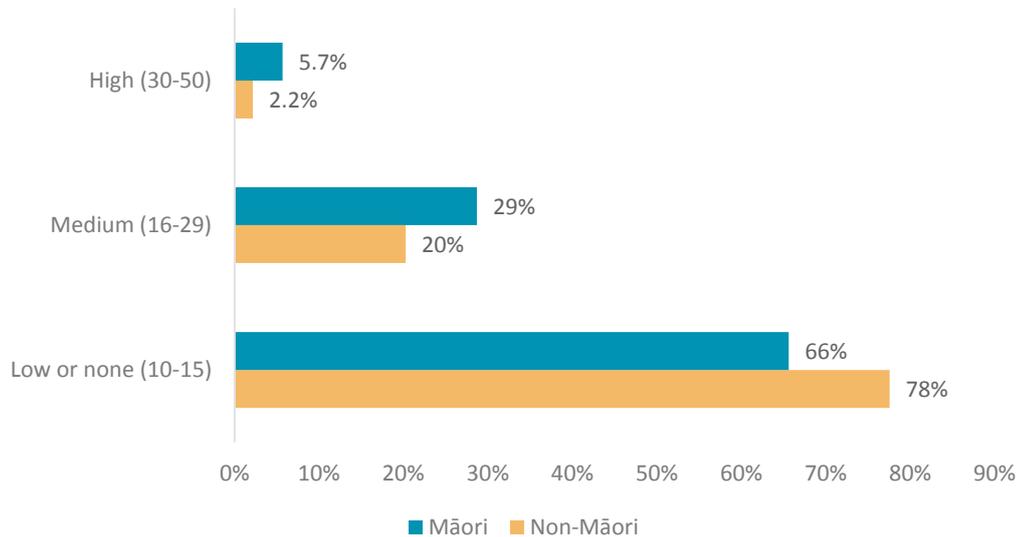


Figure 4 shows the same pattern for levels of psychological distress. Māori respondents reported significantly higher symptoms of psychological distress related to anxiety and depressive symptoms over the previous four weeks than non-Māori (K10 scores age-adjusted RR 1.09; 95% CI 1.03 – 1.16). Māori were more likely than non-Māori to report having medium or high levels of psychological distress (34% versus 22%).

**Figure 4. Levels of psychological distress (measured using the K10 scale) for Māori compared with non-Māori respondents**



These findings paint a picture of Māori wellbeing and distress at an individual level. Whānau wellbeing is also important to measure, particularly given the whānau unit is considered “the fundamental building block of Māori society” and “a key source of Māori wellbeing and connectedness” (Statistics New Zealand/Tatauranga Aotearoa, 2014:12).



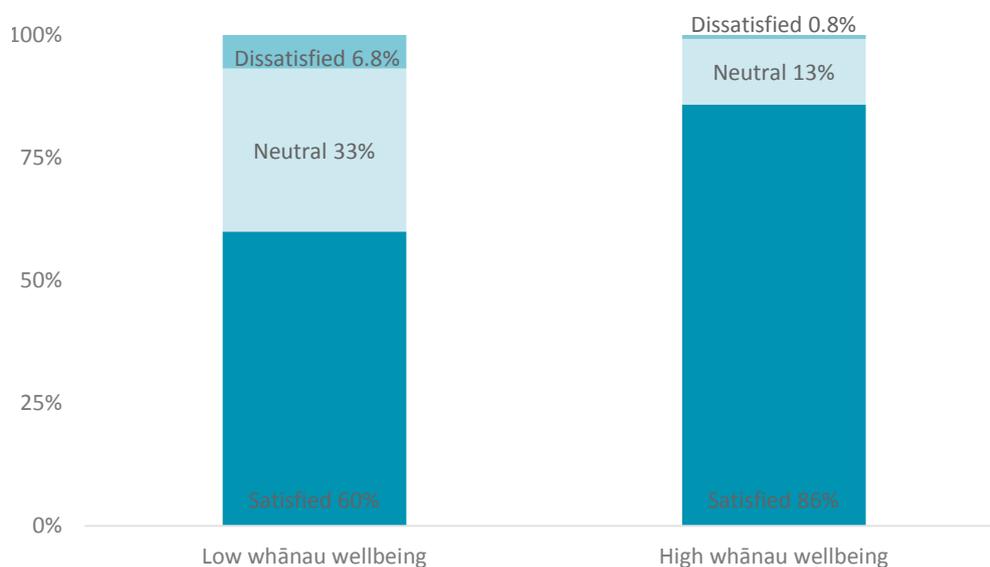
## Whānau wellbeing

The majority of Māori think their whānau are doing well. Over three-quarters (79%) of the 607 Māori respondents to the 2015 and 2016 NZMHMs indicated this, rating their whānau as either doing 'well' or 'very well'. This mirrors findings from *Te Kupenga 2013* where 83% of Māori also rated their whānau as doing 'well' or 'extremely well'.

At least four in five (81%) of the Māori respondents to the NZMHMs also indicated good familial relationships.

Those who rated their whānau as doing 'well' or 'very well' and who also felt their whānau got along well with each other, reported significantly higher levels of satisfaction with their lives as a whole than those who rated their overall whānau wellbeing more poorly (that is, not doing so well and not getting along together) (Figure 5). Those whose whānau were thought to be doing well and also getting along well were 24% more likely to be coping with the stress of everyday life, compared with those whose whānau were not thought to be doing so well.

**Figure 5. Levels of individual life satisfaction of Māori respondents by whānau wellbeing**



These findings show a positive relationship between individual mental wellbeing and whānau wellbeing, for Māori. Such a relationship is well documented in qualitative Māori mental health research (Pere, 2006).



## Whanaungatanga and belonging

The social connectedness of Māori was measured by questions focused on their reported access to whānau or social support when needed, feelings of recent isolation, and effort made to keep in contact with whānau and friends (in all three surveys).

To date, there has been very little analysis undertaken on the relationship between connection to one's culture and life satisfaction, although Indigenous research is emerging that identifies a positive association (Snowshoe, 2015). *Te Kupenga 2013* provided the first opportunity to explore this relationship specifically for Māori, to investigate whether a stronger connection to Māori culture was associated with higher levels of life satisfaction. Although it found there was a small, but positive, association between life satisfaction and how Māori feel about the importance of involvement in Māori culture, stronger associations were found between life satisfaction and whanaungatanga, health, and income.

Social connectedness is reliant on relationships or whanaungatanga and *Te Kupenga 2013* found these relationships to be the most important contributor to life satisfaction for Māori.

*“That relationships play a larger role in life satisfaction for Māori seems to support the importance of whanaungatanga (kinship with others) in Te Ao Māori.” (Statistics New Zealand/ Tauranga Aotearoa, 2015:13)*

## Whānau connectedness

Previous research (Pere, 2006) claims that good relationships with whānau, which foster whānau support, are also essential for recovery from mental distress for Māori, and connectedness to whānau, underpinned by 'belonging' to whānau or whānau-like groupings' is, therefore, imperative for Māori wellbeing. Whakawhanaungatanga or maintaining meaningful connections with others through shared experiences provides this sense of belonging.

Mental distress can often result in damaged whānau relationships, however, due to either illness-related actions of the person in distress, or through whānau not understanding the distress – the outcome of which can be those with lived experience of mental distress feeling “that they don't belong anywhere” (Pere, 2006:254).

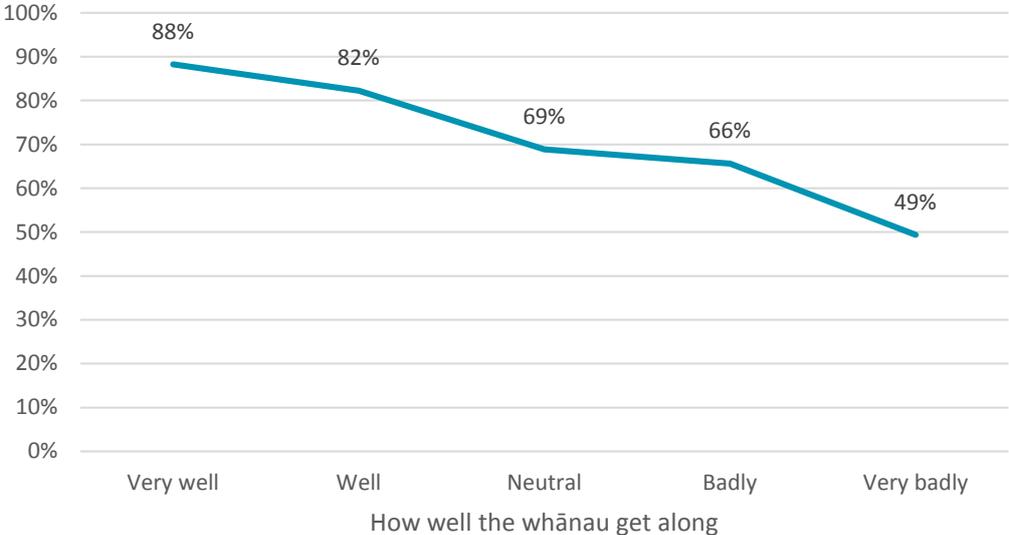
Staying connected with whānau can also be difficult for many Māori due to practical reasons such as the distance between whānau homes in contemporary society. Responses to being asked about the effort they make to connect with whānau and friends outside of their households must, therefore, take this into consideration.



When asked to consider their personal connections with whānau and friends and the relationships within their whānau, the majority (81%) of the Māori respondents did indicate that they made an effort to see those they did not live with – a similar proportion (81%) to those who felt that their whānau got along either ‘very well’ or ‘well’ together. Social desirability bias may influence these responses, however, particularly given research findings which show that irrespective of the level of dysfunction in whānau, Māori with lived experience of mental distress still long for greater contact with their whānau (Pere, 2006).

When their whānau were thought to be not getting on so well with one another, Māori respondents were less likely to make an effort to connect with people outside of their households. However, even when their whānau were reported to be getting on very badly, half of them (49%) still personally did make this effort, reinforcing the significance of whānau connectedness for Māori (Figure 6).

**Figure 6. Relationship between the effort Māori respondents make to see whānau or friends outside the household by how well their whānau get along**



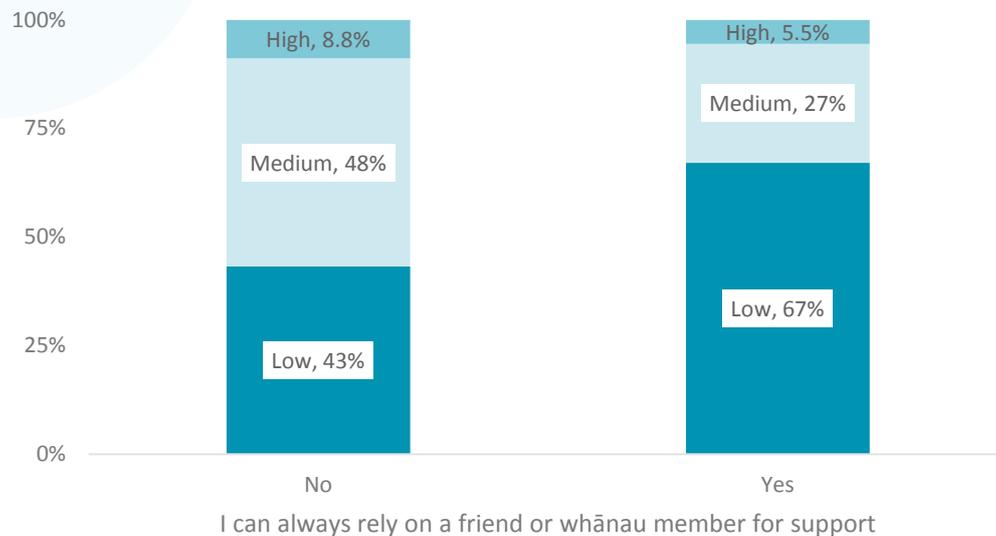
### Access to social support

In order to ascertain Māori respondents’ access to social support, all were asked about their ability to rely on a friend or whanaunga for support if they needed it. In addition, 607 were also asked in the 2015 and 2016 NZMHMs how easy or difficult it would be for them to find someone to help them in times of need – for example, if they suddenly needed a place to stay or needed pets looked after while they were away from home.

Responses to both questions indicated high levels of access to social support. Almost all (94%) agreed or strongly agreed they could consistently rely on a friend or whanaunga for support if they needed it, and the majority (87%) also felt it would be ‘easy’ or ‘very easy’ to find someone to help them in times of need.

The importance of this whānau support is highlighted in the finding that those who could rely on a friend or whanaunga for support were significantly less likely to experience symptoms of psychological distress (Figure 7).

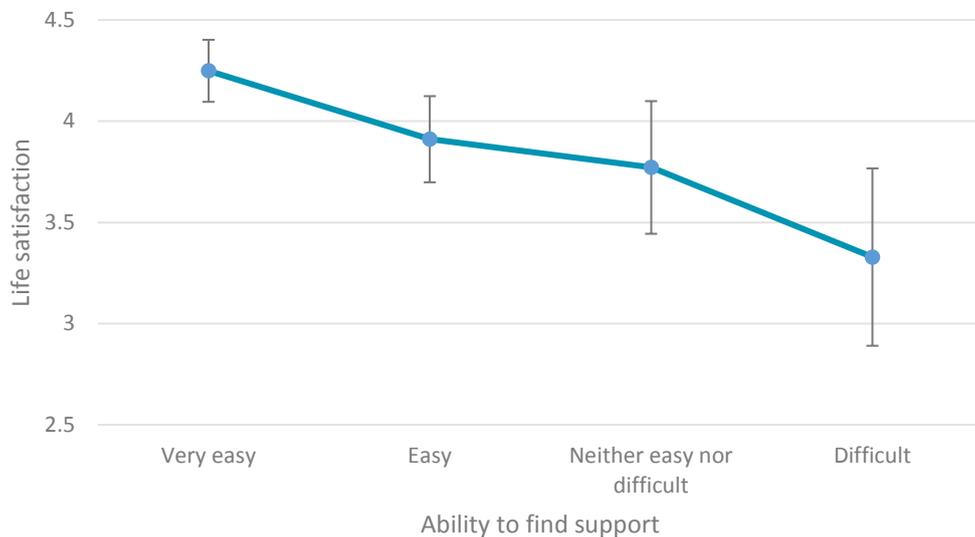
**Figure 7. Level of psychological distress of Māori respondents, by their ability to access support from a friend or whanaunga**



Analysis of the relationship between life satisfaction and other wellbeing factors that might impact it reinforced the importance of this access to social support. Those who found it easy to find someone to help them in times of need reported higher levels of satisfaction with their lives as a whole than those who found it difficult to find someone to help them (Figure 8).

**Figure 8. Māori respondents' life satisfaction by levels of ability to find support**

Note: Life satisfaction was scored from 1 (very dissatisfied) to 5 (very satisfied)



## Feeling isolated

As reported in the 2016 Mental Health Snapshot (Kvalsvig, 2018), social isolation (or loneliness) emerged as an important factor in mental distress and wellbeing. There may be many reasons for the social isolation of Māori who experience mental distress, including multi-levelled discrimination from all sectors of society (Peterson, Pere, Sheehan & Surgenor, 2004). Other research also suggests “social ineptness” as a contributor to social isolation, particularly in younger people, with an “inability to communicate and to get to know people” or “to understand the situation around them” (Pere, 2006:255) being attributed to the effect of mental distress.

*“Because you know, the process of making friends and maintaining friends is actually really hard, and although we take it for granted as teenagers or as young adults, actually for people who’ve had interruption in their development of their social functioning, it’s almost near impossible to then have you know, really valuable friendships.”* (Quote from doctoral research participant, March 2003, cited in Pere, 2006:254)

The analyses that follow explore the relationships between isolation and indicators of social and cultural connectedness among Māori respondents. In Table 2, the probability of feeling isolated in each case is shown as a risk ratio. A risk ratio < 1 indicates a lower probability of feeling isolated. For example, if the respondent reported that they made an effort to see friends and whānau outside the household, they were 25% less likely to report feeling isolated, compared with respondents who did not make an effort. Associations that were significant at the 95% confidence level are shown in bold type.

As seen in Table 2, Māori with strong relationships with and among whānau and friends are significantly less likely to feel isolated. Respondents who reported positively about the reciprocal nature of manaakitanga – both in terms of being able to give as well as receive support – also had a particularly low probability of feeling isolated. This ability to access support as well as provide support is consistent with Māori understandings of manaakitanga. Just as there are expectations of the provision of support to those who need it, so are there expectations of the receipt of support when required.



Other measures of cultural connectedness such as having visited one's ancestral marae or a high degree of proficiency in te reo Māori were not associated with isolation, but Māori respondents who knew the six aspects of their pepeha questioned about were significantly less likely to report feeling isolated. Mātauranga Māori suggests the greater strength of cultural identity, reflected through increased pepeha knowledge, may be a protective factor against social isolation (or loneliness) associated with an increased sense of belonging. This finding is consistent with that of Gordon et al. (2017), which found that Māori research participants with lived experience of mental distress who also experienced social exclusion compounded by colonisation, racial discrimination and cultural disconnection, gained a sense of belonging through reconnection with tikanga Māori, whānau, iwi and hapū. These interesting findings merit further investigation.

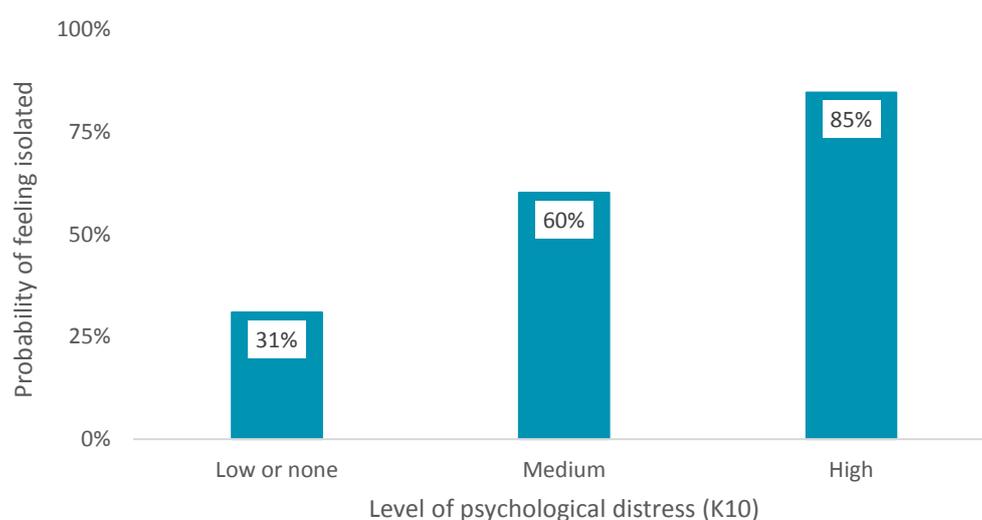
**Table 2. Relationships between measures of social and cultural connectedness, and Māori respondents' feelings of isolation**

	Probability of feeling isolated	
	Risk ratio	95% CI*
Make an effort to see friends/whānau	<b>0.75</b>	<b>0.57 to 0.98</b>
Whānau get on well with one another	<b>0.65</b>	<b>0.50 to 0.85</b>
Can always rely on friends/whānau for support	<b>0.57</b>	<b>0.48 to 0.69</b>
Is easy to find someone to help them	<b>0.55</b>	<b>0.45 to 0.67</b>
Is easy to provide help to someone	<b>0.62</b>	<b>0.47 to 0.82</b>
Have visited their ancestral marae	1.07	0.80 to 1.43
Able to speak te reo Māori well or very well	0.95	0.73 to 1.23
Know all six elements of their pepeha	<b>0.74</b>	<b>0.59 to 0.93</b>
Feel strongly connected to their culture	0.87	0.62 to 1.21

\* 95% confidence interval. Associations that were significant at the 95% level are shown in bold.

Isolation is known from other HPA research (Kvalsvig, 2018) to be an important factor in mental distress. Figure 9 illustrates how clearly this relationship can be observed for Māori.

**Figure 9. Proportion of Māori respondents feeling isolated, by level of psychological distress**



## Cultural connectedness

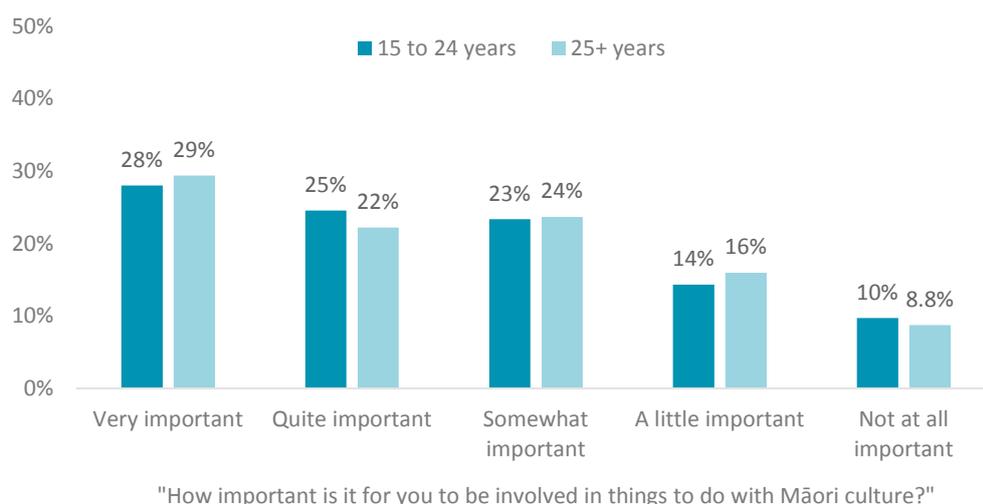
In order to ascertain the cultural connectedness of the Māori respondents (the extent to which they are integrated within their culture) they were asked about the significance to them of involvement in Te Ao Māori, their strength of cultural connection, and the importance to them of maintaining this connection.

### Importance to Māori of being involved in Māori culture

*Te Kupenga 2013* identified that for most Māori, involvement in Māori culture is important (Statistics New Zealand/ Tauranga Aotearoa, 2014). Similar results were elicited from the Māori respondents to the NZMHMs and HLS when asked how important it was to them to be involved in things to do with Māori culture. When they thought about their lives as a whole, over half (52%) of the Māori respondents indicated it was 'very or quite important' to them to be involved in things to do with Māori culture, and a further 39% indicated this involvement was 'somewhat or a little important' to them.

As with *Te Kupenga 2013*, 1 in 10 (10%) of these respondents, however, indicated it was not important to them at all to be involved in things to do with Māori culture. Again mirroring *Te Kupenga 2013* results, there were no significant age differences in respondents' views of this importance (Figure 10).

**Figure 10. Importance to Māori respondents of being involved in Māori culture, by age**



### Maintaining strong cultural connections

When asked generally about culture, without specifically identifying that culture as 'Māori', the responses to questions focussed on strength of connection and maintenance of connection suggested a similar degree of cultural connectedness among Māori respondents.<sup>4</sup> It showed that over three-quarters (77%) of the Māori respondents felt strongly connected to their culture, and over two-thirds (71%) felt maintaining a strong connection with their culture was important for them.

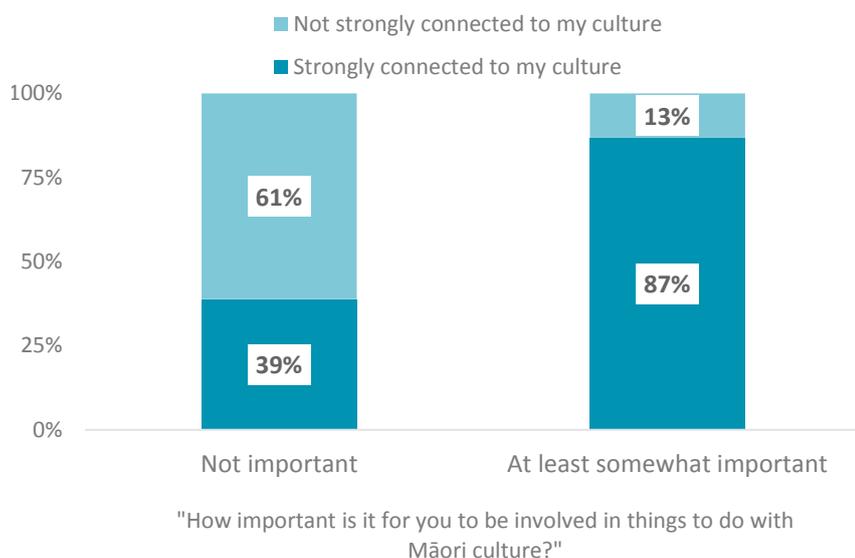
<sup>4</sup> Because the questions about strength of cultural connection in the NZMHMs and HLS were framed in such a way that 'culture' may also include New Zealand, Samoan, Hindu, Jewish or other cultures, it is possible that the culture the Māori respondents felt connected to was not their Māori culture. For this reason, all analyses that included this item were restricted to the 1,360 respondents who identified as Māori but not Pacific or Asian to improve specificity of this measure.

## Relationship between the importance of being involved in Te Ao Māori, and feeling culturally connected

Analysis of the relationship between the importance of involvement in Te Ao Māori and whether respondents felt connected to their culture revealed a number of interesting findings.

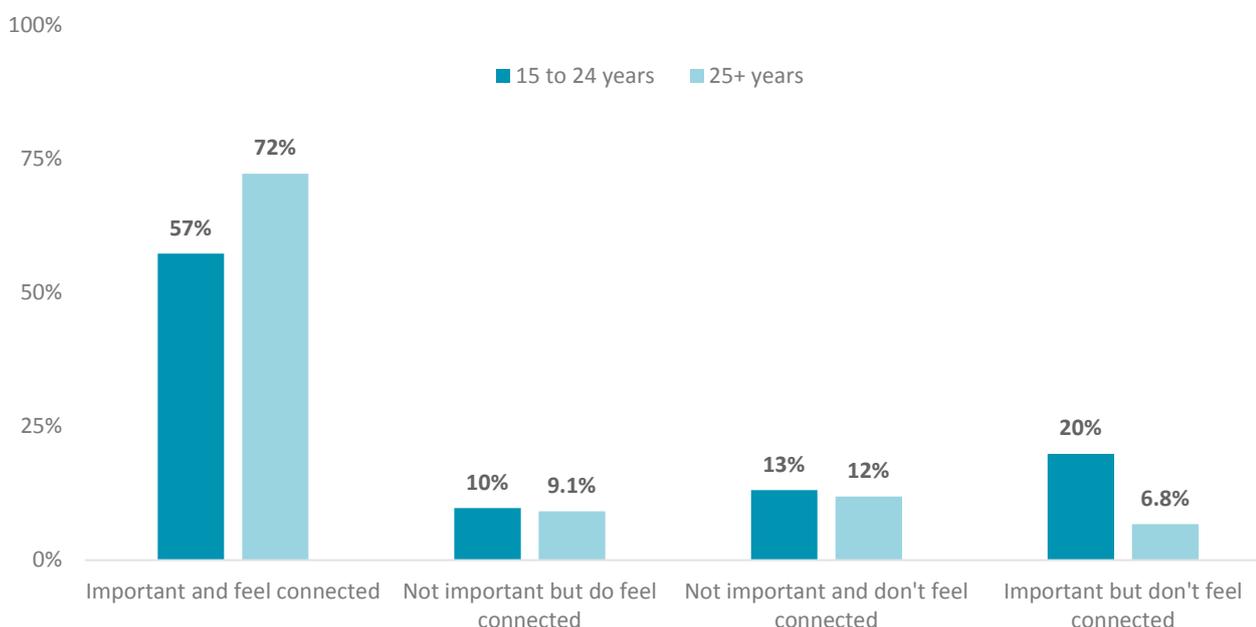
Generally speaking, if Māori respondents felt that being involved in Māori culture was at least 'somewhat important', they also reported feeling connected to their culture (Figure 11). However, 13% of Māori who felt involvement in Māori culture was important reported they did not feel strongly connected to their culture, suggesting an unmet need for cultural connectedness. This equates to around 10% of the total Māori respondents – that is, 1 in 10 felt it was important to be connected to their culture, yet did not feel connected.

**Figure 11. Strength of connection to culture by level of importance of involvement in Māori culture for Māori respondents**



This unmet need was not evenly distributed over age groups. Although cultural connections appeared to be just as important to rangatahi Māori (aged 15 to 24 years) as other age groups, Figure 12 shows that at the same time, 1 in 5 (20%) of this age group who felt that cultural connection was important, did not feel strongly connected. The proportion of pakeke and kaumātua (aged 25 years or older) for whom this was also true was far smaller (7%).

**Figure 12. Age differences in unmet need for cultural connection of Māori respondents**



In the earlier section on wellbeing it was noted that overall, 86% of Māori felt that the things they did in their life were worthwhile. When respondents felt that being involved in Māori culture was important and also felt connected to their culture, they were significantly more likely than the rest to feel that the things they did were worthwhile (90% versus 79%).

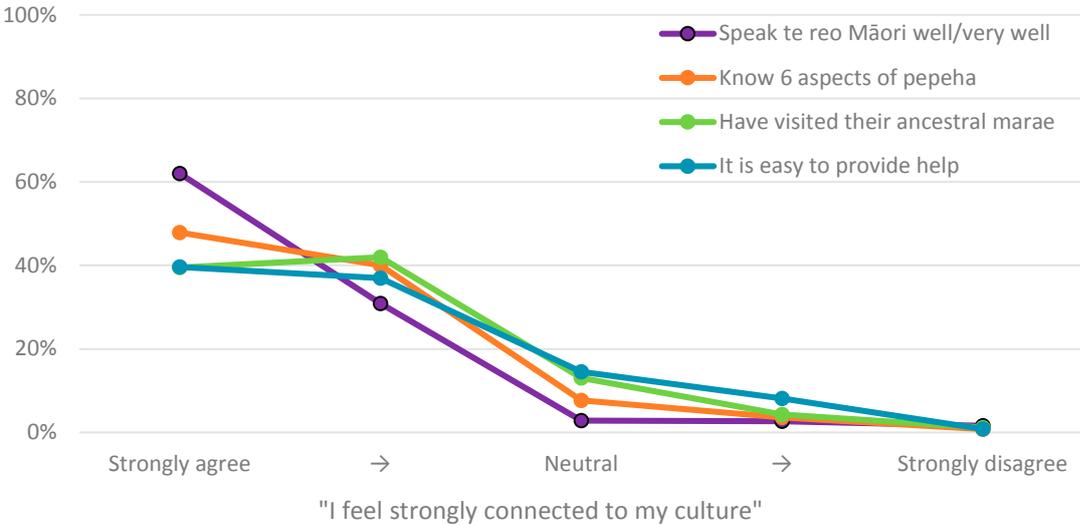
## Cultural identity

The strength of cultural identity of Māori respondents was measured through their connectedness with a number of cultural institutions and networks. Specifically, analyses focused on Māori respondents' access to and knowledge of ancestral marae, te reo Māori, and whakapapa. Their ability to provide manaakitanga was also considered a measure of strength of cultural identity.

### Supporting a strong cultural identity

Figure 13 shows that those Māori who agreed that they felt strongly connected to their culture were also more likely to speak te reo Māori, have pepeha knowledge, connect to their tūrangawaewae, and practise manaakitanga, compared with those who did not feel strongly connected to their culture. For example, of the Māori respondents who indicated a strength of cultural connection, almost two-thirds (62%) spoke te reo Māori well or very well in day-to-day conversation, compared with only 2% of those who indicated a weak cultural connection.

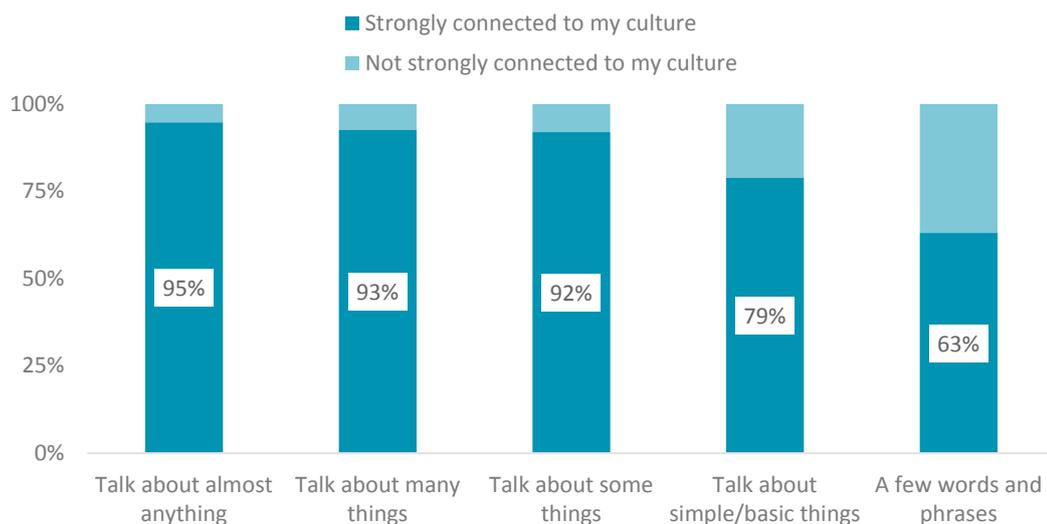
**Figure 13. Relationship between Māori respondents' strength of cultural connection, and measures of strong cultural identity**



## Ways of strengthening cultural identity

Of the four different aspects of connectedness to culture for Māori associated with identity, the ability to speak te reo Māori in day-to-day conversation appears to have a particularly strong relationship with feeling connected to culture. Figure 14 shows this relationship in a little more detail. Māori respondents who could talk about 'almost anything', 'many things' or 'some things' were highly likely to report feeling connected to Māori culture, but below these levels, respondents were less likely to feel connected.

**Figure 14. Relationship between Māori respondents' level of ability to communicate in te reo Māori in day-to-day conversation, and their cultural connectedness**



## Speaking te reo Māori

Statistics New Zealand/Tatauranga Aotearoa (2014:7) asserts that “speaking te reo Māori is an active way of connecting to culture and the language”; a sentiment that is supported in other research that aligns te reo Māori proficiency for Māori with belonging (Pere, 2006).

Findings from two post-census surveys that Statistics New Zealand/Tatauranga Aotearoa (2002; 2014) has undertaken to measure te reo Māori proficiency suggest that over half of all Māori have some ability to speak the language. The level of their proficiency, however, which is mirrored in analyses of NZMHMs and HLS data, is generally not high. Table 3 shows that almost three-quarters (74%) of the Māori respondents were not able to talk about anything other than simple or basic things. This proportion appeared to be similar across age groups.

**Table 3. Level of proficiency in te reo Māori of Māori respondents, by age group**

	15 - 24	25 - 64	65+	All ages
Talk about almost anything	7.4%	5.3%	14%	6.7%
Talk about many things	5.3%	4.3%	5.1%	4.6%
Talk about some things	15%	15%	9.2%	15%
Talk about simple/basic things	40%	41%	20%	39%
A few words and phrases	32%	34%	52%	35%

Note: Column percentages do not add up to 100 because of rounding.

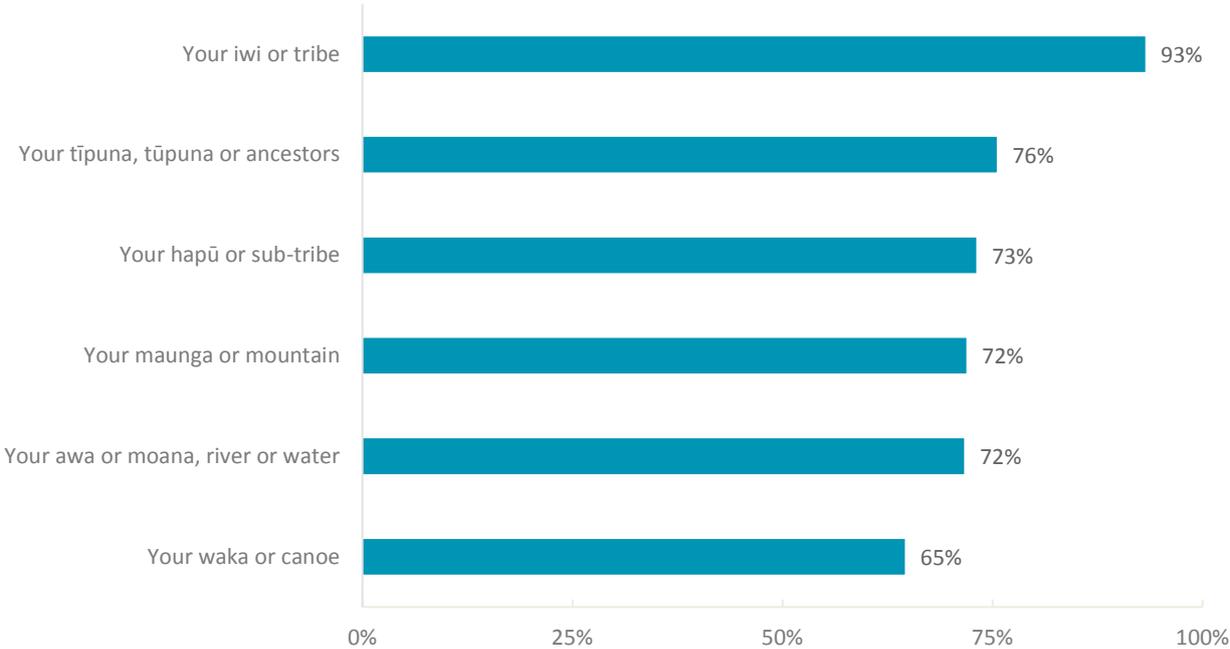
## Knowing pepeha

Knowing one's iwi, hapū and marae, and belonging to and visiting ancestral marae and other traditional places is considered a marker of connection to and engagement with culture for Māori (Statistics New Zealand/Tatauranga Aotearoa, 2014).

The NZMHMs, therefore, asked Māori respondents if they knew their iwi, hapū, maunga, awa or moana, waka, and tīpuna (or tūpuna) – all of which are aspects of tribal identity as identified in pepeha. The vast majority (93%) of respondents reported knowing their iwi and almost three-quarters (73%) reported knowing their hapū (Figure 15).

Results from *Te Kupenga 2013* show that when asked the same question, most Māori respondents also report knowing their tribal and hapū identity (89% and 55% respectively). Further, most also report knowing their tīpuna (55%), their maunga (58%), their awa or moana (56%), and their waka (52%). While these proportions are less than those who indicated pepeha knowledge in the NZMHMs, they still reflect a greater likelihood of Māori being able to participate in the cultural process of reciting pepeha in whanaungatanga contexts, than not.

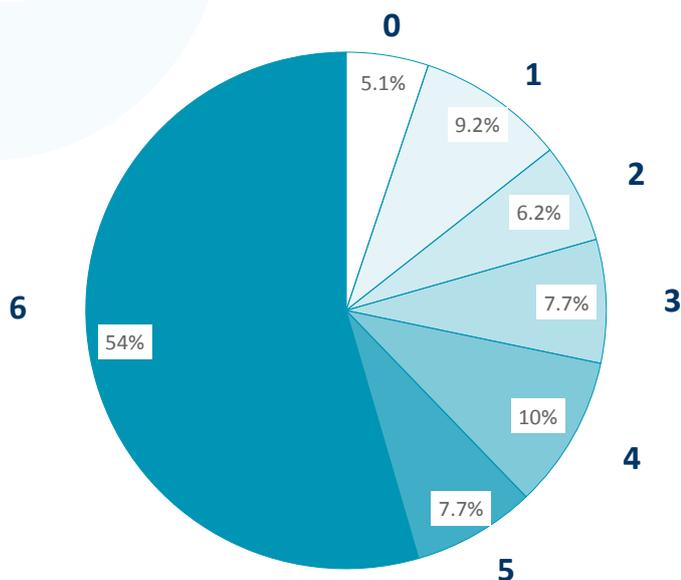
**Figure 15. Māori respondents’ knowledge of their iwi, hapū, maunga, awa or moana, waka, and tīpuna (or tūpuna)**



Around half (54%) of Māori respondents also knew all these aspects of their pepeha (Figure 16), while only 5% knew none. Of those who knew only one aspect, for 86% that single aspect was their iwi. Those 14% who did not know their iwi were less likely to feel strongly connected to Māori culture, compared with those who did know their iwi.



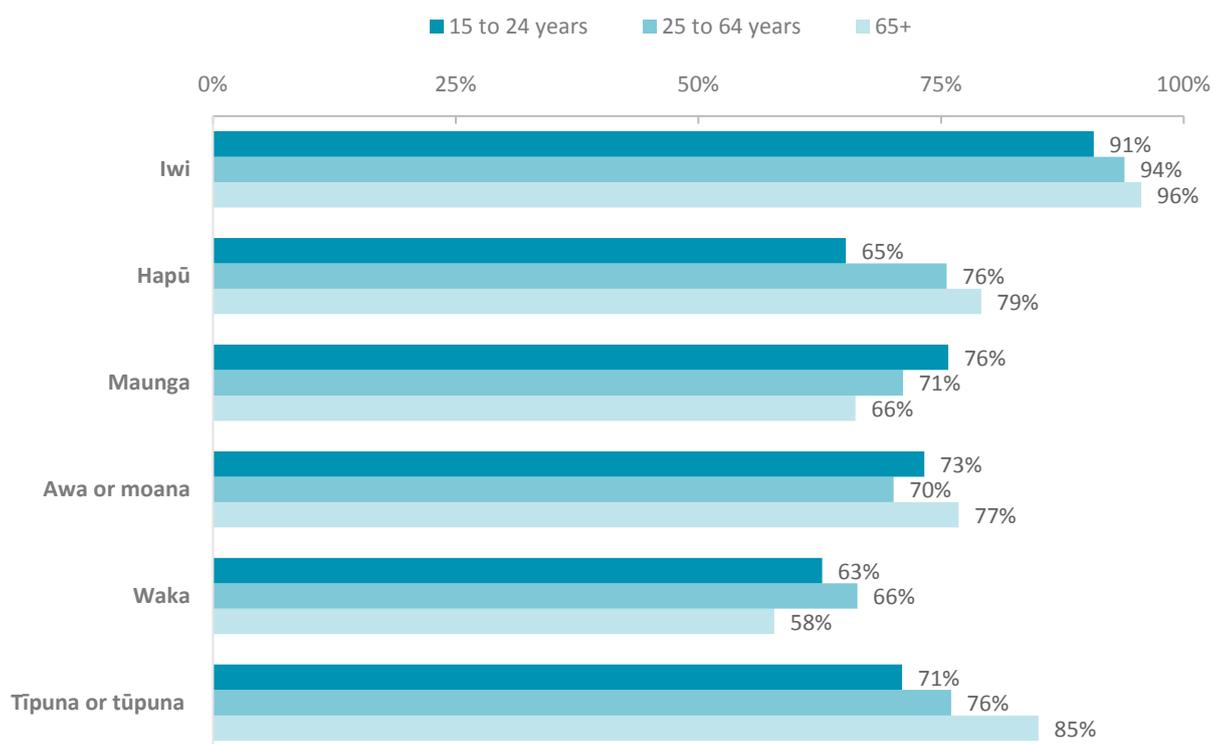
Figure 16. How many aspects of their pepeha did Māori respondents know?



*Te Kupenga 2013* also found that Māori respondents aged at least 55 years old “were more likely to know aspects of their pepeha than younger Māori”, with some 49% of this older age group knowing all aspects, compared with 28% for those aged under 25 years (Statistics New Zealand/Tatauranga Aotearoa, 2014:5).

In comparison, the Māori respondents to the NZMHMs did not show strong age differences in their pepeha knowledge. For example, over half (51%) of the rangatahi Māori (aged 15 to 24 years) knew all aspects of their pepeha, compared with 57% of the pakeke (aged 25 to 64 years) and 52% of the kaumātua (aged 65 years or older); these differences were not significant at the 95% confidence level. However, there were some differences in knowledge of specific elements. Rangatahi Māori (aged 15 to 24 years) were significantly less likely than pakeke and kaumātua (aged 25 years and older) to know their hapū or their tīpuna. Figure 17 shows these differences.

Figure 17. Age differences in Māori respondents’ knowledge of elements of their pepeha



Note: Only knowledge of hapū and tīpuna (or tūpuna) showed significant differences by age.

For the first time in 2016, Māori respondents to the NZMHM were also asked to identify their iwi. Although 93% reported knowing their iwi, slightly fewer (86%) were able to identify their iwi.

### Connecting with tūrangawaewae

Statistics New Zealand/Tatauranga Aotearoa (2014:5) describe tūrangawaewae as “a Māori concept of belonging to a place where one can stand and feel like they are at home ... a place of cultural significance where you feel you belong because your people are from there”. For many Māori, that place is their ancestral marae, the marae their parents, grandparents or tīpuna are from. *Te Kupenga 2013* results endorsed this understanding and showed that Māori identity and culture were strongly linked with this tūrangawaewae connection.

Overall, 85% of Māori respondents to the NZMHMs reported they had visited their ancestral marae, and there were no observable age differences in these visitation rates. The proportion was similar among rangatahi Māori (aged 15 to 24 years) and older respondents. Statistics New Zealand/Tatauranga Aotearoa (2014:5) reported that visiting their ancestral marae was “an important and relevant way for Māori to connect with their culture”. Findings from the NZMHM data support this, with Māori respondents who had visited their ancestral marae being 63% more likely to report that they felt connected to their culture than those who had not.

### Practising manaakitanga

The ability to manaaki is considered a cultural priority for Māori; a duty of unqualified care associated with notions of cultural responsibility and mutual respect (MacFarlane, Glynn, Cavanagh & Bateman, 2007; Hudson, Milne, Reynolds, Russell & Smith, 2010). Underpinned by an ethos of “making sure that mana is upheld”, manaakitanga aids in the establishment of cultural connectedness (Russell, McBride-Henry & Bell, 2017:10).

Culturally it is recognised that being able to manaaki others is also an indicator of wellness; in contrast, not being able to provide such care for others is an indicator of poor mental wellbeing. In recovery from mental illness or distress then, hauora hinengaro Māori experts and practitioners identify manaakitanga as a marker of wellbeing.

Although to date “there has been no perfect tool to measure ... the level of manaakitanga ... among the Māori population”, in the same way there has been no perfect tool to measure whanaungatanga (Pere, 2006:116), one question was added to the 2016 NZMHM in an attempt to do so. Respondents were asked to indicate how easy or difficult it would be for them to provide help to someone when they needed it, such as an elderly relative or mokopuna in need of care<sup>5</sup>. A high proportion of Māori respondents (87%) reported this would be ‘very easy’ or ‘easy’, with just 5% reporting it would be ‘difficult’ or ‘very difficult’.

As seen previously in Table 2 (page 26), when respondents found it easy to provide this support they were significantly less likely to report feeling isolated from others.

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5 In Figure 1 (pg 7), which provides an outline of measures used, the measure used to infer manaakitanga is taken from the list of questions used to infer ‘Whanaungatanga and belonging’.

# Hei Whai Whakaaro (Overall Reflections)

Unuhia te rito o te harakeke, kei hea te kōmako e kō?

Whakatairangitia rere ki uta, rere ki tai

Nāu i kī mai: “He aha kē te mea nui o te Ao?”

Māku e kī atu: “He tangata, he tangata, he tangata!”

Tihei ... mauri ora!

*If you remove the central shoot of the flax bush,  
where will the bellbird find rest?*

*Proclaim it to the land and proclaim it to the sea.*

*If you were to ask me, “What is the most important thing in the world?”  
I would reply, “It is people, it is people, it is people!”*

Connectedness to whānau, society and culture are considered key for Māori health and wellbeing. Indigenous research has consistently shown a strong correlation between this connectedness and the mental wellbeing of Māori (Russell, in draft; Dallas-Katoa, Varona, Dallas, Kipa & Leahy, in draft; Hudson & Hughes, 2007; Pere, 2006; Kingi, 2002).

All Māori are members of whānau, hapū, iwi and marae alongside the many other components of society. These relationships they have both with other members of the many groupings they belong to, and relatedly with their culture, are significant. Strengthening and maintaining cultural relational ties, networks and whānau connections has been identified as important not only for the mental wellbeing of Māori, but also for preventing suicide – a significant concern for the tangata whenua of Aotearoa New Zealand (Dallas-Katoa, Varona, Dallas, Kipa & Leahy, in draft).

Te Oranga Hinengaro findings are consistent with the work of Māori scholars regarding the value of promoting cultural and social connectedness to enable Māori mental wellbeing. Cultural connectedness, in particular, is considered a pathway for social inclusion for Māori, but being socially isolated, excluded or discriminated against is a common experience for Māori. Māori with lived experience of mental distress are especially likely to experience such isolation, exclusion and discrimination. For Māori, positive experiences of inclusion are based on the principles of whanaungatanga and manaakitanga, and lead to a restoration of mana and wairua (Gordon, Davey, Waa, Tiatia & Waaka, 2017). Many consider that reconnecting with whānau, iwi, hapū, and tikanga Māori, is one pathway to inclusion – a way for addressing exclusion and its complex effects that originate in past and continued colonisation and racial discrimination.

Indigenous peoples, including Māori, also regard the establishment of a positive cultural identity as equally as important to their wellbeing. A myriad of Indigenous research also supports this notion, that a strong cultural identity is protective for Māori mental wellbeing (Dee, 2016; Pere, 2006; Durie, 2001; Edwards, 1999) and a range of therapies that focus on cultural reawakening are premised on this belief that strengthening cultural identity can improve hauora hinengaro.

For decades now, Kaupapa Māori mental health services have been built around these understandings, offering therapies that recognise a secure cultural identity derived from ready access to Māori culture, and the sense of belonging or whanaungatanga that connection to culture brings, provide a strong foundation for health (Durie, 2011). Findings in Te Oranga Hinengaro are consistent with this knowledge. Stronger relationships with whānau and friends is associated with lower levels of mental distress.

Cultural identity and connection to Te Ao Māori as enablers of wellbeing are signalled through the strength of connection to te reo Māori, knowledge of pepeha, connection to tūrangawaewae and practicing manaakitanga.

The importance of te reo Māori, recognised as a taonga protected by Article II of *Te Tiriti o Waitangi* (Waitangi Tribunal, 1986), to the cultural identity of Māori is especially highlighted in Te Oranga Hinengaro. Findings suggest the ability of Māori to speak their native language is strongly associated with being connected to their culture. The potential usefulness of such findings is in their contribution to the integrated approach to promoting mental wellbeing currently sought through the Government's Inquiry into Mental Health and Addiction.

## Next steps

The HPA's 2015 and 2016 NZMHMs and 2016 HLS provide a rich data resource for exploring topics related to Māori wellbeing and distress. There is ample scope for further analysis of data from these surveys. Those presented in Te Oranga Hinengaro are posited simply as the start of conversation surrounding this important kaupapa.

Pathways to cultural connectedness that are currently measured in the HPA datasets include ability to speak te reo Māori, pepeha knowledge, tūrangawaewae connection, and ability to manaaki. Future research to support the wellbeing promotion work of the HPA through the Like Minds, Like Mine and NDI programmes will include exploration of other measures of cultural connectedness. The 2018 NZMHM, for example, will include a measure of availability of cultural support, allowing exploration of the relationship between this and other measures of wellbeing and distress. The HPA's nationwide surveys continue to evolve in this way, in response to the information needs of those working to promote mental wellbeing and recovery from distress.



# Rārangi Rauemi (References)

- Australian Bureau of Statistics. (2003). *Use of the Kessler psychological distress scale in ABS health surveys, 2001*. Canberra: Australian Bureau of Statistics.
- Awatere, Donna (1984). *Māori sovereignty*. Auckland: Broadsheet.
- Baxter, J. (2008). *Māori mental health needs profile summary: A review of the evidence*. Palmerston North: Te Rau Matatini. Available from: [http://www.moh.govt.nz/NoteBook/nbbooks/nsf/0/32E458D82F95506ACC2575430077D620/\\$file/MMH%20Needs%20Profile%20Summary.pdf](http://www.moh.govt.nz/NoteBook/nbbooks/nsf/0/32E458D82F95506ACC2575430077D620/$file/MMH%20Needs%20Profile%20Summary.pdf)
- Beaglehole, E. & P. (1947). *Some modern Māori*, New Zealand Council for Educational Research. Auckland: Whitcombe and Tombs Ltd.
- Chaplow, D. (1993). Addressing Cultural Differences in Institutions: Changing Health Practices in New Zealand. *Criminal Behaviour and Mental Health*, 3:307-21.
- Dallas-Katoa, W., Varona, G., Dallas, R., Kipa, M. & Leahy, H. (in draft). *Summary findings of an exploratory data gathering exercise on Māori suicide in Te Waipounamu*.
- Dee, A. (2016). *Māori cultural identity and the relationship to mental health outcomes for taitamariki Māori (Māori youth)*. Summer Research Scholarship Final Project Report 2015/16. The University of Auckland.
- Durie, M. (1998). *Whaiora: Maori health development*. Auckland: Oxford University Press.
- Durie, M. (1999). Te Pae Mahutonga: a model for Māori health promotion. *Health Promotion Forum of New Zealand Newsletter* 49, 2-5 December 1999.
- Durie, M. (2001). *Mauri ora: The dynamics of Māori health*. Auckland: Oxford University Press.
- Durie, M. (2011). Indigenizing mental health services: New Zealand experience. *Transcultural Psychiatry*, 48(1-2):24-36.
- Durie, M. (2017). Indigenous suicide: The Turamarama Declaration. *Journal of Indigenous Wellbeing/ Te Mauri – Pimatisiwin*, 2(2): 59-67.
- Edwards, S. (1999). *Hokia ki ngā maunga kia purea koe e ngā hau o Tawhirimatea. Māori identity reclamation: Empowerment through identity*. Unpublished master's thesis, The University of Auckland.
- Edwards, S. (2000, April 7). *Identity reclamation: Re-education as empowerment*. Paper presented at the Australian Indigenous Education Conference, Fremantle, Australia.
- Elder, H. & Tapsell, R. (2013). Māori and the Mental Health Act. In J Dawson and K Gledhill (Eds.), *New Zealand's Mental Health Act in practice*. Wellington: Victoria University Press.
- Gordon, S., Davey, S., Waa, A., Tiatia, R. & Waaka, T. (2017). *Social inclusion and exclusion, stigma and discrimination, and the experience of mental distress*. Auckland: Mental Health Foundation of New Zealand.
- Hudson, J. & Hughes, E. (2007). The role of marae and Māori communities in post-disaster recovery: A case study. *GNS Science Report, 2007/12*. Wellington.

- Hudson, M., Smith, B., Milne, M., Reynolds, P. & Russell, K. (2010). *Te Ara Tika: Guidelines for Maori research ethics: A framework for researchers and ethics committee members*. Auckland: Health Research Council of New Zealand.
- Kessler, R., Andrews, G., Colpe, L., Hiripi, E., Mroczek, D., Normand, S., Walters, E. & Zaslavsky, A. (2002). Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychological Medicine*, 32(06), 959-976.
- Kingi, T.K. (2002). *"Hua Oranga": Best health outcomes for Māori*. Unpublished doctoral thesis, Massey University, Wellington.
- Kingi, T.K., Durie, M., Elder, H., Tapsell, R., Lawrence, M. & Bennett, S. (2018). *Maia te toi ora: Māori health transformations*. Wellington: Huia Publishers.
- Kroenke, K., Spitzer, R. & Williams, J. (2001). The PHQ-9: validity of a brief depression severity measure. *Journal of General Internal Medicine*, 16(9), 606-13.
- Kvalsvig, A. (2018). *Wellbeing and mental distress in Aotearoa New Zealand: Snapshot 2016*. Wellington: Health Promotion Agency/Te Hiringa Hauora.
- MacFarlane, A., Glynn, T., Cavanagh T. & Bateman, S. (2007). Creating culturally safe schools for Māori students. *The Australian Journal of Indigenous Education*, 36:65-76.
- McBride-Henry, K. (2017). *HPA wellbeing approach*. (Unpublished report). Wellington: Health Promotion Agency/Te Hiringa Hauora.
- McFarlane-Nathan, G. (1994) *Cognitive Behaviour Therapy and the Māori client*. Auckland: Psychological Services, Department of Justice.
- Mila-Schaaf, K. (2013). Not another New Zealand-born identity crisis: Well-being and the politics of belonging. In M.N. Agee, T. McIntosh, P. Culbertson, & C. 'Ofa Makasiale (Eds.), *Pacific identities and well-being: Cross-cultural perspectives* (pp. 49–64). Otago: University of Otago Press.
- Mila-Schaaf, K. (2011). Polycultural capital and the Pasifika second generation: negotiating identities. *Integration of Immigrants Programme. Working Paper, Number 3*. Auckland: Massey University. Available from: [http://newsettlers.massey.ac.nz/publications\\_pdfs/Karlo%20Mila-Schaaf%202011.pdf](http://newsettlers.massey.ac.nz/publications_pdfs/Karlo%20Mila-Schaaf%202011.pdf)
- Minister of Health. (2016). *New Zealand Health Strategy: Future direction*. Wellington: Ministry of Health/Manatū Hauora.
- Ministry of Health/Manatū Hauora. (2014). *The guide to He Korowai Oranga – Māori Health Strategy*. Wellington: Ministry of Health/Manatū Hauora.
- Ministry of Health/Manatū Hauora. (2015). *Tatau Kahukura: Māori Health Chart Book 2015* (3rd edition). Wellington: Ministry of Health/Manatū Hauora.
- Ministry of Health/Manatū Hauora. (2016). *Suicide Facts: 2014 data*. Available online from: <https://www.health.govt.nz/publication/suicide-facts-2014-data>
- Ministry of Health/Manatū Hauora. (2017). *Office of the Director of Mental Health Annual Report 2016*. Wellington: Ministry of Health/Manatū Hauora.
- Oakley-Browne, M., Wells, J. & Scott, K. (Eds.). (2006). *Te Rau Hinengaro: The New Zealand Mental Health Survey*. Wellington: Ministry of Health/Manatū Hauora. Available from: <https://www.health.govt.nz/system/files/documents/publications/mental-health-survey.pdf>
- Organisation for Economic Co-operation and Development. (2013). *OECD Guidelines on measuring subjective well-being*. Paris, France: OECD Publishing.
- Pere, L. (2006). *Oho mauri: Cultural identity, wellbeing, and Tāngata Whai Ora/Motuhake*. Unpublished doctoral thesis, Massey University, Wellington.

- Peterson, D., Pere, L., Sheehan, N., & Surgenor, G. (2004). *Respect costs nothing: A survey of discrimination faced by people with experience of mental illness in Aotearoa/New Zealand*. Wellington: Mental Health Foundation of New Zealand.
- Pihama, L., Smith, L.T., Evans-Campbell, T., Kohu-Morgan, H., Cameron, N., Mataki, T., Te Nana, R., Skipper, H., & Southey, K. (2017). Investigating Māori approaches to trauma informed care. *Journal of Indigenous Wellbeing/Te Mauri – Pimatisiwin*, 2(3): 18-31.
- Russell, L. (in draft). *Sharing our space: Stories of Indigenous wellbeing*. Wellington.
- Russell, L., McBride-Henry, K. & Bell, R. (2017). *Evaluation of the Tiki Toa Pilot Programme*. Report written by the Health Promotion Agency for the Governance Board of Tui Ora and other programme partners including the Department of Conservation. (Unpublished report). Wellington: Health Promotion Agency/Te Hiringa Hauora.
- Sachdev, P. (1989). Mana, Tapu, Noa: Māori Cultural Constructs with Medical and Psycho-social Relevance. *Psychological Medicine*, 19:29-39.
- Snowshoe, A. (2015). *The Cultural Connectedness Scale and its relation to positive mental health among First Nations youth*. Electronic Thesis and Dissertation Repository. 3107. London, Ontario, Canada: The School of Graduate and Postdoctoral Studies, The University of Western Ontario.
- Spitzer, R., Kroenke, K., Williams, J. & Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder: the GAD-7. *Archives of Internal Medicine*, 166(10), 1092-1097.
- Squire, H. (2017). *2016 Health and Lifestyles Survey Questionnaire*. Wellington: Health Promotion Agency Research and Evaluation Unit.
- Statistics New Zealand/Tatauranga Aotearoa. (2002). *Final report on the 2001 survey on the health of the Māori language*. Available from [www.tetaurawhiri.govt.nz](http://www.tetaurawhiri.govt.nz)
- Statistics New Zealand/Tatauranga Aotearoa. (2014). *Te Kupenga 2013* (English) – corrected. Available online from [http://www.stats.govt.nz/browse\\_for\\_stats/people\\_and\\_communities/maori/TeKupenga\\_HOTP13/Commentary.aspx](http://www.stats.govt.nz/browse_for_stats/people_and_communities/maori/TeKupenga_HOTP13/Commentary.aspx).
- Statistics New Zealand/Tatauranga Aotearoa. (2015). *Ngā tohu o te ora: The determinants of life satisfaction for Māori 2013*. Available online from [http://archive.stats.govt.nz/browse\\_for\\_stats/people\\_and\\_communities/maori/te-kupenga/determinants-life-satisfaction-maori.aspx](http://archive.stats.govt.nz/browse_for_stats/people_and_communities/maori/te-kupenga/determinants-life-satisfaction-maori.aspx)
- Trowland, H. & Thimasarn-Anwar, T. (2016). *2016 New Zealand Mental Health Survey methodology report*. Wellington: Health Promotion Agency/Te Hiringa Hauora.
- Trowland, H. (2017). *New Zealand Mental Health Survey and Health and Lifestyles Survey: Methods report for the combination of three survey datasets*. Wellington: Health Promotion Agency/Te Hiringa Hauora.
- Trowland, H. & Russell, L. (2016). *2016 New Zealand Mental Health Survey Questionnaire*. Wellington: Health Promotion Agency/Te Hiringa Hauora.
- Trowland, H., Thimasarn-Anwar, T., Squire, H. & Tee, N. (2017). *2016 Health and Lifestyles Survey: Methodology report*. Wellington: Health Promotion Agency/Te Hiringa Hauora.
- Waitangi Tribunal. (1986). *Report of the Waitangi Tribunal on the te reo Maori claim (Wai 11)*. Wellington: Waitangi Tribunal, Department of Justice.
- Wynne-Jones, J. (2015a). *2015 New Zealand Mental Health Survey: Methodology report*. Report prepared for Health Promotion Agency by National Research Bureau. Wellington: Health Promotion Agency/Te Hiringa Hauora.
- Wynne-Jones, J. (2015b). *2015 New Zealand Mental Health Survey: Questionnaires*. Wellington: Health Promotion Agency/Te Hiringa Hauora.

# Appendix A

## Psychometric scales used in the questionnaire

### The Patient Health Questionnaire (used in NZMHMs)

The PHQ-9 is a 9-item scale designed to assess depressive symptoms over the previous two weeks (Kroenke, Spitzer & Williams, 2001). It should be noted that this scale provides an estimate of depressive symptoms, and should not be understood to provide a clinical diagnosis of depression.

Respondents rate themselves on a 4-point scale from 0 (not at all) to 3 (nearly every day) against items such as: 'Over the last two weeks, how often have you been bothered by feeling down, depressed or hopeless?' Response values from each respondent are then added to calculate a total score, with 'refused' or 'don't know' being coded as 'not at all' (0). Possible scores range from 0 to 27 with higher scores being indicative of greater self-reporting of depressive symptoms.

### The Generalised Anxiety Disorder 7-Item Scale (used in NZMHMs)

The GAD-7 is a 7-item scale designed to assess the severity of Generalised Anxiety Disorder symptoms over the previous two weeks (Spitzer, Kroenke, Williams & Löwe, 2006). These symptoms include: nervousness, inability to stop worrying, and fear of something bad happening. As above, this scale provides an estimate of level of anxiety, and should not be interpreted as providing a clinical diagnosis of Generalised Anxiety Disorder.

Respondents rate themselves on a 4-point scale from 0 (not at all) to 3 (nearly every day) against items such as: 'Over the last two weeks, how often have you been bothered by becoming easily annoyed or irritable?' Response values from each respondent are then added to calculate a total score, with 'refused' or 'don't know' being coded as 'not at all' (0). Possible scores range from 0 to 21 with higher scores being indicative of greater self-reporting of generalized anxiety symptoms.

### The Kessler Psychological Distress Scale (used in NZMHMs and HLS)

The K10 is a 10-item scale designed as a screening tool for mental health disorders. Specifically it provides an indication of psychological distress based on questions about anxiety and depressive symptoms experienced in the most recent four-week period (Kessler et al., 2002).

Respondents rate themselves on a 5-point scale from 1 (none of the time) to 5 (all of the time) against items such as: 'In the past four weeks, about how often did you feel tired out for no good reason?' Response values from each respondent are then added to calculate a total score, with 'refused' or 'don't know' being coded as 'none of the time' (1). Possible scores range from 10 to 50 with higher scores being indicative of greater self-reporting of psychological distress.

The K10 does not have standardised cut-off scores, so Te Oranga Hinengaro is guided by scoring methods developed by the Clinical Research Unit for Anxiety and Depression (CRUFAD), School of Psychiatry, University of New South Wales (NSW) (Australian Bureau of Statistics, 2003), which were also adapted by the New Zealand Ministry of Health Mental Health Survey.

# Appendix B

## *Te Kupenga 2013: A survey of Māori wellbeing*

*Te Kupenga 2013* is Statistics New Zealand/Tatauranga Aotearoa's first survey of Māori well-being. It contains general social and economic well-being measures as well as measures based on a Māori perspective of well-being, to give an overall picture of the social, cultural, and economic well-being of Māori.

In measuring Māori cultural well-being, *Te Kupenga 2013* starts from the key principle of connecting. The value of culture comes from the importance of cultural knowledge, values, and behaviours that allow individuals to connect with each other and their surrounding environments, and the resulting sense of self and belonging. Starting from this principle, *Te Kupenga 2013* focuses on four areas of cultural well-being:

- wairuatanga
- tikanga
- te reo Māori
- whanaungatanga.

It is through these four areas that individuals connect to Te Ao Māori.

Behaviours involving tikanga, such as marae participation, and modern-day equivalents such as kapa haka or waka ama, are the customs and practices through which individuals connect culturally with each other. Te reo Māori enables individuals to connect through language. Whanaungatanga and wairuatanga are about connecting to the animate and the inanimate worlds, and the nature and strength of those relationships.

*Te Kupenga 2013* looks at the behaviours, knowledge, and attitudes of Māori towards these four areas. A wide-ranging consultation process with Māori stakeholders informed the content of *Te Kupenga 2013*.

# Appendix C

## Iwi membership identified by Māori respondents to the 2016 New Zealand Mental Health Monitor

“What is the name of your Iwi or tribe?”	Number	%
Ngāpuhi	74	25.2
Ngāi Tahu / Kāi Tahu	20	6.8
Tainui	19	6.5
Ngāti Maniapoto	13	4.4
Te Rarawa	13	4.4
Ngāti Porou ki Harataunga ki Mataora	10	3.4
Ngāti Kahu	9	3.1
Ngāti Porou	9	3.1
Tūhoe	9	3.1
Ngāti Awa	7	2.4
Ngāti Kahungunu ki Te Wairoa	7	2.4
Ngāti Tūwharetoa	6	2.0
Te Atiawa (Taranaki)	6	2.0
Ngāpuhi ki Whaingaroa-Ngāti Kahu ki Whaingaroa	5	1.7
Ngāti Kahungunu ki Wairarapa	5	1.7
Ngāti Kahungunu ki Heretaunga	4	1.4
Ngāti Raukawa (Horowhenua/ Manawatū)	4	1.4
Te Arawa/Taupō (Rotorua/Taupō), region unspecified	4	1.4
Whakatōhea	4	1.4
Ngāi Te Rangī	3	1.0
Ngāti Pīkiao (Te Arawa)	3	1.0
Ngāti Ranginui	3	1.0
Ngāti Raukawa (Waikato)	3	1.0
Ngāti Ruanui	3	1.0

“What is the name of your Iwi or tribe?”	Number	%
Ngāti Whātua	3	1.0
Te Arawa	3	1.0
Te Aupōuri	3	1.0
Ngāti Apa (Rangitikei)	2	0.7
Ngāti Kahungunu, region unspecified	2	0.7
Ngāti Kauwhata	2	0.7
Ngāti Kuri	2	0.7
Ngāti Mutunga (Taranaki)	2	0.7
Ngāti Paoa	2	0.7
Ngāti Tama (Taranaki)	2	0.7
Te Whānau-a-Apanui	2	0.7
Waikato	2	0.7
Ngā Rauru	1	0.3
Ngāi Tai (Hauraki)	1	0.3
Ngāi Takoto	1	0.3
Ngāti Kahungunu ki Te Whanganui-a-Orotu	1	0.3
Ngāti Koata	1	0.3
Ngāti Maru (Hauraki)	1	0.3
Ngāti Rahiri Tumutumu	1	0.3
Ngāti Rangitīhi (Te Arawa)	1	0.3
Ngāti Rangiwēhē (Te Arawa)	1	0.3
Ngāti Raukawa, region unspecified	1	0.3
Ngāti Tahu-Ngāti Whāoa (Te Arawa)	1	0.3
Ngāti Wai	1	0.3
Rangitāne (Manawatū)	1	0.3
Rongomaiwahine (Te Mahia)	1	0.3

“What is the name of your Iwi or tribe?”	Number	%
Rongowhakaata	1	0.3
Taranaki	1	0.3
Te Aitanga-a-Māhaki	1	0.3
Te Ati Haunui-a-Papārangi	1	0.3
Te Roroa	1	0.3
Te Tai Rāwhiti (East Coast), region unspecified	1	0.3
Tuhourangi (Te Arawa)	1	0.3
Uenuku-Kōpako (Te Arawa)	1	0.3
Waikato/Te Rohe Pōtae (Waikato/King Country)	1	0.3
Waitaha (Te Arawa)	1	0.3





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