

Te Kaveinga – Mental health and wellbeing of Pacific peoples

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

JUNE 2018



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A note on the name of this report: The title of this report, *Te Kaveinga*, is the Cook Islands Māori term for guidance, or 'that which points out the way'. It was chosen as a name for this report to reflect the research and information contained in it, which may be used by other health researchers and policy makers as a compass to help guide future work in Pacific mental health.

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Foreword





Te Kaveinga - Mental health and wellbeing of Pacific peoples

By following the stars as they rise over the bow of the vaka, we know that the direction we are steering in will take us to destination - 'etu kaveinga.



As nga tangata o te moana nui a kiva – as peoples of the Pacific ocean, we are diverse and ever changing, in a changing world. Quantifying the mental health experiences of Pasifika peoples in New Zealand, therefore, is a complex but necessary challenge. Through an analysis of mental health prevalence, distribution and needs, patterns emerge. Through the accurate identification of patterns, areas of strengths and shortfalls become salient, and the strategic direction for both research, development of services, and focused delivery emerges; a strategic direction that enables scarce resource to be used wisely, with best effect for our people.

The current report provides an updated analysis of the mental health status of Pasifika peoples in Aotearoa - a bearing for those in research, service development, and delivery. This report builds on previous epidemiological studies such as Te Rau Hinengaro, the Youth 2000 studies and provides a clearer picture of variance seen.

Te Kaveinga highlights some real strengths amongst us - a clear majority of us are social and culturally connected and feel satisfied with our lives - indicating that we are steering in the right direction. Challenges are, however, evident - for our young, our elderly, and our vaine (women) psychological distress is relatively common. Amongst those of us who are multi-ethnic this is more pronounced, highlighting the need for focus on identity. Social isolation and exclusion are warnings of these challenges ahead. Accessing formal help remains a significant challenge, as does stigma towards psychological distress. These results highlight a need for specific responses in direction as we steer forward.

Te Kaveinga - Mental health and wellbeing in Pacific peoples gives a bearing point in our movements forward within the space of mental health. It is important that we acknowledge that we are moving in the right direction, however, challenges are present. As a collective and individually we do need to be aware and respond to these. For those in leadership, with the ability to steer us in the right direction this report gives unique and specific indicators of the direction we should take. I commend the writers of this report for providing us with this.

Kia manuia

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Key findings and implications

Te Kaveinga highlights key findings about mental health and wellbeing of Pacific peoples in 2015 and 2016 from two population surveys: the New Zealand Mental Health Monitor and the Health and Lifestyles Survey.

Key findings

- · Pacific peoples are well connected socially and culturally.
- · Cultural connectedness is weaker in multi-ethnic Pacific peoples and Pacific peoples whose heritage is from Pacific nations where there is a constitutional agreement with New Zealand (ie, Cook Islands Māori, Niueans and Tokelauans).
- Pacific peoples, on average, report higher psychological distress and depressive symptoms over the past 2 to 4 weeks than the Others (ie, non-Māori, non-Pacific people).
- The stigma surrounding mental health issues is high among Pacific peoples.
- Some Pacific peoples don't know where to get help for mental distress and awareness of national mental health websites is low.

Suggested mental health promotion implications

- · Diversify what 'culturally appropriate' health promotion looks like for Pacific peoples to ensure the wide range of Pacific peoples are reached by initiatives.
- · Raise awareness of the mental health care pathways available to Pacific peoples, including the national websites.
- · Reduce stigma among Pacific communities to help remove barriers to accessing care and social inclusion.
- · Continue to strengthen the Pacific mental health and addictions workforce to remove barriers to accessing care.
- · Through further research, explore how cultural identity relates to Pacific mental health and wellbeing, and how it could be used in innovative approaches to mental health promotion for Pacific peoples.

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Executive summary

Introduction

Te Kaveinga presents an analysis of the mental health of Pacific peoples. This is the first in-depth analysis of Pacific mental health using a nationally representative dataset since *Te Rau Hinengaro*, the previous NZ Mental Health Survey (data collected in 2003/04). The report summarises key findings on Pacific peoples' mental health in the topic areas of wellbeing, social and cultural connectedness, mental distress, and help-seeking knowledge, attitudes and behaviours. The report also examines intra-Pacific mental health by looking at mental health in multi-ethnic Pacific peoples¹ and cultural connectedness in Pacific peoples with constitutional rights as

The results for this report were derived from analysis of a pooled dataset, combining the 2015 and 2016 New Zealand Mental Health Monitor (NZMHM) with the 2016 Health & Lifestyles Survey (HLS). The pooled dataset was created to allow researchers to analyse mental health items for smaller subpopulations, such as various subgroups of Pacific peoples.

Methods

The NZMHM and HLS are both nationwide face-to-face surveys of adults aged 15 years and over. The surveys are conducted in people's homes using Computer Assisted Personal Interviewing (CAPI). The fieldwork for all three survey waves was completed over 18 months between July 2015 and December 2016. The pooled dataset included data collected from 6,777 respondents. Of these, there were 1,279 Pacific respondents included in the analysis for Te Kaveinga.

The analyses use a combination of weighted proportions and regression modelling. For all results on Pacific peoples only, descriptive statistics are presented showing the weighted proportions for various items for the Pacific respondents. For all comparative analyses, regression models were used to test for significant differences between groups. All regression analyses were adjusted to control for the potential confounding influence of population differences in age and gender structures. Only statistically significant differences are presented.

¹ Multi-ethnic Pacific peoples includes Pacific respondents who self-identified with Pacific ethnicity and at least one other non-Pacific ethnic group. The number of multi-ethnic Pacific peoples is increasing in New Zealand, particularly in younger age groups. Currently, over one-third (37%) of Pacific peoples identify with at least one other ethnicity in addition to their Pacific ethnic group (SNZ, 2014), Refer to Chapter 1 ('Introduction') of Te Kaveinga for further discussion.

² Pacific peoples from the Cook Islands, Niue and Tokelau have rights as New Zealand citizens because their Pacific Island nations hold constitutional agreements with New Zealand. Refer to Chapter 2 ('Methods') for details on intra-Pacific subgroup analysis.

Key findings

Wellbeing

Pacific peoples report high levels of overall wellbeing and family wellbeing

Of the Pacific respondents:

- 82% reported they were either satisfied or very satisfied with their life.
- 84% felt that the things they do in their lives were worthwhile or very worthwhile.
- 88% rated their family as doing well or very well.

Social connectedness

Pacific peoples are well connected with others socially

Of the Pacific respondents:

- 86% said they made an effort to see family and friends that they didn't live with.
- · 94% reported that they could always rely on a friend, family or whānau member for support.
- 75% indicated that it would be easy or very easy to find someone to help them in times of need.

Cultural connectedness

Pacific peoples are strongly connected to their culture

Of the Pacific respondents:

- 81% said they felt strongly connected to their culture.
- 82% felt that it was important to maintain a strong connection to their culture.

Pacific peoples are connected to their culture to varying degrees

Although overall Pacific respondents felt strongly connected to their culture and recognised the importance of maintaining a strong connection to their culture, there were some differences between the Pacific ethnic subgroups.

- · Within each Pacific ethnic subgroup, the proportion of respondents who agreed it was important to maintain a strong connection to culture was significantly lower in Cook Islands Māori (70%) than Samoans (88%) and Tongans (93%).
- · The proportion of respondents who agreed they felt strongly connected to their culture was significantly lower in both multi-ethnic Pacific/Other peoples (56%) and multi-ethnic Pacific/Māori (69%) than in sole-
- The proportion of respondents who agreed that maintaining a strong connection to their culture was important to them was significantly higher in the Pacific peoples who do not have constitutional rights as New Zealanders (90%) than in Pacific peoples who have constitutional rights as New Zealanders (64%). In other words, taken together Samoans and Tongans feel it is more important to maintain a strong connection to their culture than Cook Islands Māori, Niueans and Tokelauans combined.

Multi-ethnic Pacific/Other peoples includes respondents who self-identified with Pacific ethnicity and at least one other non-Maori, non-Pacific ethnic group (eq. Samoan and NZ European). Multi-ethnic Pacific/Māori peoples includes respondents who self-identified with Pacific ethnicity and Māori ethnicity. Sole-Pacific peoples includes respondents who self-identified solely with one (or more) Pacific ethnic group/s. Refer to the Methods chapter of Te Kaveinga for further details.

Mental Distress

Pacific peoples, like Māori, reported significantly higher mean psychological distress and depressive symptom scores than Others⁴ after adjusting for differences in age and gender

• On average, adjusted psychological distress (K-10) scores over the past four weeks were significantly higher in Pacific peoples (14.6) than in Others (13.9).

One-quarter (25%) of Pacific respondents had K-10 scores that suggested they experienced medium levels of psychological distress in the past four weeks; and 5% had scores consistent with high levels of psychological distress.

After adjusting for age and sex differences, Pacific were 1.2 times as likely to have experienced psychological distress as Others, although this was not statistically significant. In the NZ Health Survey, Pacific adults were shown to experience significantly higher levels of psychological distress – 1.5 times the rate in non-Pacific adults (MoH, 2016). The NZ Health Survey uses a larger sample size than this pooled dataset used for Te Kaveinga and so can detect such differences more precisely.

• On average, adjusted depression (PHQ-9) scores were significantly higher in Pacific peoples (4.2) than in Others (3.4).

14% of Pacific respondents had PHQ-9 scores suggesting they experienced moderate to severe levels of depressive symptoms in the past two weeks.

Psychological distress is more prevalent in Pacific young people and older adults

• The prevalence of medium to high levels of psychological distress (K-10 score ≥16) was significantly higher in young Pacific peoples aged 15 to 24 years (38%) and Pacific adults aged 45 to 64 years (35%).

Pacific peoples report a similar lifetime prevalence of mental distress to Others after adjusting for differences in age and gender

• 21% of Pacific peoples reported they had ever personally had an experience of mental illness, compared with 34% of Māori and 30% of the Other composite ethnic group (ie, non-Māori, non-Pacific people). The difference between Pacific and Others was not significant.

Social exclusion is strongly associated with experiencing mental distress

After controlling for the effects of age, gender and deprivation:

Pacific respondents who reported that there had been an occasion when they felt personally excluded
in a social situation over the past four weeks were more likely to report ever having an experience with
mental illness.

The Other composite ethnic group is an ethnic group comprised of all people who self-identified with any ethnic group other than Māori or Pacific (ie, NZ European, Asian and Middle Eastern Latin American African). Non-Māori, non-Pacific is commonly used as a reference group when making ethnic group comparisons with Pacific peoples because it removes Māori from the denominator when calculating rate ratios. This is useful when looking at health disparities and comparisons by ethnic groups because Māori and Pacific populations often show similar patterns.

Multi-ethnic Pacific/Other peoples experience higher levels of mental distress than sole-Pacific peoples⁵

For multi-ethnic Pacific/Other peoples, the estimated lifetime prevalence of mental distress was significantly higher than in sole-Pacific peoples. Results showed that (controlling for age and gender):

- Approximately 36% of multi-ethnic Pacific/Other peoples reported they had ever personally had an experience of mental illness, compared with 12% of sole-Pacific peoples.
- · Approximately 26% of multi-ethnic Pacific/Other peoples reported they had ever been diagnosed with a mental illness, compared with 3% of sole-Pacific peoples.

These results should be interpreted with some caution because of the small sample sizes.

Help-seeking attitudes and behaviours

Pacific peoples most frequently seek help from a friend, family or whānau member

Pacific respondents most frequently reported that, if they or someone they knew had depression or anxiety, they would first seek help from: a friend, family or whānau member; a doctor; or church/spiritual help.

- One-half (52%) of respondents said they would first seek help for depression by talking to a friend, family or whānau member; 21% would go to a doctor first; and 7% would seek church/spiritual help.
- 48% of respondents said they would first seek help for anxiety by talking to a friend, family or whānau member; 25% would go to a doctor; and 6% would seek church/spiritual help.

Some Pacific peoples don't know where to go for help

Some Pacific respondents reported that they didn't know where to go to for help, particularly for problems with anxiety.

- Almost one-quarter (24%) of Pacific respondents said they did not know where to go to for help if they or someone they knew had problems with anxiety.
- 15% of Pacific respondents said they did not know where to go to for help if they or someone they knew were experiencing depression.

Not many Pacific peoples are aware of or use the national mental health websites

Of the Pacific respondents:

- · 44% had heard of any New Zealand website for helping people find out about or helping them get through, depression.
- · 13% had heard of any New Zealand website for helping people find out about or find help getting through their problems with anxiety.

Unprompted awareness of the national mental health websites was low among the Pacific respondents.

- 28% were able to name the depression.org.nz and less than 1% were able to name thelowdown.co.nz without being specifically asked whether they had heard of those websites as ways to help people find out about, or get through depression.
- 15% were able to name the *depression.org.nz* and less than 1% were able to name *thelowdown.co.nz* without being specifically asked whether they had heard of those websites as ways to help people find out about, or find help to get through problems with anxiety.

Multi-ethnic Pacific/Other peoples includes respondents who self-identified with a Pacific ethnicity and at least one other non-Māori, non-Pacific ethnic group (eg, Samoan and NZ European). Sole-Pacific peoples includes respondents who self-identified solely with one (or more) Pacific ethnic group/s. Refer to the Methods chapter of Te Kaveinga for further details.

Pacific peoples report less positive attitudes towards others with mental distress

- Pacific respondents scored significantly lower than European/Others on three psychometric scales (MAKS, RIBS and CAMI⁶) that assessed their attitudes towards others with mental health issues. These results suggest that:
 - 1. Pacific peoples have higher levels of stigma-related mental health knowledge.
 - 2. Pacific peoples express more negative views of people with mental health issues and are less willing to interact with them.
 - 3. Pacific peoples express less kindness and less positive attitudes towards people with mental health issues.

The above key results for Pacific peoples have been summarised in this report and were originally reported in Deverick, Russell & Hudson (2017).

Discussion and Conclusions: Pacific mental health promotion priorities

Te Kaveinga presents the results from analysis of a pooled dataset combining the NZMHM and the HLS. Many of the results show that Pacific peoples are a resilient population – they report high levels of general wellbeing and family wellbeing; are well connected socially with their families and friends; and have, for the most part, retained strong connections to their Pacific culture in the New Zealand environment.

There is diversity in the mental health outcomes of Pacific peoples

This report highlights what other Pacific peoples already recognise: that there is diversity within the population which is masked or unrecognised when health data is analysed by combining all Pacific peoples into a single group. In Te Kaveinga, this diversity is seen in at least two places: (1) the poorer mental health outcomes in some multi-ethnic Pacific peoples; and (2) the differences in cultural connectedness among various Pacific subgroups.

Although we cannot ascertain what is driving the intra-Pacific differences from the surveys used for Te Kaveinga, we can, based on the wider Pacific literature, presume that it would be worthwhile focussing mental health promotion efforts on issues surrounding **identity.**⁷

Strengthening cultural identity can be important for Pacific mental health

Pacific peoples recognise that having strong identities are important for their mental wellbeing (eg, as reflected in Le Va resources on suicide prevention for Pasifika; Le Va, 2014). Therefore, it is important that future mental health promotion activities look more closely at addressing the ethnic identity issues experienced by multi-ethnic Pacific peoples, or the cultural identity issues experienced by NZ-born Pacific. Understanding and addressing issues in these Pacific subgroups is necessary because the number of NZ-born and multi-ethnic Pacific peoples is increasing in New Zealand, particularly in younger age groups. Over one-third (37%) of Pacific peoples, eg, are 'multi-ethnic' – they identify with at least one other ethnic group in addition to their Pacific ethnicity (Statistics New Zealand, 2014).

⁶ MAKS = Mental Health Knowledge Scale; RIBS = Reported and Intended Behaviour Scale; CAMI = Community Attitudes Towards the Mentally III Scale

Refer to section 1.2, Chapter 1 ('Introduction') of Te Kaveinga for discussion on Pacific identity and mental health.

At minimum, mental health promotion could prioritise research for Pacific peoples that further unpacks the identity issues experienced by Pacific youth. Such research, particularly qualitative research, is needed to examine what young Pacific peoples would find useful for helping support them to strengthen their identities in the New Zealand context. Young Pacific peoples need to be supported to develop strong Pacific identities if they are to become healthy Pacific adults who feel like they belong and are fully accepted in their communities.

Pacific mental health care pathways need to be diverse and innovative

Te Kaveinga also highlights the ongoing issues that Pacific peoples have in accessing mental health care. A notable proportion of the Pacific respondents didn't know where to get help for mental health issues, and many had poor awareness of the national mental health websites (depression.org.nz and thelowdown.co.nz).

Pacific peoples frequently reported that they would go to a friend or family member for help for mental health issues, but whether this leads to a clear path into effective treatment is unclear. The higher reported levels of stigma and negative attitudes towards those with mental health issues among Pacific peoples is of concern, particularly if this is the first point of call for help. Although Te Kaveinga could not look at suicide (it was not included in the NZMHM), qualitative research shows that young Pacific peoples who have attempted suicide see the stigma associated with mental health issues in Pacific communities as a barrier to their seeking help (eg, Tiatia-Seath, 2017).

It was not possible to gather a picture of mental health care pathways and service use among Pacific peoples from the NZMHM and HLS pooled dataset. What we can gather from the results here is firstly that we need to look further into the appropriateness of mental health promotion initiatives for Pacific peoples. This means ensuring that the diverse range of Pacific peoples (and identities) are catered for in our mental health promotion models. Second, we need to look into raising awareness of the various mental health care avenues available to Pacific peoples, including the national websites. Third, we need to continue our efforts in reducing the stigma of mental health issues among Pacific peoples as this will help those affected to feel safe discussing the issues with their families and also feel supported in their journey to recovery.

Alongside these mental health promotion activities, we need to continue to strengthen the Pacific mental health workforce and ensure our service delivery models are culturally appropriate. As with our health promotion efforts, this means ensuring that the diverse range of Pacific identities, values and worldviews are recognised and met appropriately.







1.1 Background

Pacific peoples in New Zealand

Pacific peoples make up 7.4% of the total New Zealand population (295,941 people) and are now the fourth largest ethnic population in the country (Statistics New Zealand; SNZ, 2014). 'Pacific peoples' is an overarching term used in New Zealand to refer to people whose ancestral origins stem from a number of different Pacific Island nations scattered throughout Polynesia and Melanesia (Bisley, 2008). The four largest Pacific groups in the 2013 Census were:

- · Samoan (49% of Pacific peoples)
- Cook Islands Māori (21% of Pacific peoples)
- Tongan (20% of Pacific peoples)
- Niuean (8% of Pacific peoples) (SNZ, 2014).

Pacific peoples are historically a migrant population, with increasing numbers arriving in New Zealand since the mid-1950s to meet local labour force demands (Bedford, 2008). Since migrations to New Zealand, the numbers of Pacific peoples born in New Zealand ('NZ-born') have grown. Increasing levels of ethnic intermarriage has also led to growth in the number of multi-ethnic Pacific peoples (Callister & Didham, 2008). Currently, almost twothirds (62%) of Pacific peoples are NZ-born and over one-third (37%) of Pacific peoples identify with at least one other ethnicity in addition to their Pacific ethnic group (SNZ, 2014). The majority of NZ-born and multi-ethnic Pacific peoples are children and young people aged up to 25 years (SNZ, 2014a).

Overall, Pacific peoples have a youthful demographic compared with the Other composite ethnic group (ie. non-Māori, non-Pacific people) in New Zealand. The Pacific population has the highest proportion of children aged 0 to 14 years in New Zealand, with 36% of the population in this age group. Over one-half (55%) of Pacific peoples are aged under 25 years (SNZ, 2014).

Pacific peoples are a culturally diverse and transnational population. Many Pacific peoples reside in both the Pacific Islands and New Zealand at some point in their lives, and continue to maintain close ties with their kin in their ancestral homelands (Lee, 2009). Although Pacific peoples share many common worldviews and values, there is some heterogeneity within the population. This is reflected in subtle variation in demographic and cultural indicators between specific Pacific subgroups. For example, larger proportions of Samoans and Tongans are able to hold an everyday conversation in their Pacific language (56% and 53% respectively) than Cook Islands Māori (13%) and Niueans (19%). Similarly, larger proportions of Cook Islands Māori and Niueans are NZ-born and identify with multiple ethnicities compared with Samoans and Tongans (see SNZ, 2014b; 2014c; 2014d; 2014e).

The mental health of Pacific peoples in New Zealand

Pacific peoples experience a significant burden of mental health in New Zealand. The New Zealand Health Survey found that Pacific adults were 1.5 times more likely than non-Pacific adults to report experiencing psychological distress in the previous four weeks (Ministry of Health; MoH, 2016). Despite reporting a high prevalence of mental distress, Pacific adults also report lower rates of diagnosed mental disorders than non-Pacific adults; this may either reflect their access to mental health services or different cultural concepts of mental distress (MoH, 2015).

An in-depth analysis of the mental health of Pacific peoples, based on a large nationally representative sample, has not been undertaken and published since the previous New Zealand Mental Health Survey - Te Rau Hinengaro, conducted in late 2003 and 2004. Results from this survey demonstrated that Pacific peoples experienced higher crude rates of mental disorders than Others (non-Māori, non-Pacific), although many of these differences were explained by underlying differences in the age and sex structure of the Pacific population (Foliaki, Kokaua, Schaaf & Tukuitonga, 2006). Within the Pacific population, anxiety and mood disorders were estimated to be more prevalent in Pacific females, whereas substance use disorders were more prevalent in Pacific males (Foliaki et al., 2006).

Mental health issues are a priority area for young Pacific peoples. Consistent with the distribution of mental health issues in the total NZ population, Te Rau Hinengaro showed that mental disorders were more prevalent in young Pacific peoples aged 16 to 24 years (Foliaki et al., 2006). Pacific secondary students report similar levels of depressive symptoms to NZ European students, but are more likely to report self-harm and three times more likely to report a suicide attempt in the previous 12 months (Fa'alili-Fidow et al., 2016). In a recent analysis of national mortality records, the incidence of suicide in Pacific young peoples aged 15 to 24 years (24.0 per 100,000) was significantly higher than in NZ European/Others (16.5 per 100,000), and was 2.5 times higher in young Pacific men than women (Tiatia-Seath, 2017).

Pacific peoples' use of mental health services

Overall, Pacific peoples are relatively low users of specialist mental health services compared with Others (ie, non-Māori, non-Pacific) (Foliaki et al., 2006; Kokaua, Schaaf, Wells & Foliaki, 2009). This is demonstrated by higher self-reported levels of psychological distress and lower self-reported use of mental health services compared with non-Pacific (MoH, 2015). Pacific peoples also tend to use community mental health services at lower rates than Others; this is reflected in their over representation in both inpatient and forensic mental health services (eg, Kokaua & Wells, 2009).

There are multiple barriers influencing Pacific peoples' low use of community mental health services. These are complex and beyond the scope of discussion in this report. In addition to the stigma of having mental health issues, many of these barriers to accessing care are similar to the barriers that impact Pacific access to primary health care (see Southwick et al., 2012). These include, for example: lack of culturally appropriate care models that align with Pacific worldviews and concepts of mental health; underrepresentation of Pacific peoples in the mental health workforce; socio-economic barriers (eg, lack of transport and cost); and lack of after-hours-care (Agnew et al., 2004; Faalogo-Lilo, 2012; Tiatia-Seath, 2014; Tiatia-Seath, 2017).

1.2 Contemporary issues in Pacific mental health

NZ-born and multi-ethnic Pacific peoples

The results from Te Rau Hinengaro demonstrated that the prevalence of mental disorders was significantly higher in NZ-born Pacific peoples compared with those born in their respective Pacific Island nations. Pacific peoples who migrated to New Zealand at younger ages were also over twice as likely to have any mental disorder compared with those who migrated at older ages (Kokaua et al., 2009). These 'NZ-born' and 'Island-born' differences have become of key interest to Pacific scholars and are frequently seen in the contemporary academic discourse on Pacific peoples in New Zealand (eg, Anae, 1997; Mila-Schaaf, 2011; Tiatia, 2012).

Patterns are also beginning to emerge when Pacific mental health data is analysed by multiple ethnic group affiliation, although, the evidence base is currently smaller and less robust. One key study has shown that Pacific peoples identifying with mixed Pacific/non-Pacific ancestry may have lower self-esteem and wellbeing than those identifying solely with Pacific or mixed Pacific/Pacific ancestry (Manuela & Sibley, 2014). This evidence is based on a relatively small sample that may not be representative of the entire Pacific population. There has been no published analysis of a nationally representative dataset that examines multiple Pacific ethnic group affiliation.

Pacific identity and mental health

Increasing numbers of NZ-born and multi-ethnic Pacific peoples are particularly important to consider for mental health because they are distinct markers of identity. Young Pacific peoples in particular need to balance multiple roles and values associated with these (sometimes conflicting) identities. This can be a source of significant psychological and emotional friction (Tiatia-Seath, 2017).

Much of the literature discusses NZ-born and Island-born Pacific wellbeing in terms of issues surrounding cultural identity. Scholars emphasise the tensions experienced by young NZ-born Pacific peoples when trying to negotiate multiple identities and establish their sense of belonging as an authentic Pacific person (eg, Anae, 2001; Tiatia, 1998; Mila-Schaaf, 2013).

Manuela and Sibley (2014) created the term 'identity tension' to describe the lower levels of self-esteem and wellbeing observed in multi-ethnic Pacific/non-Pacific peoples. They theorised that multi-ethnic Pacific/non-Pacific peoples might experience poorer mental health because they internalised negative social stereotypes associated with their Pacific identity. Keddell (2006), however, suggests that, similar to NZ-born Pacific, the reason might be more to do with Pacific/non-Pacific peoples' feeling like they don't belong or are not accepted by other Pacific peoples as being authentically Pacific. At the same time, this is possibly heightened because Pacific/non-Pacific peoples are seen by others in wider society as being 'Pacific', and, as such, they experience similar levels of racial discrimination and social stereotyping. In other words, multi-ethnic Pacific/non-Pacific struggle to establish an identity with either of their ethnic groups, and may feel socially excluded or isolated. This struggle to feel a sense of belonging and acceptance is evidenced in qualitative research with 'afakasi' Samoans (see Agee & Culbertson, 2013; Berking et al., 2007; Keddell, 2006).

It is widely recognised among Pacific peoples that having a strong cultural identity is important for mental wellbeing and also for suicide prevention (Le Va, 2014). A strong Pacific cultural identity -eg, language speaking ability, knowledge of traditional customs, worldviews and one's genealogy - can enhance young Pacific peoples' sense of belonging, enable them to participate fully in Pacific community activities, and help them remain connected to their wider families (Taumoefolau, 2013). Pacific peoples view identity as having an important influence on their mental wellbeing. Because of this, supporting young people to develop strong cultural identities is a key intervention area to consider for Pacific mental health promotion.

A need for an updated and nuanced understanding of Pacific mental health

The Pacific population has undergone considerable demographic change since the survey fieldwork on Te Rau Hinengaro was conducted (between October 2003 and December 2004). The numbers of NZ-born Pacific peoples have increased, as well as the numbers of Pacific peoples identifying with multiple ethnicities (SNZ, 2014). From a health promotion policy perspective, it is pertinent that we have an in-depth and current picture of the mental health of Pacific peoples. Initiatives are more likely to be relevant, culturally appropriate, and effective, when guided by evidence that identifies key focus points and subsections of the Pacific population for targeted interventions.

^{&#}x27;Afakasi is the Samoan word for a person who is/has mixed Pacific and European ancestry.

1.3 This report

This report presents key results from analyses from the 2015 and 2016 survey waves of the NZ Mental Health Monitor (NZMHM), analysed together with the mental health module from the 2016 Health & Lifestyles Survey (HLS). Data were pooled together from these two surveys to enhance statistical power and enable a more in-depth investigation of the relationships between variables of interest for specific Pacific subgroups (eg., Samoan, Cook Islands Māori, Tongan and Niuean).

Analysing Pacific mental health information by specific subgroups is important because there is increasing evidence across a wide range of mental health outcomes and correlates that there is heterogeneity among Pacific peoples (eg, Foliaki et al, 2006; Paterson, Tautolo, Iustini & Taylor, 2016). For example, Cook Islands adults have higher rates of substance use disorders than non-Cook Islands Pacific peoples (Kokaua & Wells, 2009). Cook Islands secondary students are also more likely to report binge drinking than Samoans (Fa'alili-Fidow et al, 2016).

This report presents the findings for the Pacific sample analysed in three different ways:

- 1. Basic proportions showing weighted responses to survey question items for the Pacific sample, presented in Chapters 3 to 6.
- 2. Ethnic group comparisons showing Pacific results compared with the Other composite ethnic group (ie, non-Māori, non-Pacific people) reference group. Results for Māori are also shown alongside these comparisons.
- 3. Intra-Pacific comparisons showing results for various Pacific subgroups. In this report, the Pacific subgroups examined in separate data analyses were:
 - a. The three largest Pacific ethnic subgroups (Samoan, Cook Islands Māori, Tongan) and a residual group of Other Pacific.
 - b. Multi-ethnic Pacific peoples, defined as those who self-identified with Pacific ethnicity and at least one other ethnic group.
 - c. Pacific ethnic subgroups broken down by those who hold constitutional rights as New Zealanders (Cook Islands Māori, Niuean and Tokelauan) and those who do not (Samoans and Tongans), with a residual group of Other Pacific.

Results on multi-ethnic Pacific peoples and Pacific peoples with constitutional rights as New Zealanders are presented separately in chapter 7 of this report. A summary of the various Pacific subgroups included in the intra-Pacific comparisons is shown in Table 2-3 in Chapter 2.

For all ethnic group and intra-Pacific comparisons, the results included in this report were adjusted for population differences in age and gender. Analyses were also adjusted for socioeconomic deprivation and these are referred to throughout the report where the results remained significant after adjustment. Only statistically significant differences at the conventional p < .05 level are included in this report.

Terminology

Unless a survey item specifically used the term 'mental illness', throughout this report the terms 'mental distress' and 'mental health issues' are used to broadly refer to: those who have been diagnosed with mental illness; those who report having experienced challenges with their mental health; and those whose scores on the various psychometric scales included in the NZMHM indicated some level of psychological distress or disorder.

Using the terms 'mental distress' and 'mental health issues', shifts the paradigm away from a purely biomedical understanding of mental health and also away from the focus on deficit models of health. This is more consistent with Pacific views of health and wellbeing which are holistic, strengths-based, and, within the context of mental health promotion, emphasise positive mental health states and identifying protective factors (Anae et al., 2002).

1.4 Limitations

The NZMHM did not include items on place-of-birth or years since migration to New Zealand. Pacific mental health outcomes have been shown to vary significantly by place-of-birth and migration status: NZ-born Pacific peoples and those who migrated to New Zealand at younger ages generally have poorer mental health than Island-born Pacific and older migrants (Foliaki et al, 2006; Kokaua, et al., 2009). This means that both place-ofbirth and migration status are potentially confounding factors, or at least need to be examined when analysing Pacific mental health data. Because the NZMHM did not include question items on these factors, they were not included in regression models or stratified analyses of the pooled dataset.

The NZMHM and HLS use questionnaires that rely on respondents' self-reported experiences, knowledge and behaviours around mental health and awareness. Like all self-reported measures, these are subject to a range of biases that mean the estimated results may not represent the actual prevalence of mental distress, knowledge and behaviours seen in the population surveyed. For example, social desirability bias, when respondents answer survey questions in ways they think are deemed more socially acceptable, is common with questions on mental health attitudes (Corrigan & Shapiro, 2010) and other sensitive topics (Krumpal, 2013).

The NZMHM uses a range of psychometric scales which assess mental health attitudes, knowledge and levels of distress in accordance with Western views of mental illness. Many of these scales were developed in populations in other countries. We are not aware of any extensive studies on the validity of the K10 and other scales for the Pacific population in New Zealand. It is worth noting that Pacific peoples' views of mental health, being more holistic, and partly spiritual,9 are not necessarily captured in these scales. For example, the MAKS (Mental Health Knowledge Scale), which assesses mental health knowledge, includes a range of items which are predominantly aligned with a biomedical concept of mental health and models of care.

Using a pooled dataset means the sample size varies for each survey item, and some results are more precise than others. Throughout the report sample sizes (n) are stated below each figure or in the text where no figures are presented. Analysis with a pooled dataset can introduce error if there are differences over time (between each survey wave); this is why the pooled datasets were restricted to combining the two NZMHM waves with only the 2016 HLS.

For the intra-Pacific analyses, it should be noted that the Pacific sample in the pooled dataset may not be representative of the Pacific population in New Zealand. In particular, the Cook Islands group is underrepresented in the pooled dataset. Cook Islands Māori make up 21% of the Pacific population in New Zealand, whereas only 17% of the pooled dataset were Cook Islands Māori (SNZ, 2014).

Because the occurrence of mental distress is not very prevalent in the population at any given time and Pacific peoples is a small population, the ability to detect differences within the Pacific sample is limited. Although some of the intra-Pacific differences included in this report reached statistical significance, these results should be interpreted with caution as the models, being based on small numbers are less reliable and have more error (ie, larger 95% confidence intervals) around the estimates. Because the patterning of results is supported by other findings in the Pacific academic literature, and are likely to be of interest in guiding future Pacific health research with larger sample sizes, they have been included in this report.

See Agnew et al. (2004) for an in-depth discussion on Pacific peoples' concepts of mental health and mental health care models.



Data for this report were sourced from the 2015 and 2016 New Zealand Mental Health Monitor (NZMHM) and the 2016 Health and Lifestyles Survey (HLS) pooled dataset. Key aspects of the methods for the NZMHM and the HLS are summarised below, as well as an overview of methods used in pooling the surveys together.

Details on the methods used in pooling survey data together from the 2015 and 2016 NZMHM and the 2016 HLS can be found on the HPA website (HPA, 2017).

Specific details on the survey methodologies, including the sampling, recruitment, selection processes and interviewing procedures, can be found in the three survey methodology reports: NRB (2015), HPA (2016), and HPA (2017b).

2.1 Ethics

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

The NZMHM and the HLS are voluntary surveys. The voluntary nature of the surveys were explained to potential participants during recruitment (in the HPA's survey brochure and on the website), as well verbally by interviewers and in consent forms given prior to each survey participant's interview.

The two NZMHM survey waves and the HLS were conducted through face-to-face interviews, which is particularly important given the sensitivity of the topics within the surveys. Respondents were assured their responses to the questions would be kept confidential (protected by the Privacy Act 1993) and stored electronically in non-identifiable records. Participants were informed that all analyses would only be aggregated to a group level, to ensure that the information they provided was not identifiable.

2.2 Sampling frames and recruitment

The NZMHM and HLS are both nationwide face-to-face surveys of New Zealand adults aged 15 years and over. Participants were recruited into the surveys using an area-based frame made up of New Zealand Census 2013 meshblocks¹⁰ as a sampling frame.

Booster samples were used to adequately represent some groups. In the HLS, these were Māori and Pacific and in the NZMHM, young people aged 15 to 24 were also boosted.

2.3 Data collection

The interview procedures involved face-to-face interviews in respondents' homes, with a Computer Assisted Personal Interview (CAPI) methodology. Showcards with predetermined response categories were used to assist respondents where appropriate. The fieldwork for all three surveys took place over an 18 month period, from July 2015 to December 2016.

 $^{10 \}qquad \hbox{A meshblock is the smallest geographic area unit used by Statistics New Zealand to report statistical data (SNZ, 2016)}.$

Response rates

The response rate is a measure of how many of the people selected to take part in the survey actually participated. It describes the success of the study in terms of achieving cooperation from the population being measured. A high response rate suggests the survey results are more representative of the New Zealand adult population. The unweighted response rates were: 59% for the 2015 NZMHM, 71% for the 2016 NZMHM, and 75% for the 2016 HLS.11

2.4 Questionnaire

Questionnaires for the NZMHM and HLS can be found in the following three reports published on the HPA's website: NRB (2015a), HPA (2016a), and HPA (2017c).

2.5 Pooled data

Using data pooled from both waves of the NZMHM and the HLS enhances statistical precision. This is particularly important for analysing data on Pacific mental health because of the generally low prevalence observed for the outcomes and the small size of the Pacific population. Examining data at the Pacific subgroup level is seldom conducted in New Zealand but, by pooling data, a sufficient sample size can be achieved to conduct these analyses.

Three criteria were considered before pooling the data and steps were taken to ensure the pooled data was robust:

- 1. Are survey designs the same? A few small differences existed but they were similar enough to expect no significant effect in the survey estimates.
- 2. Are the survey samples independent? No, but they were made to be independent by removing 100 respondents.
- 3. Are the questionnaires the same? Do the variables mean the same thing? Only items that were asked in the same way were harmonised.

An adjustment was done to the survey weighting to ensure that estimates relate to the 2016 NZMHM target population.

Full details of the creation of the pooled dataset are in the report: New Zealand Mental Health Monitor and Health and Lifestyles Survey: Methods report for the combination of three survey datasets (HPA, 2017).

For the weighted response rates see: New Zealand Mental Health Monitor and Health and Lifestyles Survey: Methods report for the combination of three survey datasets (HPA, 2017)

Respondents

In total, there were 1,279 Pacific respondents in the pooled dataset. Ethnicity of respondents in the surveys is shown in Table 2-1. To ensure statistical independence, 100 respondents were removed from the pooled dataset. This means that the sample sizes in the original datasets do not sum to the pooled sample sizes.

Table 2-1: Survey respondents* in the NZMHM and HLS

	Original datasets			Pooled dataset		
	2015 NZMHM	2016 NZMHM	2016 HLS	Items from 2015 and 2016 NZMHM only	Items from NZMHM and HLS	
Other	862	997	2,309	1,843	4,129	
Māori	270	341	930	607	1,515	
Pacific	269	344	706	612	1,279	
Samoan	131	136	329	267	579	
Cook Islands Māori	51	62	134	112	232	
Tongan	48	75	142	123	257	
Niuean	17	30	41	47	88	
Other Pacific	30	58	97	88	184	
Total	1,377	1,646	3,854	3,002	6,777	

^{*}Total response ethnicity.

Note: Numbers of respondents in each Pacific subgroup do not sum to the total numbers of Pacific respondents because these numbers were obtained using Total response ethnicity output (see MoH, 2017). This means those respondents identifying with multiple Pacific ethnic groups may be counted more than once (in each of the ethnic groups they identified with).

Profile of Pacific respondents

A basic profile of the Pacific respondents by the major socio-demographic factors included in the data analysis is presented in Table 2-2.



Table 2-2: Profile of Pacific survey respondents* by socio-demographic correlates

Socio-demographic characteristics	Number in pooled dataset (n=1,279)	%		
Gender				
Female	794	62.1		
Male	484	37.8		
Age group (years)				
15-24	249	19.5		
25-44	575	45.0		
45-64	345	27.0		
65+	110	8.6		
Deprivation (NZDep2013)#				
Low (least deprived): 1-3	61	4.8		
Moderate: 2-7	236	18.5		
High (most deprived): 8-10	982	76.8		

^{*} Total response ethnicity.

Note: proportions are not survey weighted.

2.6 Data analysis and weighting

Weighting

Estimation weights were applied to the pooled dataset to ensure that no specific population was over or under-represented in survey estimates. Estimation weights can be thought of as the number of people in the population represented by a given survey participant.

For a more detailed description of the weighting procedure, refer to the Methodology Reports for the NZMHM and HLS.

Data analysis

The analysis presented in this report is mainly descriptive in nature, including weighted proportions for Pacific peoples (by total response ethnicity) in the pooled dataset. Because a pooled dataset was used, and some questions were not asked in all three of the surveys, the sample size n has been presented alongside each graph, as well as the surveys that the data in the graph is from.

Some comparisons by ethnicity have been made between Pacific peoples, Māori, and the Other composite ethnic group (ie, non-Māori, non-Pacific people). For these analyses, odds ratios adjusted for age and sex have been reported and were only included for survey items where there were significant differences at the $\rho < .05$ level. As well as adjusting for age and sex, all ethnic group comparisons were also adjusted for the potential confounding influence of deprivation (NZDep2013). For simplicity, only the age and sex adjusted results are presented in the report, although, where the results remained significant after adjusting for deprivation, these are mentioned throughout the report.

^{*} Based on the New Zealand Deprivation Index, 2013 (Atkinson, Salmond & Crampton, 2014).

For ethnic group comparisons, all logistic and linear regression analyses used prioritised ethnicity output¹² because this simplifies the modelling process. For the specific purposes of this report and to increase Pacific sample sizes, the Level 1 prioritisation scheme was modified to prioritise Pacific respondents.¹³ This means that those who identified as Pacific and Māori, were counted in the Pacific ethnic group. For all other forthcoming reports on the NZMHM, these respondents are included in the Māori ethnic group.

All mental health outcomes included in chapter 5 were analysed for differences between the largest Pacific ethnic subgroups. For these a prioritised ethnicity system has been used to allocate those with more than one Pacific ethnicity to a single mutually exclusive Pacific group. The Pacific subgroups used in the analyses were Tongan, Cook Island Māori, Samoan and a residual 'Other' Pacific group. Allocation to the subgroups were prioritised in order of smallest to largest: Tongan > Cook Island Māori > Samoan¹⁴ and the remaining respondents were allocated to the Other Pacific subgroup.

For chapter 7, all mental health outcomes included in chapter 5 were analysed for differences between: (1) Multi-ethnic Pacific subgroups and (2) Pacific peoples with constitutional rights as New Zealanders.

- 1. **Multi-ethnic Pacific peoples**: Three discrete groups for the multi-ethnic Pacific analysis (sole-Pacific, Pacific/Māori and Pacific/Other) were created using a sole/combination ethnicity output approach.¹⁵
- 2. Pacific peoples with constitutional rights as New Zealanders: The same Level 2 ethnicity prioritisation scheme described above was used to allocate respondents into mutually exclusive Pacific subgroups, with Tokelauan (the smallest Pacific group) prioritised first. Respondents in the prioritised Pacific subgroups were then used to form two aggregate Pacific subgroups, based on the presence or absence of a constitutional agreement between the Pacific Island nation and New Zealand. Pacific peoples from the Cook Islands, Niue and Tokelau have rights as New Zealand citizens because their Pacific Island nations hold constitutional agreements with New Zealand. To make the analysis more robust, only Samoans and Tongans were included in the 'non-NZ Constitutional Agreement' subgroup. This is because these two Pacific ethnic subgroups share a similar history of migration to New Zealand (arriving at similar time periods) and share similar cultural demographics in terms of language retention and proportions of NZ-born (see Table 7–1, Chapter 7). Other Pacific peoples, particularly Fijians, ¹⁶ have a relatively recent New Zealand migration history; therefore, because Pacific mental health outcomes have been shown to vary by migration status, it was decided to separate these Pacific peoples out into a residual Other Pacific subgroup. The various Pacific subgroups included in the analyses are summarised in Table 2–3.

Care was taken in the analysis of the K-10 scale because the distribution of scores was highly skewed towards the low psychological distress end. Various data transformations (eg, log base 10) were explored to attempt to check that statistical conclusions are robust despite this skewness. Results showed the same patterns as the non-transformed analysis. Because of this and to keep interpretations simple, analysis such as linear regression was done on the non-transformed K-10 scores.

In this report, 95% confidence intervals (CIs) were estimated using the jackknife method of variance estimation.

¹² In prioritised ethnicity output each respondent is allocated to a single ethnic group using the prioritisation tables from the Ethnicity Data Protocols: This ensures that ethnic groups of policy importance are not swamped by the NZ European group (MoH, 201)

¹³ There were 91 respondents that identified with both Māori and Pacific ethnicities. Using prioritised ethnicity output in accordance with the Ethnicity Data Protocols results in significant loss of Pacific respondents to the Māori ethnic group, particularly children and young people (Didham & Callister, 2012).

¹⁴ This ethnicity output prioritisation scheme is based Level 2 Pacific ethnicity codes in the Ethnicity Data Protocols (MoH, 2017).

¹⁵ Sole/combination ethnicity output is used to categorise respondents identifying with only one ethnicity (eg, sole-Pacific) and others identifying with more than one ethnicity (eg, Pacific/Māori and Pacific/Other). Pacific/Other peoples includes respondents who self-identified with a Pacific ethnicity and at least one other non-Māori, non-Pacific ethnic group (eg, Samoan and NZ European). This form of ethnicity output is relatively uncommon in the health and disability sector

¹⁶ Growth in the Fijian Pacific population was significantly higher than in the other Pacific groups over the previous census years, increasing by 46.5% between 2006 and 2013 (SNZ, 2014).

Table 2–3: Pacific subgroups used in Intra-Pacific analyses

Pacific subgroups analysis	Pooled sample size (n)	%	
Pacific ethnic subgroups, n=1,279			
Samoan	555	43.4	
Cook Island Māori	223	17.4	
Tongan	251	19.6	
Other Pacific	250	19.6	
Multi-ethnic Pacific peoples, n=1,279			
Sole-Pacific	969	75.8	
Multi-ethnic Pacific/Māori	91	7.1	
Multi-ethnic Pacific/Other	219	17.1	
Pacific peoples with constitutional rights as New Zealanders, n=1,279			
NZ Constitutional Rights	322	25.2	
(Cook Island Māori, Niuean, Tokelauan)	322	25.2	
Non-NZ Constitutional Rights	804	62.9	
(Samoan, Tongan)	804	62.9	
Other Pacific	153	12.0	

Note: proportions are not survey weighted



3. Pacific wellbeing

3.1 Overall Pacific wellbeing

Wellbeing is a broad term that encompasses multiple and interrelated dimensions of health - this includes the physical, mental, emotional, social and spiritual dimensions of health commonly described in Pacific models of health (Fa'alili-Fidow et al, 2016). Wellbeing as a concept is multi-dimensional; it is more than the absence of illness as it includes the presence of positive aspects of health, such as 'sense of meaning in life' (Jarden, Jarden & Oades, 2017). Because of the multi-dimensional nature of wellbeing, it may be conceptualised and measured globally using high-level subjective indicators, such as life satisfaction, or by examining its various dimensions separately.

Pacific cultural identity is closely related to wellbeing and the two constructs are commonly considered together by Pacific peoples (Manuela & Sibley, 2014a). Pacific identity is connected to mental wellbeing because it impacts one's feelings about belongingness, acceptance and inclusion (Mila-Schaaf, 2013). Other aspects of wellbeing seen as being important to Pacific peoples include: family support and relationships, being connected with Pacific communities and wider society, having a religion or spirituality, and having the personal and cultural resources to be able to act within Pacific cultural settings (Manuela & Sibley, 2015).

Life satisfaction

When NZMHM respondents were asked to rate their overall satisfaction with their life as a whole in 2015 and 2016, the majority (82%) reported being either satisfied or very satisfied with their life (Figure 3-1).

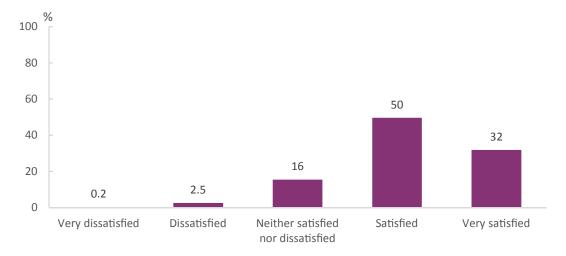


Figure 3-1: Overall Pacific life satisfaction

n=612; 2015 and 2016 NZMHM

Meaning in life

In 2015 and 2016, respondents were asked "to what extent do you feel the things you do in your life are worthwhile?" Over 4 in 5 (84%) Pacific people reported feeling that the things they do in their lives were worthwhile or very worthwhile (Figure 3-2).

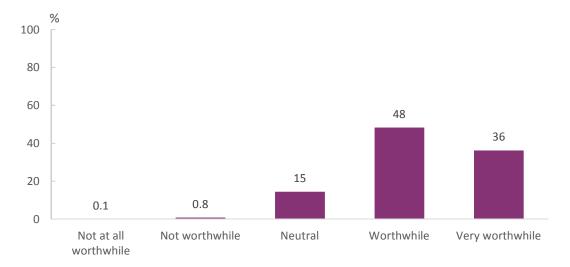


Figure 3-2: Overall extent to which Pacific peoples feel the things they do in life are worthwhile n=612; 2015 and 2016 NZMHM

3.2 Family wellbeing

Perceived family wellbeing

When Pacific respondents in 2015 and 2016 were asked to rate how well their family were doing, almost 9 in 10 (88%) reported that their family was doing well or very well (Figure 3-3).

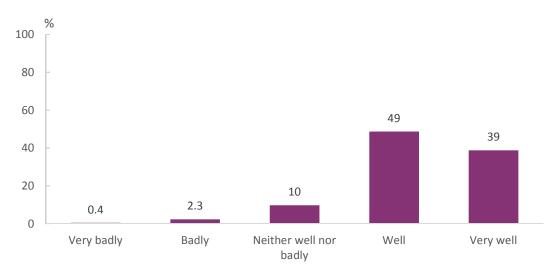


Figure 3-3: Pacific self-rated family wellbeing

n=612; 2015 and 2016 NZMHM

Perceived family cohesion

In 2015 and 2016, almost 9 in 10 (89%) Pacific respondents reported that their family got along with one another well or very well. Over one-half (55%) of Pacific peoples reported that their family got along with one another very well (Figure 3-4).

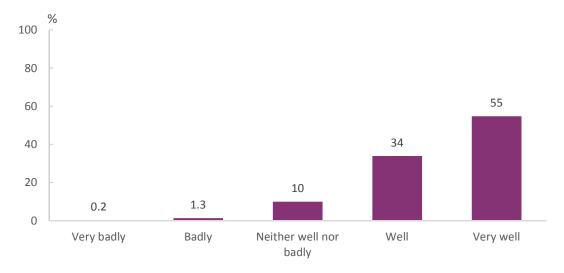


Figure 3-4: Pacific self-rated family cohesion

n=612; 2015 and 2016 NZMHM

3.3 Life difficulties and everyday stresses

Perceived life difficulty in past 12 months

In 2015 and 2016, almost one-third (30%) of Pacific respondents agreed or strongly agreed with the statement that the last 12 months had been among the most difficult times of their life. One in 10 Pacific respondents strongly agreed that the last 12 months had been among the most difficult in their life (Figure 3-5).

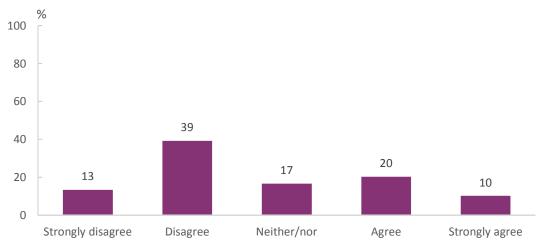


Figure 3-5: Pacific perceived life difficulty in the past 12 months

n=1279; pooled from 2015, 2016 NZMHM and 2016 HLS

Ability to cope with everyday life stresses

Most Pacific respondents (86%) agreed or strongly agreed that they were able to cope with everyday stresses of life in 2015 and 2016 (Figure 3-6).

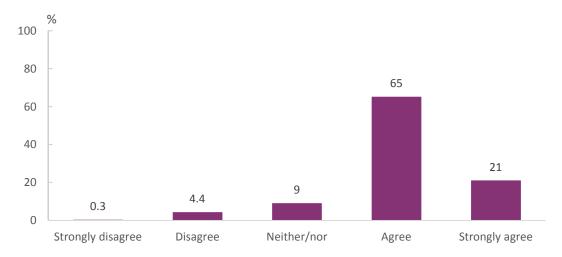


Figure 3-6: Pacific perceived ability to cope with everyday life stresses

n=612; 2015 and 2016 NZMHM



4. Pacific social and cultural connectedness

Pacific peoples share a holistic concept of health, and as part of this, they recognise the important roles that strong social connections to Pacific communities and Pacific culture play in mental wellbeing.

For most Pacific peoples, the family - the 'aiga, kaiga, magafoa, kopu, tangata, vuvale, or famili - is the centre of their way of living; it provides the foundation for their health and wellbeing as well as their links with the wider community (MoH, 2014). Healthy social relationships are vital to Pacific peoples' wellbeing and a sense of purpose in life (Le Va, 2014). The relational spaces between Pacific peoples, or the $v\bar{a}^{17}$, are important for their sense of belonging in their Pacific communities. It is the space, for example, in which NZ-born Pacific peoples form their cultural identities and find ways to feel accepted in their wider Pacific communities (Mila-Schaaf, 2013).

It should be noted that not all Pacific subgroups have remained equally connected to their Pacific cultures in New Zealand. For example, language retention, a population-level indicator of cultural identity, is much lower in Cook Islands Māori (13%) and Niueans (19%) than in Samoans (56%) and Tongans (53%) (Ministry of Social Development; MSD, 2016). As well as being an indicator of cultural identity, language impacts Pacific peoples' social connectedness; it enables them to maintain links with Pacific Island-based kin and is highly regarded among Pacific peoples as an important marker of authentic Pacific identity (Tamoefolau, 2013). In this sense, language also impacts Pacific peoples' belongingness.





Vā is a concept in Samoan and Tongan cultures that refers to the relational spaces between peoples. This includes the social ways people relate to each other as well as how they relate spiritually and to their wider cultural environment (Anae, 2010).

4.1 Pacific social connectedness

Connectedness with family and friends

Overall, Pacific respondents reported being well connected socially with family and friends. In 2015 and 2016, almost 9 in 10 (87%) Pacific peoples agreed or strongly agreed that they made an effort to see family and friends that they didn't live with (Figure 4-1).

Most Pacific respondents (94%) reported that they could always rely on a friend, family or whānau member for support (Figure 4-2).

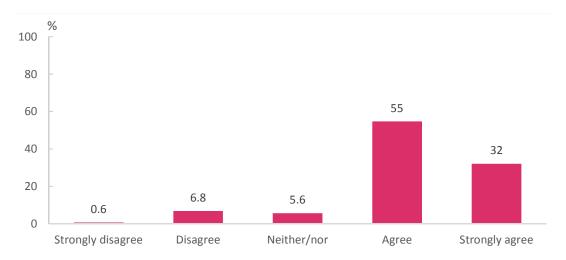


Figure 4-1: Pacific reporting they make an effort to see family and friends they don't live with n=1279; pooled from 2015, 2016 NZMHM and 2016 HLS

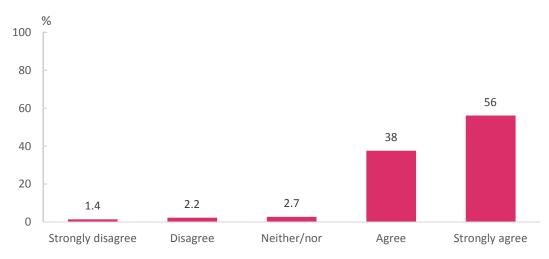


Figure 4-2: Pacific reporting they can always rely on a friend, family or whānau member for support n=1279; pooled from 2015, 2016 NZMHM and 2016 HLS

Perceived social support

In the 2016 NZMHM, respondents were asked "how easy or difficult would it be to find someone to help you in times of need, such as providing a place to stay if you suddenly needed one, or looking after pets while you're away from home?" 1 in 4 (75%) Pacific respondents indicated that it would be easy or very easy to find someone to help them in times of need (Figure 4-3).

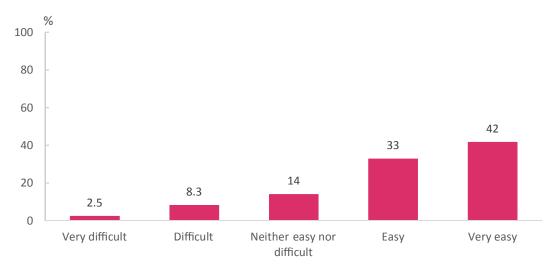


Figure 4-3: Pacific difficulty or ease finding someone to help them in times of need n=612, 2015 and 2016 NZMHM

When comparing perceived social support across ethnic groups, the adjusted prevalence of Pacific respondents (76%) who reported they could easily find someone to help them in times of need was significantly lower than in Others (87%) (Figure 4-4). The odds of reporting that it was easy to find someone to help them in times of need was significantly higher among Others (odds ratio (OR)=0.47; 95% confidence interval (CI): 0.31, 0.70). This result remained significant even after controlling for differences in deprivation (NZDep2013) between Pacific and Others, suggesting there are reasons over and above deprivation that explain this significant result for Pacific peoples (Table 4-2).

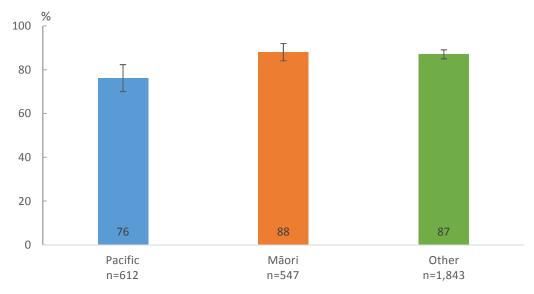


Figure 4-4: Prevalence of respondents reporting they can easily find someone to help them in times of need, by ethnicity (adjusted for age and gender)

n=3.002, 2015 and 2016 NZMHM

Social isolation

In 2015 and 2016, a small proportion of Pacific respondents reported they felt socially isolated most of the time (4%) or all of the time (2%) in the previous four weeks (Figure 4–5). Just over one-third (34%) of Pacific respondents indicated they felt isolated from others a little, or some of the time. The majority of Pacific respondents (60%) stated they did not feel isolated from others in the last four weeks.

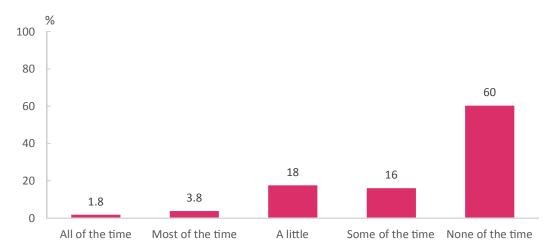


Figure 4-5: Pacific reported feelings of social isolation in past 4 weeks

n=1279; pooled from 2015, 2016 NZMHM and 2016 HLS

4.2 Pacific cultural connectedness

Four out of five Pacific respondents (81%) agreed or strongly agreed that they felt strongly connected to their culture in 2015 and 2016 (Figure 4–6). One-half of Pacific respondents strongly agreed that they felt a strong connection to their culture.

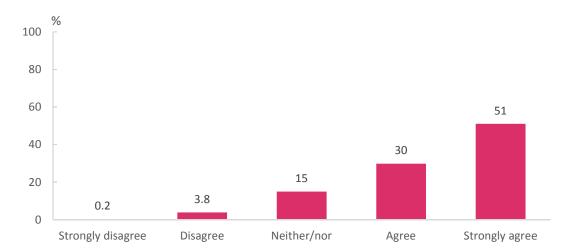


Figure 4-6: Pacific reporting feeling strongly connected to their culture

n=612, 2015 and 2016 NZMHM

Four out of five Pacific people (82%) agreed or strongly agreed with the statement "maintaining a strong connection to my culture is important to me" (Figure 4-7).

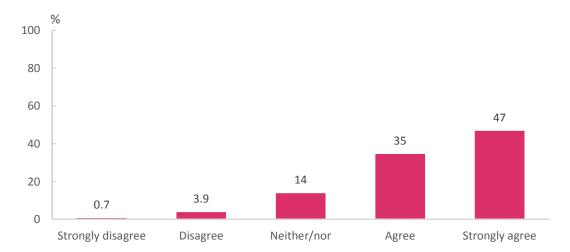


Figure 4-7: Pacific importance of maintaining a strong connection to their culture n=1279; pooled from 2015, 2016 NZMHM and 2016 HLS

Overall, Pacific peoples showed a strong connection to their culture. The adjusted odds of Pacific respondents reporting they felt a strong connection to their culture (OR=2.6; 95% CI: 1.2, 5.5), or that maintaining a strong connection to their culture was important to them (OR=3.2; 95% CI: 2.0, 5.2), was three times higher than in Others (Table 4-2).

When comparing between the various Pacific ethnic subgroups, the estimated prevalence of agreeing it was important to maintain a strong connection to culture was significantly lower in Cook Islands Māori (71%) than Samoans (89%) and Tongans (94%) (Cook Islands vs Samoan OR=0.31; 95% CI: 0.16, 0.60, Cook Islands vs Tongan OR=0.16; 95% CI: 0.08, 0.35) (Figure 4-8). There were larger proportions of neutral respondents (ie, those who neither agreed nor disagreed that maintaining a strong connection to their culture was important) among Cook Islands Māori and Other Pacific (Table 4-1).

For Other Pacific, the odds of agreeing it was important to maintain a strong connection to their culture (71%) were significantly lower than Tongans (OR=0.16; 95% CI: 0.04, 0.63) but not significantly different from Samoans. The distributions of responses across the Pacific ethnic subgroups, including the proportions of neutral responses, are shown in Table 4-1.

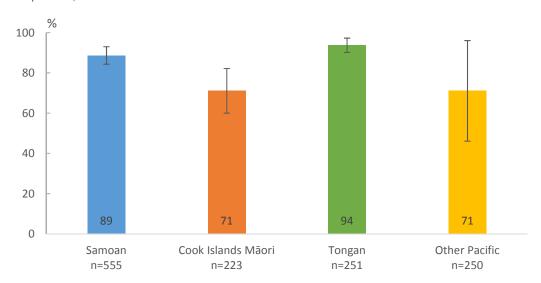


Figure 4-8: Importance of maintaining a strong connection to culture, by Pacific ethnic subgroup (adjusted for age and gender) n=1279; pooled from 2015, 2016 NZMHM and 2016 HLS

Table 4–1: Importance of maintaining a strong connection to culture, by Pacific ethnic subgroup.

	Agree %	Neither agree nor disagree %	Disagree %
Pacific ethnic subgroup	(95% CI)	(95% CI)	(95% CI)
Samoan	88.3	9.3	2.4
	(84.0, 92.7)	(5.3, 13.3)	(0.6, 4.2)
Cook Islands Māori	70.3	21.0	8.6
	(58.7, 82.0)	(10.6, 31.5)	(1.7, 15.5)
Tongan	93.3	4.0	2.7
	(89.7, 96.9)	(1.5, 6.5)	(0.1, 5.2)
Other Pacific	71.0	22.3	6.8
	(49.7, 92.2)	(0,44.7)	(2.1, 11.5)

n=1279; pooled from 2015, 2016 NZMHM and 2016 HLS

Note: These weighted proportions are not adjusted for age or gender.

Table 4–2: Summary of significant Pacific survey items and mental health outcomes, by ethnicity

		Prevalence (%) (95% CI)		OR* Pacific vs Others
	Pacific	Māori	Other	(95% CI) [p-value]
Perceived social support [respondents who agreed it would be easy to find someone to help them in times of need]	76.2 (70.0, 82.3)	88.0 (84.1, 91.9)	87.0 (85.0, 89.1)	0.47# (0.32, 0.70) [0.000]
Cultural connectedness [respondents who agreed they felt strongly	80.9 (69.7, 92.1)	77.5 (71.6, 83.4)	62.0 (58.3, 65.6)	2.62# (1.25, 5.51)
connected to their culture] Cultural connectedness	82.0	71.5	59.1	[0.011] 3.17#
[respondents who agreed it was important to maintain a strong connection to their culture]	(74.9, 89.0)	(67.0, 76.1)	(56.3, 61.8)	(1.95, 5.16) [0.000]

^{*} All ethnic group comparisons were adjusted for age and gender (see Chapter 2, Methods) # OR remained statistically significant when model adjusted for age, gender and deprivation (NZDep2013).

5. Pacific mental distress

5.1 Psychological distress

Psychological distress is measured in both the NZMHM and the HLS using the K-10 - a psychometric scale that contains a series of 10 questions that assesses respondents' levels of psychological distress in the previous four weeks (Kessler et al., 2002). The K-10 has been used nationally in the previous NZ Mental Health Survey (Oakley Browne et al., 2006) and is currently included in the NZ Health Survey (MoH, 2016). Respondents rate themselves on a scale from 1 to 5 over 10 questions that focus on symptoms of anxiety and depression. Higher total scores are indicative of greater self-reported psychological distress.

Psychological distress in Pacific peoples

Data pooled together from the 2016 HLS and the 2015 and 2016 NZMHM surveys show an estimated 5% of Pacific peoples reported experiencing high levels of psychological distress in the previous four weeks. Almost one-quarter (25%) of Pacific peoples reported experiencing medium levels of psychological distress in the previous four weeks (Table 5-1).

Table 5-1: Pacific self-reported psychological distress in the past 4 weeks, by K-10 score category

K-10 score category (score range)	Percentage	95% CI
Low or none (≤15)	70.9	65.5, 76.4
Medium (16-29)	24.5	19.5, 29.5
High (≥30)	4.6	1.8, 7.4

n=1279; pooled from 2015, 2016 NZMHM and 2016 HLS.

Psychological distress in Pacific peoples by age

The prevalence of medium to high levels of psychological distress (K-10 score ≥16) over the past four weeks was significantly higher in young Pacific peoples aged 15 to 24 years (38%) and Pacific adults aged 45 to 64 years (35%) (Figure 5-1).

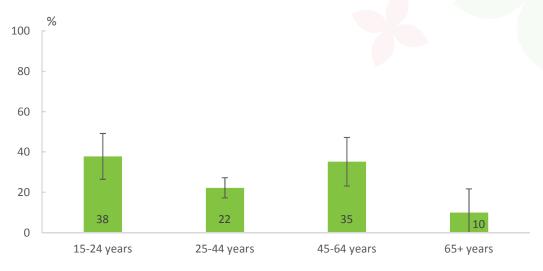


Figure 5–1: Pacific self-reported medium to high levels of psychological distress (K-10 score ≥ 16) in the past 4 weeks, by age

n=1,279; pooled from 2015, 2016 NZMHM and 2016 HLS

Psychological distress by ethnicity

The pooled dataset showed that, on average, reported K-10 scores over the past four weeks were significantly higher in Pacific peoples (14.6) than in Others (13.9) after adjusting for age and gender (Figure 5-2). The mean K-10 score in Pacific peoples was not significantly different from the mean score among Māori (15.3).

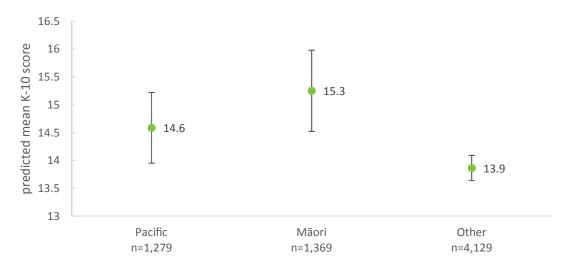


Figure 5-2: Self-reported psychological distress (mean K-10 score) adjusted for age and gender, by ethnicity n=6,777; 2015, 2016 NZMHM and 2016 HLS

Three in ten Pacific people experienced medium or high levels of mental distress in the last four weeks. After adjustment for age and gender, this was 1.2 times the rate for Others but was not a statistically significant difference. When looking at K-10 scores as categories (low or none, medium and high), there were no significant differences between Pacific and Māori or between Pacific and Other after adjustment for age and sex (Table 5-2).

Māori did show a significantly higher prevalence of high and medium K-10 scores, compared with Others.

Table 5-2: Self-reported psychological distress in the past 4 weeks (K-10 score category), by ethnicity

	Prioritised ethnicity % (95% CI)			
	Pacific	Māori	Other	
Unadjusted				
Low or none (≤15)	71	64	78	
	(65, 76)	(60, 69)	(76, 80)	
Medium (16-29)	24	30	20	
	(19, 29)	(26, 34)	(18, 22)	
High (≥30)	4.6	5.6	2.0	
	(1.8, 7.4)	(2.1, 9.1)	(1.5, 2.5)	
Adjusted for age and sex				
Low or none (≤15)	73	67	77	
	(68, 78)	(63, 71)	(75, 79)	
Medium (16-29)	22	27	21	
	(18, 27)	(24, 31)	(19, 22)	
High (≥30)	4.4	5.3	2.2	
	(1.4, 7.4)	(1.5, 9.1)	(1.6, 2.8)	

5.2 Anxiety

Symptoms of anxiety are measured in the NZMHM using the GAD-7 (Spitzer, Kroenke, Williams & Lowe, 2006). The GAD-7 contains seven questions that assess various symptoms of anxiety that respondents report having experienced over the previous four weeks. Respondents rate themselves on a scale from 0 to 3 over the seven questions that focus on symptoms such as nervousness, inability to stop worrying, and fear of something bad happening. Higher total scores are indicative of greater self-reported anxiety symptoms.

Anxiety in Pacific peoples

Data from the 2015 and 2016 NZMHM show an estimated 3% of Pacific peoples reported experiencing severe symptoms of anxiety (Table 5-3). Four in ten Pacific peoples reported experiencing moderate symptoms of anxiety and just over one in five (23%) Pacific peoples reported experiencing mild levels of anxiety symptoms. There were no significant differences in Pacific GAD-7 scores compared with Others.

Table 5-3: Pacific self-reported symptoms of anxiety in previous 4 weeks, by GAD-7 score category

GAD-7 score category (score range)	Percentage	95% CI
None (≤4)	69.6	60.1, 79.1
Mild (5-9)	23.3	13.4, 33.3
Moderate (10-14)	3.8	2.1, 5.5
Severe (≥15)	3.3	1.3, 6.6

n=612; 2015 and 2016 NZMHM.

5.3 Depressive symptoms

Depressive symptoms and their severity are measured in the NZMHM using the PHQ-9 (Kroenke, Spitzer, & Williams, 2001). The PHQ-9 contains nine question items assessing the presence and severity of depressive symptoms. Respondents rate themselves on a scale from 0 to 4. Total scores range from 0 to 27, with higher scores being indicative of greater self-reporting of depressive symptoms.

Depressive symptoms in Pacific peoples

Data from the 2015 and 2016 NZMHM showed 1 in 10 Pacific people reported experiencing moderate levels of depression symptoms and just over 1 in 5 (22%) Pacific people reported experiencing mild levels of depression symptoms in the past two weeks (Table 5-4). Moderately severe or severe levels of depressive symptoms in the past two weeks were reported by 4% of Pacific people.

Table 5-4: Pacific self-reported symptoms of depression in past 2 weeks, by PHQ-9 score category

PHQ-9 score category (score range)	Percentage	95% confidence interval
Minimal (<4)	64.0	56.5, 71.6
Mild (5-9)	22.1	15.4, 28.9
Moderate (10-14)	10.0	4.2, 15.8
Moderately severe (15-19)	1.3	0.7, 2.4
Severe (≥20)	2.5	0.8, 6.0

n=612; 2015 and 2016 MHS.

Depressive symptoms by ethnicity

On average, PHQ-9 scores were significantly higher in Pacific peoples (4.2) than in Others (3.4) after adjusting for age and gender. The mean K-10 score in Pacific peoples was not significantly different from the mean score among Māori (4.3).



Figure 5-3: Predicted symptoms of depression (mean PHQ-9 score) adjusted for age and gender, by ethnicity n=3,002; 2015 and 2016 NZMHM

5.4 Experience of mental distress

Prevalence of mental distress

Ever had a personal experience of mental illness

In 2016, NZMHM respondents were asked "have you ever personally had an experience of mental illness?"

The estimated prevalence of ever having a personal experience of mental illness was 21% in Pacific peoples (Figure 5-4). After adjustment for age and gender, this was 20%, which is low compared with Māori (34%) and Others (30%). However, the difference between Pacific and Others was not significant (Table 5-5).

This adjusted result is similar to the 12-month prevalence of experiencing any mental disorder shown in Te Rau Hinengaro, which was 21.8% for Pacific peoples, 26.4% for Māori and 19.8% for Other (non-Māori, non-Pacific) (Oakley Browne, Wells & Scott., 2006). In Te Rau Hinengaro, the unadjusted prevalence of experiencing any mental disorder was significantly higher in Pacific (24.4%) and Māori (29.5%) than in Others (19.3%), but this difference was **not** significant after adjusting for age and gender, and was further reduced after adjusting for education and equivalised household income. This suggested that, although Pacific have a greater burden of mental disorders than Others, much of this appears to be due to the youthfulness and relative socioeconomic disadvantage in the population (Oakley Browne et al., 2006).

In this report the unadjusted result showed the prevalence of ever having experienced a mental illness was still significantly lower in Pacific than in Others. This inconsistent finding may be due to the smaller numbers of Pacific in the pooled dataset for this report compared with Te Rau Hinengaro.

Ever diagnosed with a mental illness

In 2016, HLS respondents were asked "have you ever been diagnosed with a mental illness?"

The estimated prevalence of ever being diagnosed with mental illness in Pacific peoples was 9% (Figure 5–4). After adjustment for age and gender, this was still 9%, which is low compared with Māori (18%) and Others (14%) (Table 5–5).

Impact of long-term mental distress

Long-term emotional, psychological, or psychiatric condition that affects participation in everyday activities

In the 2015 and 2016 NZMHM, respondents were asked "does a long-term emotional, psychological, or psychiatric condition cause you difficulty doing everyday activities that people your age can usually do?"

The estimated prevalence of a long-term emotional, psychological, or psychiatric condition that caused difficulty doing everyday activities people their age could usually do was 12% in Pacific peoples (Figure 5–4).

Long-term emotional, psychological, or psychiatric condition that affects communication and socialising with others

In the 2015 and 2016 NZMHM, respondents were asked "does a long-term emotional, psychological, or psychiatric condition cause you difficulty communicating, mixing with others, or socialising?"

The estimated prevalence of a long-term emotional, psychological, or psychiatric condition that caused difficulty communicating, mixing with others, or socialising was 12% in Pacific peoples (Figure 5–4).

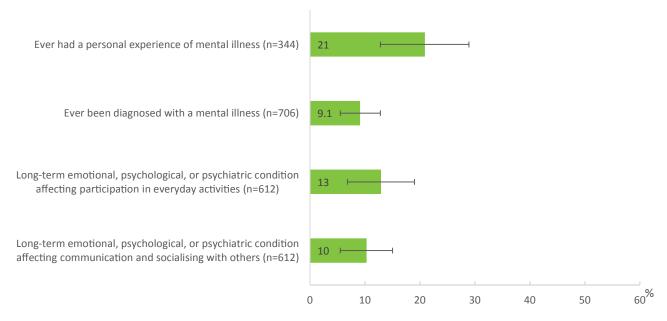


Figure 5-4: Lifetime prevalence of mental distress in Pacific peoples

Table 5-5: Lifetime prevalence of ever experiencing or being diagnosed with a mental illness, by ethnicity

	Prioritised ethnicity % (95% CI)			
	Pacific	Māori	Other	
Unadjusted				
Ever had a personal experience of mental illness (n=1,646)	21	36	31	
	(13, 29)	(29, 42)	(26, 35)	
Ever diagnosed with a mental illness (n= 3,854)	9.2	18	14	
	(5.5, 12.8)	(14, 22)	(12, 16)	
Adjusted for age and sex				
Ever had a personal experience of mental illness (n=1,646)	20	34	30	
	(12, 28)	(27, 40)	(26, 34)	
Ever diagnosed with a mental illness (n= 3,854)	9.4	18	14	
	(5.6, 13.2)	(14, 22)	(12, 16)	

Social exclusion and mental distress in Pacific peoples

Pacific respondents who reported that there had been an occasion when they felt personally excluded in a social situation over the past four weeks were much more likely to report ever having an experience with mental illness after controlling for the effects of age, gender and deprivation (OR=7.9; 95% CI: 2.7, 23.3, n=344).



6. Help-seeking knowledge, attitudes and behaviours

6.1 Awareness of sources of help

Awareness of sources of help for depression

In the 2016 NZMHM, respondents were asked "if you thought you or someone you know might be experiencing depression, do you know where you could get help?" The three most commonly known sources of help for depression reported by Pacific people were talking to a friend, family or whānau member (51%), seeing a doctor (39%) and seeing a therapist or counsellor (24%) (Figure 6–1). In total, 15% of Pacific people reported that they don't know where to get help if they or someone they knew were experiencing depression.

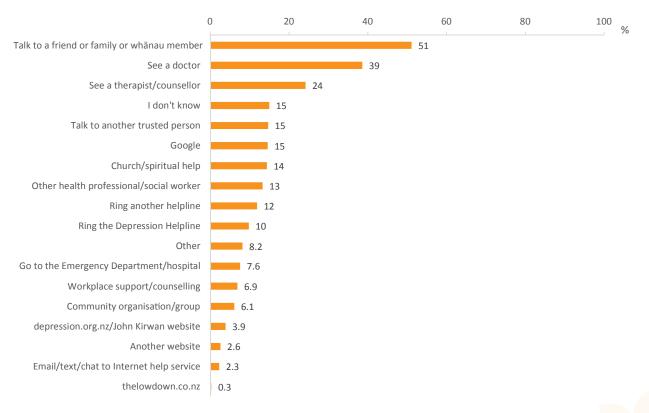


Figure 6–1: Main sources of help for Pacific peoples if they thought they, or someone they knew, were experiencing depression

n=344; 2016 NZMHM

Awareness of sources of help for anxiety

In the 2016 NZMHM, respondents were asked "if you thought you or someone you know had problems with anxiety, do you know where you could get help?" The two most commonly known sources of help for anxiety reported by Pacific people were seeing a doctor (43%) and talking to a friend, family or whānau member (40%) (Figure 6–2). Almost one-quarter (24%) of Pacific peoples reported that they don't know where to get help if they, or someone they knew, were experiencing anxiety.

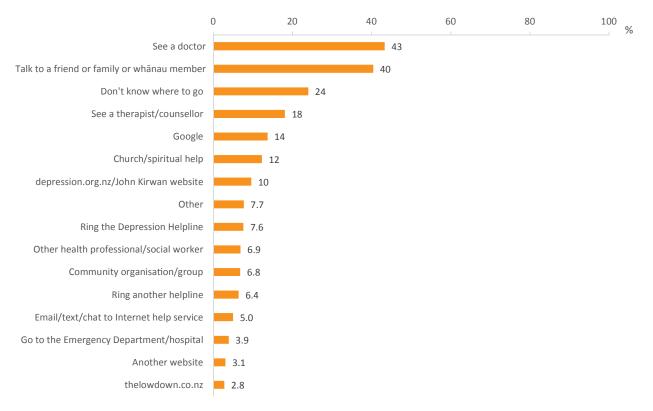


Figure 6–2: Main sources of help for Pacific peoples if they thought they, or someone they knew, were experiencing anxiety

n=344; 2016 NZMHM

6.2 First point of contact for help

First point of contact for help with depression

In the 2016 NZMHM, respondents were asked "if you were experiencing depression, where would you first go for help?" Just over one-half (52%) of Pacific people reported that they would first talk to a friend, family or whānau member if they were experiencing depression (Figure 6–3). One in five (21%) Pacific people would first seek help for depression from a doctor. The church/spiritual help was the third most common initial point of contact, reported by 7% of Pacific people as their first source of help if they were experiencing depression.

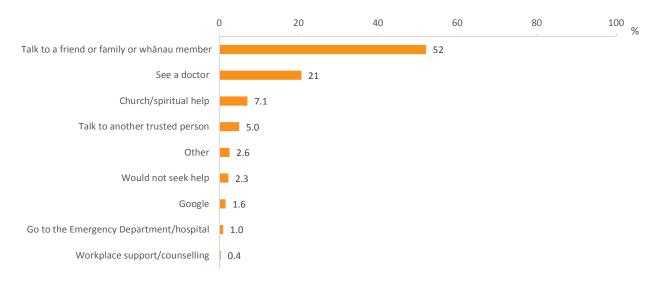


Figure 6–3: First source of help for Pacific peoples if they were experiencing depression

n=344; 2016 NZMHM

First point of contact for help with anxiety

In the 2016 NZMHM, respondents were asked "if you had problems with anxiety, where would you first go for help?" Almost one-half (48%) of Pacific people reported that they would first talk to a friend, family or whānau member if they were experiencing anxiety (Figure 6–4). Just over one-quarter (25%) of Pacific people would first seek help for anxiety from a doctor. The church/spiritual help was the third most common initial point of contact, reported by 6% of Pacific people as their first source of help if they were experiencing anxiety.

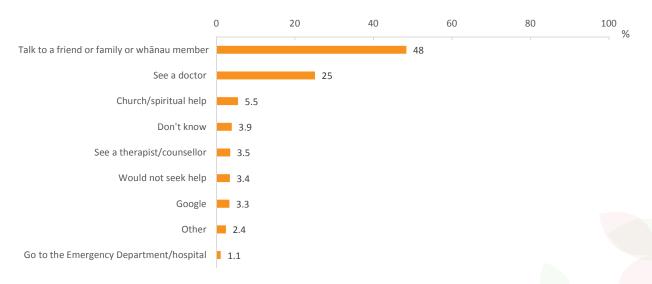


Figure 6-4: First source of help for Pacific peoples if they were experiencing anxiety

n=344; 2016 NZMHM

6.3 Awareness of New Zealand websites

Awareness of websites for sourcing information and help for depression and anxiety

In the 2015 and 2016 NZMHM, respondents were asked "Have you heard about any New Zealand websites that can assist people to find out about, or get through, depression?"

Just over 4 in 10 (44%) Pacific people had heard of any New Zealand websites that could assist people to find out about, or get through, depression (Figure 6-5).

In the 2015 and 2016 NZMHM, respondents were asked "Have you heard about any New Zealand websites that can assist people to find out about anxiety, or find help getting through their problems with anxiety?"

Just over 1 in 10 (13%) Pacific people had heard of any New Zealand websites that could assist people to find out about anxiety, or find help getting through their problems with anxiety (Figure 6-5).

Prompted recall of depression.org.nz and thelowdown.co.nz websites

Out of all Pacific respondents in the 2015 and 2016 NZMHM, one-half (50%) had heard of the depression.org.nz website when they were specifically asked whether they had heard of that website (Figure 6-5).

Out of all Pacific respondents in the 2016 NZMHM, 14% had heard of the thelowdown.co.nz website when they were specifically asked whether they had heard of that website (Figure 6-5).

Unprompted recall of depression.org.nz and thelowdown.co.nz websites

Unprompted recall of the websites was low. Not many Pacific respondents were able to identify the depression. org.nz and thelowdown.co.nz websites without specifically asked if they had heard of them.

When Pacific respondents were asked if they had heard of websites for helping people find out about, or get through depression, less than 3 in 10 (27.9%; 95% CI: 20.5, 35.2; n=612) were able to name the depression.org.nz website. Less than 1% of Pacific respondents (0.2%; 95% CI: 0.0, 0.6; n=612) were able to name thelowdown.co.nz website.

When Pacific respondents were asked if they had heard of a website that could help people find out about, or help them get through problems with anxiety, 15.3% (95% CI: 8.3, 25.1; n=344) were able to name the depression. org.nz website. Just over 1% (1.4%; 95% CI: 0.1, 5.3; n=344) were able to name thelowdown.co.nz website.

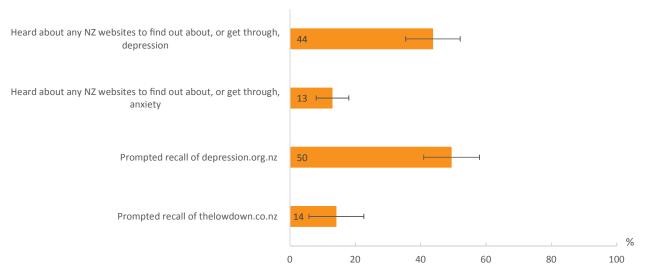


Figure 6-5: Awareness of websites for depression and anxiety in Pacific peoples

n=612; 2015 and 2016 NZMHM

6.4 Attitudes towards people with mental distress

The following results on stigma and attitudes towards people with mental distress were not derived from the analysis for this report. However, key results for Pacific peoples are summarised here because they likely influence how Pacific peoples seek help when experiencing mental distress.

For the full report, refer to: Attitudes of adults towards people with experience of mental distress: Results from the 2015 Mental Health Monitor (Deverick, Russell & Hudson, 2017).

The 2015 NZMHM included three psychometric scales that assessed respondents' knowledge, attitudes, and intended behaviours towards people experiencing mental health:

- 1. Mental Health Knowledge Scale (MAKS)
- 2. Reported and Intended Behaviour Scale (RIBS)
- 3. Community Attitudes Towards the Mentally III Scale (CAMI).

Information on these scales is available in Deverick, Russell, & Hudson (2017). Analysis showed that:

- Pacific respondents scored significantly lower on the MAKS (20.6) than European/Other (22.2, p-value <.001), suggesting Pacific peoples have higher levels of stigma-related mental health knowledge.
- Pacific respondents scored significantly lower on the RIBS (14.2) than European/Other (22.2, p-value <.001), suggesting Pacific peoples express more negative views of people with mental health issues and are less willing to interact with them.
- Pacific respondents scored significantly lower on the benevolence subscale of the CAMI (34.6) than European/Other (35.5, p-value <.002), suggesting Pacific peoples express less kindness and less positive attitudes towards people with mental health issues.



7. Intra-Pacific mental health

Pacific peoples is an overarching term used in New Zealand (NZ) to refer to people with ancestral connections to the Pacific Islands. As discussed in Chapter 1, there are some differences in mental health observed within Pacific peoples - a greater burden of mental health issues are experienced by NZ-born Pacific and those who migrated to NZ at younger ages (Foliaki et al., 2006; Kokaua et al., 2009).

It was not possible to analyse the pooled dataset by place-of-birth or migration status because these questions were not included in the NZMHM. However, in recognition of the fact that Pacific peoples is a diverse population, this report has looked at two different ways of examining mental health within Pacific peoples:

- 1. Multi-ethnic Pacific peoples
- 2. Pacific peoples with constitutional rights as New Zealanders

These two ways of looking at mental health within Pacific peoples were chosen because they both relate to Pacific identity, which is considered by Pacific peoples to have an important influence on their wellbeing. Although these are not direct measures of identity, both multi-ethnic and NZ constitutional rights groupings could be considered high-level proxy indicators or markers of identity. This is because people from these groups share subtly different experiences and ways of living.

7.1 Multi-ethnic Pacific peoples

As discussed in Chapter 1, there is some evidence that multi-ethnic Pacific peoples with mixed Pacific/non-Pacific ancestry reported experiencing lower self-esteem and wellbeing than sole-Pacific peoples and multiethnic Pacific/Pacific peoples. This was suggested to be due to underlying 'identity tension' from internalised negative stereotypes about one's Pacific-ness (Manuela & Sibley, 2014).

Although there is little quantitative evidence on the underlying reasons for poorer mental health in multi-ethnic Pacific/non-Pacific, the small qualitative evidence base points towards tensions surrounding ethnic identity. For example, some multi-ethnic Pacific peoples with mixed Pacific/European ethnicity describe experiencing tensions or not feeling accepted by other Pacific peoples because of the perceived privilege associated with their whiteness (Berking et al., 2007). These tensions are compounded because multi-ethnic Pacific/European peoples may be socially assigned by other non-Pacific peoples as being Pacific because of their appearance; and, as such, they may experience similar levels of discrimination. In other words, multi-ethnic Pacific/European peoples can find themselves struggling to feel like they are accepted or belong in either of their ethnic groups.

The number of Pacific peoples identifying with multiple ethnicities is increasing in NZ, particularly among Pacific children and youth. To date, there has been no research on multi-ethnic Pacific peoples using a nationally representative dataset. This is surprising given the large size of the multi-ethnic Pacific population (37% of Pacific peoples), and because ethnic intermarriage and multi-ethnic population growth has previously been signalled as emerging demographic features to consider for future generations of Pacific peoples (see Callister & Didham, 2008).

Lifetime prevalence of mental distress in multi-ethnic **Pacific peoples**

Ever had an experience of mental illness

In the 2016 NZMHM, the estimated prevalence of ever personally having an experience of mental illness was significantly higher in multi-ethnic Pacific/Other (36%) than in sole-Pacific peoples (12%) (Figure 7-1).

The adjusted odds of ever having experienced a mental illness was almost five times higher in multi-ethnic Pacific/Other than in sole-Pacific peoples (OR=4.4; 95% CI: 1.4, 13.4). This result remained significant after adjusting for deprivation.

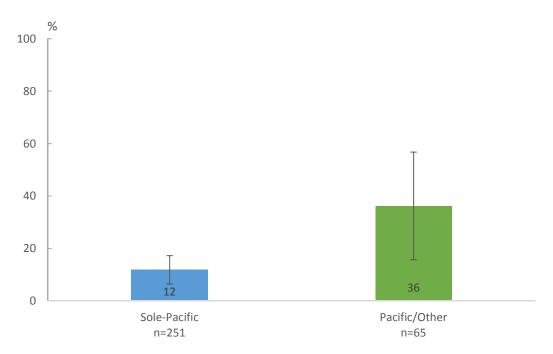


Figure 7-1: Multi-ethnic Pacific peoples* reporting ever experiencing a mental illness. Prevalence adjusted for age and gender.

*Result for multi-ethnic Pacific/ Māori is suppressed due to small numbers (n=28).

n=344; 2016 NZMHM

Ever been diagnosed with a mental illness

In the 2016 HLS, the estimated prevalence of ever personally being diagnosed with a mental illness was significantly higher in multi-ethnic Pacific/Other (26%) than in sole-Pacific peoples (3%) and multi-ethnic Pacific/ Māori peoples (5%) (Figure 7-2).

The adjusted odds of ever being diagnosed with a mental illness was 12 times higher in multi-ethnic Pacific/ Other than in sole-Pacific peoples (OR=12.2; 95% CI: 5.4, 27.4).

The results presented in this section could mean that the actual prevalence of experiencing or being diagnosed with mental illness is higher in multi-ethnic Pacific/Other than in sole-Pacific peoples. Alternatively, it could also mean that the two Pacific subgroups have different concepts of mental illness, or that multi-ethnic Pacific/Other are more likely to utilise mental health services and, consequently, obtain a diagnosis. Further research is needed to examine the mental health among multi-ethnic Pacific peoples and how this relates to their identity as Pacific peoples.

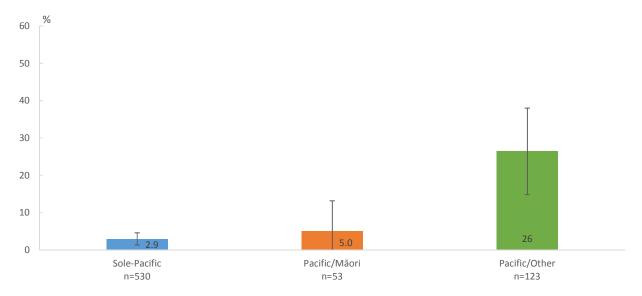


Figure 7-2: Multi-ethnic Pacific peoples reporting ever being diagnosed with a mental illness. Prevalence adjusted for age and gender.

n=706; 2016 HLS

Cultural connectedness in multi-ethnic Pacific peoples

When comparing between the various Pacific subgroups, the adjusted prevalence of peoples reporting they felt strongly connected to their culture was significantly lower in both multi-ethnic Pacific/Other (56%) and multi-ethnic Pacific/Māori (69%) than in sole-Pacific peoples (93%) (Figure 7-3).

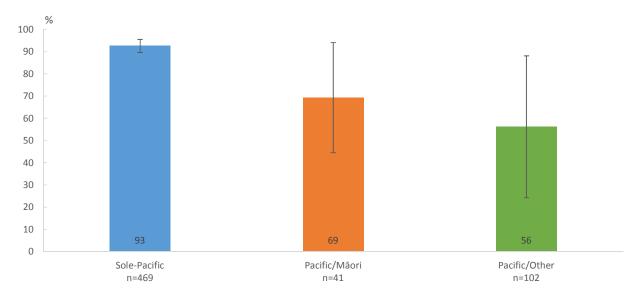


Figure 7-3: Multi-ethnic Pacific peoples' reporting feeling connected to culture. Prevalence adjusted for age and gender. n=612; 2015 and 2016 NZMHM

7.2 Pacific peoples with constitutional rights as New Zealanders

Pacific peoples with ancestral ties to Pacific Islands that have constitutional agreements with NZ (Cook Islands Māori, Niueans and Tokelauans) hold the same rights as NZ citizens. This means they can move more freely between the Pacific Islands and NZ and, in effect, are more likely to be exposed to the NZ environment.

To our knowledge, no research has looked specifically at what this means for how Cook Islands Māori peoples, Niueans and Tokelauans experience their Pacific cultural identity. However, population statistics reveal a number of shared aspects of culture in these groups: compared with Samoans and Tongans they have much lower levels of Pacific language retention, slightly higher proportions of NZ-born Pacific and higher levels of ethnic intermarriage. For Niueans and Tokelauans the numbers of people resident in NZ exceed the numbers resident in Pacific Islands (Callister & Didham, 2008). Some of these cultural indicators are summarised in Table 7–1.

Table 7-1: Cultural indicators in five largest Pacific ethnic groups, by NZ Constitutional Rights status

	Proportion in population* (%)				
Cultural indicators	NZ Constitutional Rights			Non-NZ Constitutional Rights	
[Description]	Cook Islands	Niuean	Tokelauan	Samoan	Tongan
Language retention [Can hold an everyday conversation in their Pacific language]	12.8	18.7	31.9	55.6	53.2
NZ-born [Born in New Zealand]	77.4	78.9	73.9	62.7	59.8
Ethnic intermarriage [% of multi-ethnic Pacific]	43.0	45.0	33.9	31.2	23.1
Religious affiliation [Affiliated with at least one religion]	65.1	65.9	83.4	83.4	88.1

^{*}Sourced from 2013 NZ Census information (SNZ, 2014b; 2014c; 2014d; 2014e; 2014f).

Cultural connectedness in Pacific peoples with NZ constitutional rights

In the pooled dataset, the estimated prevalence of Pacific peoples who reported that maintaining a strong connection to their culture was important to them was significantly higher in the non-NZ Constitutional Rights Pacific peoples (90%) than in NZ Constitutional Rights peoples (64%), after adjusting for age and gender (Figure 7–4). Pacific peoples who did not hold constitutional rights as New Zealanders were more likely than those with constitutional NZ rights to agree that maintaining a strong connection to their culture was important to them (OR=5.1; 95% CI: 1.9, 13.3).

Table 7–2 shows the distribution of responses (unadjusted) and demonstrates that a larger proportion of Pacific peoples with constitutional rights as New Zealanders neither agreed nor disagreed that maintaining a strong connection to their culture was important to them.



Figure 7–4: Pacific importance of maintaining a strong connection to culture, by NZ Constitutional Rights status (predicted prevalence, adjusted for age and gender)

n=1,279; 2015 and 2016 NZMHM and 2016 HLS

Table 7–2: Pacific importance of maintaining a strong connection to culture, by NZ Constitutional Rights status (unadjusted prevalence)

Pacific subgroup	Agree % (95% CI)	Neither agree nor disagree % (95% CI)	Disagree % (95% CI)
Non-NZ Constitutional Rights	89.8	7.7	2.5
	(86.6, 93.0)	(4.7, 10.6)	(1.0, 4.0)
Other Pacific	81.0	11.5	7.4
	(66.4, 95.6)	(0.0, 25.2)	(1.2, 13.6)
NZ Constitutional Rights	64.3	28.2	7.5
	(45.7, 82.8)	(8.2, 48.2)	(2.4, 12.7)

n=1,279; 2015 and 2016 NZMHM and 2016 HLS



8. Conclusions

This report presented the first in-depth analysis of Pacific mental health using nationally representative datasets since Te Rau Hinengaro, the previous NZ Mental Health Survey conducted in 2003/2004. When looking at mental distress in Pacific peoples, most of the psychometric tools used to assess mental health used for this report were different from those used in Te Rau Hinengaro; therefore, many of the results in this report are not comparable. Time frames of prevalence are also not comparable in many instances (eg, lifetime prevalence and 12-month prevalence). This report showed that the adjusted prevalence of Pacific reporting they ever experienced a mental illness (21%) was not significantly different from Others (30%). This result was similar to the 12-month prevalence of Pacific experiencing any mental disorder (21.3%), which also was not significant from Other (non-Māori, non-Pacific after adjusting for age and gender (Oakley Browne et al., 2006)).

Some of the other mental distress outcomes are more difficult to interpret in the context of other surveys in New Zealand. For example, analysis of the mean K-10 score showed Pacific peoples tended to score higher on average compared with non-Māori, non-Pacific. However, when the K-10 was broken down into its various categories of psychological distress (low or none, medium and high), Pacific peoples showed no significant differences in psychological distress compared with non-Māori, non-Pacific. This is inconsistent with the NZ Health Survey which shows Pacific peoples report significantly higher levels of psychological distress than non-Pacific after adjusting for age and gender. This finding was replicated even when the K-10 score threshold for psychological distress was the same as that used for the NZ Health Survey (K-10 score >12).18 It is likely that this inconsistency is explained by the smaller Pacific sample in the pooled dataset used for this report; this reduces statistical precision and the ability to detect differences.

Other key findings in this report suggest that Pacific peoples report high levels of subjective wellbeing and they are well connected socially and culturally. The finding that not all Pacific peoples are connected to their culture will be of interest to policy-makers and those developing mental health promotion initiatives. Health promotion approaches commonly assume that Pacific peoples are culturally homogenous by delivering them through traditional Pacific cultural forums. However, this report shows multi-ethnic Pacific/Other feel less strongly connected to their culture than sole-Pacific; and, similarly, fewer Pacific peoples who identify with nations that have a constitutional agreement with New Zealand (Cook Islands Māori, Niueans and Tokelauans) feel it is important to maintain a connection to their culture. What this means is that we need to diversify our approaches to mental health promotion to ensure they reach the variety of Pacific peoples. It also means that there are some Pacific young peoples who may need extra support in solidifying their cultural identities.

Another key finding of interest is that multi-ethnic Pacific/Other peoples have a higher prevalence of mental distress over their lifetime than sole-Pacific. This is something to be explored further, particularly given the increasing numbers of multi-ethnic Pacific young people.

Although the surveys used for this report did not look at mental health service use in detail, it is evident from the results that some Pacific peoples don't know where to go for help. Furthermore, awareness of the national mental health websites is low. It is also evident that stigma surrounding mental illness is high among Pacific peoples. All of these factors pose barriers to mental health care access and we know from existing research that Pacific peoples under utilise community mental health services. Taken together, these results highlight the importance of continuing work to reduce stigma around mental distress and illness, and enhancing awareness

¹⁸ This report used K-10 score ≥16 as the threshold for 'psychological distress', meaning respondents whose score totalled 16 or above were classified as having medium or high psychological distress in the previous 4 weeks.

of the pathways that Pacific peoples have to accessing mental health care. At the same time it is important to continue to strengthen the Pacific workforce and culturally appropriate models of care so that Pacific peoples feel safe and understood when using the mental health services available to them.







9. References

- Agee, M. N., & Culbertson, P. (2013). Sowing the seeds: Parents' and grandparents' influences in the identity development of 'akafasi young people. In M. N. Agee, T. McIntosh, P. Culbertson, & C. O. Makasiale (Eds.), Pacific identities and wellbeing: Cross-cultural perspectives (pp. 65-83). Otago: Otago University Press.
- Agnew, F., Pulotu-Endemann, F. K., Robinson, G., Sualii-Sauni, T., Warren, H., Wheeler, A., Erick, M., Hingano, T., & Schmidt-Sopoaga, H. (2004). Pacific Models of Mental Health Service Delivery in New Zealand ("PMMHSD") Project. Auckland: Clinical Research and Resource Centre, Waitemata District Health Board.
- Anae, M. (1997). Towards a NZ-born Samoan identity: some reflections on "labels". Pacific Health Dialog, 4(2), 128-137
- Anae, M. (2001). The new Vikings of the sunrise: New Zealand-borns in the Information Age. In P. Spoonley, C. Macpherson, & M. Anae (Eds.), Tangata o te Moana Nui: The evolving identities of Pacific peoples in Aotearoa, New Zealand (pp. 101-121). Palmerston North, NZ: Dunmore Press.
- Anae, M. (2010). Research for better Pacific schooling in New Zealand: Teu le va a Samoan perspective in New Zealand. Mai Review, 1, 1-14.
- Anae, M., Moewaka Barnes, H., McCreanor, T., & Watson, P. (2002). Towards promoting youth mental health in Aotearoa/New Zealand: Holistic 'houses' of health. International Journal of Mental Health Promotion, 4(2), 5-14.
- Atkinson, J., Salmond, C., & Crampton, P. (2014). NZDep2013 Index of Deprivation. URL: http://www.otago.ac.nz/ wellington/otago069936.pdf. Wellington: Department of Public Health, University of Otago, Wellington. Accessed 18 November, 2017.
- Bisley, A. (2008). Introduction. In A. Bisley (Ed.), Pacific interactions: Pasifika in New Zealand New Zealand in Pasifika (pp. 1-12). Wellington: Institute of Policy Studies.
- Bedford, R. (2008). Pasifika mobility: Pathways, circuits, and challenges in the 21st century. In A. Bisley (Ed.), Pacific interactions: Pasifika in New Zealand - New Zealand in Pasifika (pp. 85-134). Wellington: Institute of Policy Studies.
- Berking, T., Fatialofa, C. S., Lupe, K., Skipps-Paterson, S., & Agee, M. (2007). Being 'Akafasi. In P. Culbertson, M. N. Agee, & C. O. Makasiale (Eds.), Penina Uliuli: Contemporary challenges in mental health for Pacific peoples (pp. 49-62). Honolulu: University of Hawaii Press.
- Didham, R., & Callister, P. (2012). The effect of prioritisation on ethnic health analysis: a research note. New Zealand Medical Journal, 125(1359), 58-66.
- Callister, P., & Didham, R. (2008). Emerging demographic and socioeconomic features of the Pacific population in New Zealand. In A. Bisley (Ed.), Pacific interactions: Pasifika in New Zealand - New Zealand in Pasifika (pp. 13-40). Wellington: Institute of Policy Studies, Victoria University of Wellington.
- Corrigan, P., & Shapiro, J. (2010). Measuring the impact of programs that challenge the public stigma of mental illness. Clinical Psychology Review, 30, 907-922.
- Deverick, Z, Russell, L., Hudson, S (2017). Attitudes of adults towards people with experience of mental distress: Results from the 2015 New Zealand Mental Health Monitor. Wellington: Health Promotion Agency

- Fa'alili-Fidow, J., Moselen, E., Denny, S., Dixon, R., Teevale, T., Ikihele, A., Adolescent Health Research Group, & Clark, T. C. (2016). *Youth'12 The Health and Wellbeing of Secondary School Students in New Zealand: Results for Pacific Young People.* Auckland: University of Auckland.
- Faalogo-Lilo, C. (2012). *Barriers and supports Pacific people experience in using mental health services*. (Unpublished thesis, Doctor of Clinical Psychology), University of Auckland, Auckland.
- Foliaki, F., Kokaua, J., Schaaf, D., & Tukuitonga, C. (2006). Pacific people. In M.A. Oakley Browne, J. E. Scott, K. M. Wells (Eds.), *Te Rau Hinengaro*: *The New Zealand Mental Health Survey* (pp.179-208). Wellington: Ministry of Health
- Health Promotion Agency. (2016). 2016 New Zealand Mental Health Monitor Methodology Report. Wellington: Health Promotion Agency.
- Health Promotion Agency. (2016a). 2016 New Zealand Mental Health Monitor Questionnaire. Wellington: Health Promotion Agency.
- Health Promotion Agency. (2017). New Zealand Mental Health Monitor and Health and Lifestyles Survey: Methods report for the combination of three survey datasets. Wellington: Health Promotion Agency.
- Health Promotion Agency. (2017b). 2016 Health and Lifestyles Survey Methodology Report. Wellington: Health Promotion Agency.
- Health Promotion Agency. (2017c). 2016 Health and Lifestyles Survey Questionnaire. Wellington: Health Promotion Agency Research and Evaluation Unit.
- Jarden, R., Jarden, A., & Oades, L. G. (2017). Wellbeing policy in Australia and New Zealand. In M. Slade, L. Oades, & A. Jarden (Eds.), *Wellbeing, Recovery and Mental health* (pp. 207-214). Cambridge: Cambridge University Press.
- Keddell, E. (2006). Pavlova and pineapple pie: selected identity influences on Samoan-Pakeha people in Aotearoa/New Zealand. *Kōtuitui*: New Zealand Journal of Social Sciences Online, 1(1), 45-63.
- Kessler, R. C., Andrews, G., Colpe, L. J., Hiripi, E., Mroczek, D. K., Normand, S-L. T., Walters, E. E., & Zaslavsky, A. M. (2002). Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychological Medicine*, 32, 959 –976.
- Kokaua, J., & Wells, J. E. (2009). Twelve month prevalences of mental disorders and treatment contact among Cook Islanders resident in New Zealand. *Pacific Health Dialog, 15*(1), 79-88.
- Kokaua, J., Schaaf, D., Wells, J. E., Foliaki, S. A. (2009). Twelve-month prevalence, severity, and treatment contact of mental disorders in New Zealand born and migrant Pacific participants in Te Rau Hinengaro: The New Zealand Mental Health Survey. *Pacific Health Dialog*, *15*(1), 9-17.
- Kroenke, K., Spitzer, R. L., & Williams, J. B. (2001). The PHQ-9: validity of a brief depression severity measure. Journal of General Internal Medicine, 16(9), 606–613.
- Krumpal, I. (2013). Determinants of social desirability bias in sensitive surveys: a literature review. *Quality & Quantity*, 47(4), 2025-2047.
- Lee, H. (2009). Pacific migration and transnationalism: Historical perspectives. In H. Lee & S. T. Francis (Eds.), Migration and transnationalism [electronic resource]: Pacific perspectives (pp. 7-41). Canberra, Australia: ANU E Press, Australian National University.
- Le Va. (2014). Preventing suicide for Pasifika top 5 tactics. URL: https://www.leva.co.nz/resources/preventing-suicide-for-pasifika-top-5-tactics. Auckland: New Zealand. Accessed 23 October, 2017.
- Manuela, S., & Sibley, C. G. (2014). Why do Pacific people with multiple ethnic affiliations have poorer subjective wellbeing? Negative ingroup affect mediates the identity tension effect. *Social Indicators Research*, *115*, 319-336.

- Manuela, S., & Sibley, C. G. (2014a). Exploring the hierarchical structure of Pacific identity and wellbeing. Social Indicators Research, 118, 969-985.
- Manuela, S., & Sibley, C. G. (2015). The Pacific identity and wellbeing scale-revised (PIWBS-R). Cultural Diversity and Ethnic Minority Psychology, 21(1), 146-155.
- Mila-Schaaf, K. (2011). Polycultural capital and the Pasifika second generation: negotiating identities. *Integration* of Immigrants Programme. Working Paper, Number 3. Albany, North Shore City: Massey University. URL: http://newsettlers.massey.ac.nz/publications_pdfs/Karlo%20Mila-Schaaf%202011.pdf. Accessed 24 March, 2017.
- 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: Crosscultural perspectives (pp. 49-64). Otago: University of Otago Press.
- Ministry of Health. (2014). 'Ala Mo'ui: Pathways to Pacific health and wellbeing 2014-2018. Wellington: Ministry of Health.
- Ministry of Health. (2015). Annual update of key results 2014/15: New Zealand Health Survey. Wellington. Ministry
- Ministry of Health. (2016). Annual update of key results 2015/16: New Zealand Health Survey. Wellington. Ministry
- Ministry of Health. (2017). HISO 10001:2017 Ethnicity Data Protocols, September 2017. Wellington: Ministry
- Ministry of Social Development. (2016). The Social Report 2016: Te pūrongo oranga tangata. Wellington: Ministry of Social Development.
- National Research Bureau (2015). 2015 New Zealand Mental Health Survey: Methodology Report. Wellington: Health Promotion Agency.
- National Research Bureau (2015a). 2015 New Zealand Mental Health Survey: Questionnaires. Wellington: Health Promotion Agency.
- Oakley Browne, M.A., Wells, J. E., & Scott, K. M. (Eds.). 2006. Te Rau Hinengaro: The New Zealand Mental Health Survey. Wellington: Ministry of Health.
- Paterson, J., Tautolo, E-S., Iustini, L., & Taylor, S. (2016). Pacific Islands Families Study: psychological distress among mothers of Pacific children living in New Zealand. Australian and New Zealand Journal of Public Health, 40, 110-114.
- Southwick, M. Ryan, D., & Kenealy, T. (2012). Primary care for Pacific people: A Pacific health systems approach. Report to the Health Research council and Ministry of Health. Wellington: Pacific Perspectives. URL: https:// www.health.govt.nz/system/files/documents/publications/primary-care-pacific-people-pacific-healthsystems-approach.pdf. Accessed 20 November, 2017.
- Spitzer, R. L., Kroenke, K., Williams, J. B., & Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder: the GAD-7. Archives of Internal Medicine, 166(10), 1092-1097.
- Statistics New Zealand. (2014). 2013 Census QuickStats about culture and identity: Pacific peoples ethnic group. URL: http://www.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-cultureidentity/pacific-peoples.aspx. Wellington: Statistics New Zealand. Accessed 21 March, 2017.
- Statistics New Zealand. (2014a). NZ.Stat online table: Ethnic group (single and combination) by age group and sex, for the census usually resident population count, 2001, 2006, and 2013 (RC, TA.). Wellington: Statistics New Zealand. Available at: http://nzdotstat.stats.govt.nz/wbos/index.aspx.

- Statistics New Zealand. (2014b). 2013 Census ethnic group profiles: Cook Islands Māori. URL: http://www.stats. govt.nz/Census/2013-census/profile-and-summary-reports/ethnic-profiles.aspx?request_ value=24709&parent_id=24706&tabname=#24709. Wellington: Statistics New Zealand. Accessed 22 October, 2017.
- Statistics New Zealand. (2014c). 2013 Census ethnic group profiles: Samoan. URL: http://www.stats.govt.nz/ Census/2013-census/profile-and-summary-reports/ethnic-profiles.aspx?request_value=24708&parent_ id=24706&tabname=#24708. Wellington: Statistics New Zealand. Accessed 22 October, 2017.
- Statistics New Zealand. (2014d). 2013 Census ethnic group profiles: Tongan. URL: http://www.stats.govt.nz/ Census/2013-census/profile-and-summary-reports/ethnic-profiles.aspx?request_value=24711&parent_ id=24706&tabname=#24711. Wellington: Statistics New Zealand. Accessed 22 October, 2017.
- Statistics New Zealand. (2014e). 2013 Census ethnic group profiles: Niuean. URL: http://www.stats.govt.nz/ Census/2013-census/profile-and-summary-reports/ethnic-profiles.aspx?request_value=24712&parent_ id=24706&tabname=#24712. Wellington: Statistics New Zealand. Accessed 22 October, 2017.
- Statistics New Zealand. (2014f). 2013 Census ethnic group profiles: Tokelauan. URL: http://www.stats.govt.nz/ Census/2013-census/profile-and-summary-reports/ethnic-profiles.aspx?request_value=24713&parent_ id=24706&tabname=&p=y&printall=true. Wellington: Statistics New Zealand. Accessed 22 October, 2017.
- Statistics New Zealand. (2016). Statistical standard for meshblock. URL: http://www.stats.govt.nz/methods/ classifications-and-standards/classification-related-stats-standards/meshblock.aspx. Wellington: Statistics New Zealand. Accessed 19 November, 2017.
- Taumoefolau, M. (2013). Respect, solidarity, and resilience in Pacific worldviews: A counselling perspective In M. N. Agee, T. McIntosh, P. Culbertson, & C. O. Makasiale (Eds.), Pacific identities and wellbeing: Crosscultural perspectives (pp. 131-145). Otago: Otago University Press.
- Tiatia J. (1998). Caught between cultures: A New Zealand-born Pacific Island perspective. Auckland: Christian Research Association.
- Tiatia, J. (2012). Commentary on 'Cultural Diversity Across the Pacific': Samoan Cultural Constructs of Emotion, New Zealand-Born Samoan Youth Suicidal Behaviours, and Culturally Competent Human Services. Journal of Pacific Rim Psychology, 6(02), 75-79.
- Tiatia-Seath, J. (2014). Pacific peoples, mental health service engagement and suicide prevention in Aotearoa New Zealand. Ethnicity and Inequalities in Health and Social Care, 7(3), 111-121.
- Tiatia-Seath, J. (2017). Negotiating personhood in light of Pacific suicide prevention. In U. L. Vaai & U. Nabobo-Baba (Eds.), In The relational self: Decolonising personhood in the Pacific (pp. 79-101). Suva, Fiji: The University of the South Pacific & The Pacific Theological College.



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