YOUTH2000 SURVEY SERIES

Youth19 Rangatahi Smart Survey Initial Findings

Hauora Hinengaro / Emotional and Mental Health

www.youth19.ac.nz

THE UNIVERSITY OF AUCKLAND Te Whare Wānanga o Tāmaki Makaurau NEW ZEALAND
VICTORIA UNIVERSITY OF WELLINGTON TE HERENGA WAKA
UNIVERSITY of OTĀGO Te Whare Wānanga o Otāgo
AUT
YOUTH19 A Youth2000 survey

Citation: Fleming, T., Tiatia-Seath, J., Peiris-John, R., Sutcliffe, K., Archer, D., Bavin, L., Crengle, S., & Clark, T. (2020). *Youth19 Rangatahi Smart Survey, Initial Findings: Hauora Hinengaro / Emotional and Mental Health.* The Youth19 Research Group, The University of Auckland and Victoria University of Wellington, New Zealand.

Acknowledgements

Thank you to the rangatahi who took part in the survey and the schools and families who supported them – without all of you there would be no survey. We enormously appreciate your time, openness and energy. Thank you to the Youth19 investigators and researchers who ran the survey and contributed to this analysis and to the Adolescent Health Research Group who have carried out the Youth2000 Survey Series with thousands of students over 20 years.

The Youth19 Researchers: Associate Professor Terryann Clark[1] and Dr Terry (Theresa) Fleming[2] (co-principal investigators), Dr Roshini Peiris-John[1], Associate Professor Sue Crengle[3], Dr Lara Greaves[1], Dr John Fenaughty[1], Professor Dave Parry[4], Dr Sonia Lewycka[1]

The Adolescent Health Research Group: Dr Terry (Theresa) Fleming[2], Associate Professor Terryann Clark[1], Dr Roshini Peiris-John[1], Associate Professor Simon Denny[1], Associate Professor Melody Oliver[1], Dr John Fenaughty[1], Dr Jemaima Tiatia-Seath[1], Dr Sonia Lewycka[1], Dr Jennifer Utter[1], Dr Lara Greaves[1], Dr Pat Bullen[1], Lovely Dizon[1], Kristy Kang[1], Dr Kelsey Deane[1], Dr Bridget Farrant[1], Dr Mathijs Lucassen[1], Kylie Sutcliffe[2], Associate Professor Sue Crengle[3], Dr Jude Ball[3]
1 The University of Auckland, 2 Victoria University of Wellington, 3 University of Otago, 4 Auckland University of Technology

Report design and layout: Bo Moore, www.bomoore.net
Illustrations: Yasmine El Orfi, www.yasmineelorfi.com

Funding

The Youth19 Rangatahi Smart Survey is a collaboration between two Health Research Council projects:

Clark, T.C., Le Grice, J., Shepherd, M., Groot, S., & Lewycka, S. (2017). *Harnessing the spark of life: Maximising whānau contributors to rangatahi wellbeing.* Health Research Council of New Zealand Project Grant (HRC ref: 17/315).

Fleming, T., Peiris-John, R., Crengle, S., & Parry, D. (2018). *Integrating survey and intervention research for youth health gains.* Health Research Council of New Zealand Project Grant (HRC ref: 18/473).

Contact

youth19@auckland.ac.nz or terry.fleming@vuw.ac.nz
Further Youth19 publications are available at www.youth19.ac.nz

Summary

This report highlights the emotional and mental health findings from the Youth19 Rangatahi Smart Survey (Youth19). It is designed to be read with the *Youth19 Rangatahi Smart Survey, Initial Findings: Introduction and Methods* report, which explains how the survey was conducted, who was included and how to interpret the results. This document and other Youth19 outputs are available at *www.youth19.ac.nz*.

As part of Youth19, secondary school students answered questions about their emotional and mental health. In this report we present an overview of findings and changes over time in areas of emotional and mental health, first for the total population (all students combined) and then for Māori, Pacific, Asian, and Pākehā and other European groups. Finally, we highlight ways to support mental wellbeing for young people.

Youth19 data shows that:

- **most students are happy or satisfied with their lives**, have good wellbeing and are not depressed, however
- **a large number of students reported high levels of distress**, with symptoms of depression generally particularly high among female students
- **youth emotional and mental health appears to have worsened** compared to previous Youth2000 surveys in 2001, 2007 and 2012, with most of this change occurring since 2012 (Fleming et al., 2014)
- there is **persistent and growing mental health inequity between Māori and other ethnic groups**
- socioeconomic deprivation is important, with symptoms of depression and rates of suicide attempts generally **higher among those living in lower income communities**.

Our findings are consistent with other research highlighting a general decline in youth mental health internationally (Bor et al., 2014; Keyes et al., 2019; Lessof et al., 2016) and prior research emphasising the importance of poverty and inequality in mental health (Denny et al., 2016a).

The concerning decline in emotional and mental health we see here among all students, and among Māori and Pacific students in particular, has important implications for advocacy, policy and service provision. This report also outlines opportunities for supporting students who face emotional or mental health challenges.

We will be publishing more in-depth publications that explore youth emotional and mental health in the near future.

Findings

Measures of wellbeing

We measured emotional wellbeing using the 5-item World Health Organization Well-being Index (WHO-5; World Health Organization, 1998).

Overall, 69% of students reported good wellbeing, as shown in Table 1, with good wellbeing indicated by a WHO-5 score of 13 or more. Wellbeing was higher among males and younger students than among females and older students. Differences in wellbeing for students from different school deciles, different deprivation areas, and rural vs urban areas were generally small.

In fact, for most of these comparisons, the 95% confidence intervals overlap. As explained in *Youth19 Rangatahi Smart Survey, Initial Findings: Introduction and Methods* (available at www.youth19.ac.nz), where confidence intervals overlap, differences are within the margin of error. Such differences may not be statistically significant and should not be considered definitive.

Prevalence of good wellbeing has decreased between 2012 and 2019 (from 76% to 69%), as shown in Table 2.

Depressive symptoms

Depressive symptoms were measured using the Short Form of the Reynolds Adolescent Depression Scale (RADS-SF) (Milfont et al., 2008; Reynolds, 2002). Scoring highly on this scale does not necessarily mean that a young person has a depressive disorder – an assessment with a health professional is needed to confirm this – however it does indicate that they are likely to have clinically significant symptoms of depression (i.e., symptoms of depression that are likely to affect the young person in their daily life, including at home and school).

In Youth19, 23% of students reported significant symptoms of depression. This was particularly high for students at low decile schools and for those living in high deprivation neighbourhoods (i.e., lower income communities). More females reported significant depression symptoms (29%) than males (17%), as shown in Table 1.

The proportion of young people with symptoms of depression has increased markedly, from 13% in 2012 to 23% in 2019, as shown in Table 2.

Suicide attempts

We asked whether students had seriously thought about killing themselves (attempting suicide) or tried to kill themselves (made a suicide attempt) in the previous 12 months.

Overall, 6% of participants reported that they had attempted suicide in the past 12 months. This was particularly high for students at low decile schools (13%) compared to those at medium decile (6%) and high decile (3%) schools. Living in high deprivation neighbourhoods (i.e., lower income communities) was also associated with higher rates of attempting suicide (11% of students in high deprivation areas, compared to 6% of those in medium and 3% in low deprivation areas).

Suicide attempts were slightly more common among 15-year-old students (8%) than students of other ages, but differences by age were small. Differences in rates of suicide attempts between males and females were relatively small.

Suicide attempts appear to have increased from 2012 to 2019, particularly among males, as shown in Table 2.

Difficulty getting help

Around one fifth (19%) of students reported that they had had difficulty getting help for feeling bad or having a hard time in the past year. A greater proportion of females (24%) than males (14%) reported such difficulty, and having difficulty was slightly more common among students aged 15 and older than among those younger than 15, as shown in Table 1.

Table 1: Emotional and mental health indicators

	Good emotional wellbeing[1]		Very happy or satisfied with life		Significant depressive symptoms[2]		Serious thoughts of suicide		Attempted suicide		Difficulty getting help for emotional concerns	
	n (N)	% [95% CI]	n (N)	% [95% CI]	n (N)	% [95% CI]	n (N)	% [95% CI]	n (N)	% [95% CI]	n (N)	% [95% CI]
Total	5,032 (7,270)	69.3 [67.8-70.8]	2,910 (7,463)	40.8 [39.2-42.4]	1,805 (7,279)	22.7 [21.4-24.1]	1,571 (7,307)	20.7 [19.1-22.3]	476 (7,308)	6.2 [5.4-7.0]	1,440 (7,145)	19.1 [17.8-20.5]
Sex												
Male	2,600 (3,273)	78.3 [76.4-80.1]	1,544 (3,363)	45.1 [42.9-47.3]	529 (3,285)	16.5 [14.9-18.0]	520 (3,287)	16.8 [14.8-18.9]	142 (3,289)	5.1 [3.7-6.4]	436 (3,201)	13.9 [12.4-15.4]
Female	2,432 (3,997)	60.4 [58.7-62.1]	1,366 (4,100)	36.5 [34.5-38.4]	1,276 (3,994)	29.0 [27.1-30.9]	1,051 (4,020)	24.5 [22.7-26.4]	334 (4,019)	7.4 [6.2-8.6]	1,004 (3,944)	24.3 [22.5-26.1]
Age												
13 and under	1,008 (1,299)	78.2 [75.4-81.0]	611 (1,352)	47.3 [44.6-50.1]	284 (1,313)	19.1 [16.6-21.6]	225 (1,308)	16.3 [14.3-18.3]	74 (1,309)	5.1 [3.9-6.3]	208 (1,273)	15.4 [13.2-17.6]
14	1,175 (1,625)	71.5 [68.9-74.1]	725 (1,683)	44.0 [41.2-46.8]	400 (1,641)	24.0 [21.9-26.0]	333 (1,648)	20.6 [17.3-23.8]	99 (1,647)	6.4 [4.2-8.7]	277 (1,611)	15.9 [13.6-18.2]
15	1,080 (1,596)	68.6 [65.9-71.2]	601 (1,633)	40.3 [37.6-43.1]	429 (1,591)	24.0 [21.8-26.2]	383 (1,601)	22.1 [19.9-24.3]	145 (1,599)	8.4 [7.0-9.9]	335 (1,563)	20.1 [18.4-21.9]
16	904 (1,404)	65.4 [62.3-68.6]	509 (1,427)	36.7 [34.0-39.4]	365 (1,401)	24.0 [21.6-26.4]	344 (1,411)	24.1 [22.3-25.9]	86 (1,412)	5.1 [3.9-6.4]	318 (1,383)	22.3 [20.1-24.5]
17 and over	865 (1,346)	65.0 [62.3-67.7]	464 (1,368)	37.0 [33.6-40.4]	327 (1,333)	22.1 [19.5-24.7]	286 (1,339)	19.8 [16.8-22.9]	72 (1,341)	5.8 [4.2-7.5]	302 (1,315)	21.1 [18.3-24.0]
Neighbourhood Deprivation[3]												
Low	1,455 (2,048)	70.7 [68.2-73.1]	896 (2,081)	44.7 [42.9-46.5]	407 (2,046)	17.0 [15.8-18.1]	353 (2,052)	16.1 [14.4-17.8]	65 (2,051)	2.8 [2.1-3.4]	369 (2,025)	17.3 [15.6-19.0]
Medium	1,854 (2,689)	70.2 [68.0-72.5]	1,017 (2,745)	39.8 [37.1-42.4]	674 (2,692)	23.0 [20.8-25.2]	576 (2,703)	20.5 [18.9-22.1]	149 (2,699)	5.9 [4.9-6.8]	536 (2,657)	18.9 [16.9-20.9]
High	1,231 (1,803)	67.2 [64.0-70.5]	715 (1,874)	38.4 [34.9-42.0]	538 (1,809)	29.5 [25.6-33.4]	473 (1,813)	25.7 [21.7-29.6]	210 (1,821)	10.8 [8.5-13.1]	368 (1,758)	20.9 [18.1-23.8]
School Decile[4]												
Low	955 (1,361)	70.1 [65.8-74.4]	592 (1,437)	41.3 [35.1-47.5]	401 (1,359)	28.3 [24.2-32.3]	363 (1,383)	25.1 [20.6-29.6]	194 (1,380)	13.4 [10.6-16.3]	288 (1,319)	21.7 [17.3-26.2]
Medium	2,106 (3,048)	70.7 [67.5-73.8]	1,176 (3,125)	38.5 [35.5-41.4]	762 (3,055)	23.3 [19.9-26.7]	640 (3,058)	21.1 [17.8-24.3]	179 (3,062)	6.2 [4.8-7.5]	601 (3,002)	18.9 [15.8-22.0]
High	1,942 (2,819)	67.5 [64.8-70.2]	1,129 (2,859)	43.2 [41.1-45.2]	628 (2,824)	19.8 [17.4-22.3]	557 (2,824)	18.5 [16.3-20.6]	96 (2,824)	3.2 [2.3-4.0]	543 (2,784)	18.4 [16.5-20.4]
Urban Rural indicator[5]												
Urban	3,451 (4,965)	69.5 [67.7-71.3]	1,994 (5,086)	41.6 [39.6-43.6]	1,231 (4,968)	22.6 [20.9-24.2]	1,070 (4,978)	20.7 [18.8-22.6]	310 (4,984)	5.7 [4.8-6.5]	966 (4,882)	19.0 [17.4-20.6]
Small towns	341 (518)	63.8 [55.4-72.2]	203 (530)	38.3 [32.5-44.1]	141 (516)	26.9 [19.1-34.7]	128 (523)	23.1 [13.8-32.3]	47 (524)	10.1 [5.1-15.2]	123 (508)	24.0 [16.9-31.2]
Rural	748 (1,058)	73.3 [71.0-75.6]	431 (1,085)	40.5 [36.4-44.7]	248 (1,064)	20.6 [17.3-24.0]	205 (1,068)	17.6 [15.5-19.8]	67 (1,064)	5.5 [3.7-7.3]	185 (1,051)	15.6 [13.1-18.1]

1 Score of 13 or more on the World Health Organization Well-being Index (WHO-5)

2 Score of 28 or more on the Reynolds Adolescent Depression Scale - Short Form (RADS-SF)

3 NZ Deprivation Index 2018, Low deprivation (1-3), Medium deprivation (4-7), High deprivation (8-10)

4 School Decile, Low decile (1-3) indicating higher deprivation, Medium decile (4-7), High decile (8-10) indicating lower deprivation.

5 Urban (population of 10,000 or more), Small towns (population between 1,000 and 9,999 people), Rural (population fewer than 1,000)

Table 2: Emotional and mental health indicators 2001–2019

	Year 2001		Year 2007		Year 2012		Year 2019	
	n (N)	% [95% CI]	n (N)	% [95% CI]	n (N)	% [95% CI]	n (N)	% [95% CI]
Good emotional wellbeing[1]								
Total	NR	NR	6,797 (8,670)	78.2 [77.4-79.0]	6,303 (8,271)	76.0 [75.0-77.0]	4,815 (6,969)	69.3 [67.8-70.8]
Sex								
Male	NR	NR	3,911 (4,648)	84.3 [83.1-85.5]	3,071 (3,739)	82.0 [81.0-83.0]	2,493 (3,143)	78.2 [76.4-80.1]
Female	NR	NR	2,886 (4,022)	72.2 [70.9-73.4]	3,232 (4,532)	69.9 [68.2-71.7]	2,322 (3,826)	60.4 [58.6-62.1]
Significant depressive symptoms[2]								
Total	1,137 (9,105)	11.6 [10.9-12.3]	981 (8,541)	11.4 [10.8-12.0]	1,078 (8,169)	13.0 [12.1-13.9]	1,717 (6,978)	22.7 [21.3-24.1]
Sex								
Male	363 (4,154)	8.7 [7.8- 9.5]	338 (4,570)	7.2 [6.6- 7.9]	315 (3,670)	8.7 [7.6- 9.8]	506 (3,154)	16.5 [14.9-18.1]
Female	774 (4,951)	14.5 [13.4-15.7]	643 (3,971)	15.6 [14.6-16.6]	763 (4,499)	17.4 [16.1-18.7]	1,211 (3,824)	28.9 [27.0-30.8]
Suicide attempts								
Total	NR	NR	413 (8,706)	4.8 [4.3-5.2]	377 (8,309)	3.9 [3.4-4.3]	432 (7,003)	6.2 [5.4-7.0]
Sex								
Male	NR	NR	138 (4,658)	2.9 [2.4-3.5]	93 (3,761)	2.2 [1.6-2.8]	125 (3,158)	5.0 [3.6-6.4]
Female	NR	NR	275 (4,048)	6.6 [5.9-7.3]	284 (4,548)	5.5 [4.8-6.3]	307 (3,845)	7.3 [6.1-8.5]

1 Score of 13 or more on the World Health Organization Well-being Index (WHO-5)

2 Score of 28 or more on the Reynolds Adolescent Depression Scale - Short Form (RADS-SF)

Notes: when comparing survey years, students from kura kaupapa Māori are not included in 2019 results, as previous survey waves did not include kura kaupapa Māori students. The data reported has been calibrated to adjust for differences between the national population of students and those who took part in surveys. See *Youth19 Rangatahi Smart Survey, Initial Findings: Introduction and Methods f*or details (available at www.youth19.ac.nz).

NR = not reported. In 2001, the WHO-5 was not included and the question about suicide attempts was asked in a different way, hence is not included in this table.

Youth voice

For the first time in a Youth2000 survey, Youth19 included open text questions so that students could express their views about the issues they face. Students could respond in open text boxes, in their own words. Only a quarter to a third of students answered these questions, so it is important to remember that not all students' voices are represented. Some example responses to the question **'What do you think should be changed to support young people in New Zealand better?'** are included below.

"Make it normal and comfortable to talk to people and not make it like people who talk about their feeling are weird and needy people who are just looking for attention because that's how young people in this day and age think."

Māori female, decile 2, age 15

"Listen to them. Respect as people not just useless kids."

European male, decile 7, age >17

"The climate and how polluted the environment is, I feel like this is what is making our country toxic and you can't really be happy if the environment is sad."

Pacific female, decile 1, age 15

"Ask them what they want to do and how you can help them and support them."

Māori female, decile 1, age 15

"Having more options whether it be on future plans or after school organizations where you can just have fun and be a kid with other people just a place where we feel we can connect and talk freely with others without being judged on age, size, beliefs, race, or orientation."

Asian female, decile 9, age 14

"Educate people on mental health, taxes, future pathways, politics, how to buy a home, job interviews, getting promotions etc etc. These are so much more important than things like Pythagoras theorem."

Pacific, identify another way, decile 10, age 15

More in-depth analyses of open text responses are underway and will be available via www.youth19.ac.nz.

Mental health and wellbeing among rangatahi Māori

Youth19 data shows that many rangatahi Māori have good mental health. However, rangatahi do have high rates of depressive symptoms and suicide attempts. Youth19 data shows a worsening trend between 2012 and 2019 for emotional and mental wellbeing among rangatahi Māori:

- rates of good wellbeing (as measured by the WHO-5 wellbeing index) dropped from 75% to 67%
- rates of significant depressive symptoms rose from 14% to 28%
- the proportion who had attempted suicide in the past 12 months rose from 6% to 13%
- Māori females reported worse mental and emotional wellbeing than Māori males.

Socio-economic deprivation has serious impacts on mental health and wellbeing. Higher socio-economic deprivation is associated with:

- a higher prevalence of depressive symptoms (23% of rangatahi Māori who live in low deprivation areas compared to 30% of those in high deprivation areas)
- a higher proportion of students who had attempted suicide in the past 12 months (7% of rangatahi Māori who live in low deprivation areas compared to 13% of those in high deprivation areas).

We note a very concerning equity gap between rangtahi Māori and Pākehā and other European youth in the latest 2019 survey. Rangatahi Māori have:

- a higher proportion with significant depressive symptoms (28%) compared to Pākehā and other European youth (20%)
- a higher proportion who have attempted suicide in the past 12 months (13%) compared to Pākehā and other European youth (3%).

This decline in mental health is consistent with other Māori mental health data including suicide trends (Clark et al., 2018; Crengle et al., 2013; Ngā Pou Arawhenua et al., 2020). Mental distress and challenges particularly affect those rangatahi Māori exposed to personal, community and intergenerational traumas – including the ongoing impacts of discrimination and colonisation (Lawson-Te Aho & Liu, 2010; Pihama et al., 2014). Despite some recent energy and innovation in Māori youth mental health, there remains a lack of specific policy, services and resources for rangatahi Māori.

Urgent action is required to address this concerning trend, fulfil Te Tiriti o Waitangi obligations and ensure equity for rangatahi Māori. Recommendations include:

- Te Tiriti compliant health systems that support mana motuhake of rangatahi Māori and their whānau
- a genuine partnership, that includes equitable funding and resourcing with Māori communities/services to find solutions that work for them
- improved culturally safe and competent clinicians/support systems and services for whānau and rangatahi in times of distress
- specific policies that minimise barriers to healthcare and support free primary care and counselling services for rangatahi Māori
- addressing institutional racism and long-term systemic issues that impact on quality health and mental health access
- a well-prepared Māori mental health workforce, including youth health workers, school services, navigators, youth workers, community workers, Māori providers and school/education workforce
- addressing the social, cultural and economic determinants of wellbeing (i.e., adequate income, quality housing, food security, accessible care and gender equality)
- programmes that support cultural identity and whanaungatanga as strategies to prevent distress and support wellbeing.

More detailed rangatahi Māori mental health publications are coming soon.

Table 3: Rangatahi Māori emotional and mental health*

	Good emotional wellbeing[1]		Significant depressive symptoms[2]		Attempted suicide	
	n (N)	% [95% CI]	n (N)	% [95% CI]	n (N)	% [95% CI]
Total	936 (1,381)	67.6 [64.8-70.5]	413 (1,381)	27.8 [25.3-30.3]	177 (1,383)	12.6 [10.4-14.7]
Sex						
Male	494 (628)	76.9 [72.4-81.4]	109 (630)	18.6 [14.4-22.7]	49 (628)	8.8 [5.7-11.9]
Female	442 (753)	56.9 [52.7-61.2]	304 (751)	38.4 [34.1-42.8]	128 (755)	16.8 [13.3-20.3]
Neighbourhood Deprivation[3]						
Low	128 (193)	69.8 [65.1-74.5]	53 (190)	22.7 [17.4-28.0]	15 (191)	7.3 [4.9-9.6]
Medium	246 (382)	64.6 [59.3-69.8]	118 (382)	28.5 [24.2-32.8]	47 (382)	14.5 [11.4-17.6]
High	384 (558)	69.0 [64.3-73.7]	182 (561)	29.7 [25.7-33.7]	92 (562)	13.0 [9.9-16.2]

* Ethnicity is categorised using the NZ census ethnicity prioritisation method

1 Score of 13 or more on the World Health Organization Well-being Index (WHO-5)

2 Score of 28 or more on the Reynolds Adolescent Depression Scale - Short Form (RADS-SF)

3 NZ Deprivation Index 2018, Low deprivation (1-3), Medium deprivation (4-7), High deprivation (8-10)

Table 4: Rangatahi Māori emotional and mental health trends*

	Year 2001		Year 2007		Year 2012		Year 2019	
	n (N)	% [95% CI]	n (N)	% [95% CI]	n (N)	% [95% CI]	n (N)	% [95% CI]
Good emotional wellbeing[1]								
Total	NR	NR	1,258 (1,613)	77.6 [75.7-79.4]	1,230 (1,637)	75.3 [73.1-77.4]	731 (1,097)	67.4 [64.5-70.4]
Sex								
Male	NR	NR	711 (831)	85.2 [83.2-87.2]	649 (767)	84.8 [82.3-87.2]	394 (507)	76.7 [72.1-81.3]
Female	NR	NR	547 (782)	70.7 [67.1-74.3]	581 (870)	65.1 [62.5-67.7]	337 (590)	56.7 [52.4-61.1]
Significant depressive symptoms[2]								
Total	341 (2,218)	14.8 [13.1-16.4]	180 (1,583)	11.3 [9.9-12.7]	227 (1,607)	13.8 [11.3-16.3]	333 (1,099)	27.9 [25.3-30.4]
Sex								
Male	103 (1,023)	10.3 [8.1-12.5]	45 (814)	5.6 [4.1- 7.1]	63 (742)	8.5 [6.3-10.6]	88 (509)	18.6 [14.4-22.9]
Female	238 (1,195)	19.6 [17.3-21.8]	135 (769)	16.4 [14.0-18.8]	164 (865)	19.5 [16.0-23.0]	245 (590)	38.5 [34.0-42.9]
Suicide attempt in the past 12 months								
Total	NR	NR	114 (1,627)	7.2 [6.1-8.3]	108 (1,652)	6.2 [5.0-7.4]	134 (1,095)	12.5 [10.3-14.7]
Sex								
Male	NR	NR	37 (835)	4.4 [3.2-5.5]	26 (775)	3.1 [1.9-4.3]	32 (506)	8.7 [5.5-11.9]
Female	NR	NR	77 (792)	9.7 [7.9-11.6]	82 (877)	9.6 [7.7-11.5]	102 (589)	16.8 [13.2-20.4]

*Ethnicity is categorised using the NZ census ethnicity prioritisation method

1 Score of 13 or more on the World Health Organization Well-being Index (WHO-5)

2 Score of 28 or more on the Reynolds Adolescent Depression Scale - Short Form (RADS-SF)

Notes: when comparing survey years, students from kura kaupapa Māori are not included in 2019 results, as previous survey waves did not include kura kaupapa Māori students. The data reported has been calibrated to adjust for differences between the national population of students and those who took part in surveys. See *Youth19 Rangatahi Smart Survey, Initial Findings: Introduction and Methods* for details (available at www.youth19.ac.nz).

NR = not reported. In 2001, the WHO-5 was not included and the question about suicide attempts was asked in a different way, hence is not included in this table.

Mental health and wellbeing among Pacific youth

Youth19 data shows that many Pacific youth have good mental health. However, at the same time, rates of significant depressive symptoms are high among Pacific students, especially among females (33%, compared to 15% of Pacific males).

Socio-economic deprivation has serious impacts on mental health and wellbeing. Higher deprivation is associated with:

- a higher prevalence of depressive symptoms (15% of Pacific students who live in low deprivation areas compared to 25% of those in high deprivation areas)
- a higher proportion who have attempted suicide in the past 12 months (2% of Pacific students who live in low deprivation areas compared to 14% of those in high deprivation areas).

Overall, a greater proportion of Pacific youth report attempting suicide in the past 12 months (12%) than their Pākehā and other European peers (3%).

We have seen a worsening trend between 2012 and 2019 for emotional and mental wellbeing among Pacific youth. Over this period, among Pacific youth:

- significant depressive symptoms increased from 14% to 25%.
- the proportion who had attempted suicide in the past 12 months increased from 7% to 12%.

This concerning data highlights areas of urgent need, including:

- improved culturally competent clinicians and services to support Pacific families and youth in times of distress
- specific policies that minimise barriers to healthcare and support free primary care and counselling services for Pacific youth
- addressing institutional racism and long-term systemic issues that impact on quality health and mental health access
- invest in training a well-prepared Pacific mental health, community workers and school/education workforce
- addressing the social, cultural and economic determinants of wellbeing (i.e., quality housing, food security, pride in culture) to keep Pacific youth well, hopeful and connected.

Further in-depth publications regarding Pacific youth mental health are coming soon.

Table 5: Pacific youth emotional and mental health*

	Good emotional wellbeing[1]		Significant depressive symptoms[2]		Attempted suicide	
	n (N)	% [95% CI]	n (N)	% [95% CI]	n (N)	% [95% CI]
Total	624 (838)	72.8 [67.3-78.4]	220 (843)	24.6 [20.6-28.6]	99 (854)	11.7 [9.8-13.6]
Sex						
Male	286 (325)	87.3 [84.5-90.1]	50 (328)	14.8 [11.5-18.1]	29 (332)	10.2 [7.8-12.5]
Female	338 (513)	61.0 [54.8-67.1]	170 (515)	32.8 [30.0-35.6]	70 (522)	13.0 [9.9-16.1]
Neighbourhood Deprivation[3]						
Low	49 (68)	64.9 [58.0-71.7]	12 (69)	14.9 [9.5-20.3]	2 (69)	1.6 [0.0-3.6]
Medium	157 (204)	75.8 [69.7-81.9]	47 (204)	25.0 [16.5-33.5]	20 (205)	10.9 [5.7-16.2]
High	349 (478)	72.2 [65.8-78.6]	134 (478)	25.3 [18.6-32.0]	69 (490)	14.2 [11.4-17.0]

*Ethnicity is categorised using the NZ census ethnicity prioritisation method

1 Score of 13 or more on the World Health Organization Well-being Index (WHO-5)

2 Score of 28 or more on the Reynolds Adolescent Depression Scale - Short Form (RADS-SF)

3 NZ Deprivation Index 2018, Low deprivation (1-3), Medium deprivation (4-7), High deprivation (8-10)

Table 6: Pacific youth emotional and mental health trends*

	Year 2001		Year 2007		Year 2012		Year 2019	
	n (N)	% [95% CI]	n (N)	% [95% CI]	n (N)	% [95% CI]	n (N)	% [95% CI]
Good emotional wellbeing[1]								
Total	NR	NR	700 (849)	82.2 [79.5-85.0]	908 (1,140)	79.0 [75.7-82.3]	619 (831)	72.9 [67.3-78.4]
Sex								
Male	NR	NR	392 (453)	85.6 [82.5-88.7]	413 (483)	84.7 [81.9-87.6]	284 (323)	87.3 [84.5-90.1]
Female	NR	NR	308 (396)	78.9 [74.7-83.2]	495 (657)	73.2 [68.3-78.2]	335 (508)	60.9 [54.8-67.1]
Significant depressive symptoms[2]								
Total	126 (707)	17.7 [14.5-21.0]	90 (814)	11.4 [9.5-13.3]	150 (1,113)	13.7 [11.1-16.2]	216 (835)	24.6 [20.6-28.5]
Sex								
Male	33 (289)	12.0 [7.8-16.1]	29 (433)	6.4 [3.9- 9.0]	41 (467)	8.8 [6.3-11.2]	50 (326)	14.8 [11.6-18.1]
Female	93 (418)	22.5 [18.7-26.2]	61 (381)	16.2 [13.9-18.5]	109 (646)	18.5 [14.2-22.8]	166 (509)	32.7 [29.9-35.5]
Suicide attempts								
Total	NR	NR	69 (841)	8.6 [6.9-10.3]	95 (1,151)	7.4 [5.8-8.9]	98 (847)	11.7 [9.8-13.6]
Sex								
Male	NR	NR	20 (446)	4.3 [2.6-6.0]	18 (488)	3.2 [1.9-4.5]	29 (330)	10.2 [7.8-12.5]
Female	NR	NR	49 (395)	12.7 [9.8-15.5]	77 (663)	11.6 [9.1-14.1]	69 (517)	13.0 [9.9-16.1]

* Ethnicity is categorised using the NZ census ethnicity prioritisation method

1 Score of 13 or more on the World Health Organization Well-being Index (WHO-5)

2 Score of 28 or more on the Reynolds Adolescent Depression Scale - Short Form (RADS-SF)

Notes: when comparing survey years, students from kura kaupapa Māori are not included in 2019 results, as previous survey waves did not include kura kaupapa Māori students. The data reported has been calibrated to adjust for differences between the national population of students and those who took part in surveys. See *Youth19 Rangatahi Smart Survey, Initial Findings: Introduction and Methods* for details (available at www.youth19.ac.nz).

NR = not reported. In 2001, the WHO-5 was not included and the question about suicide attempts was asked in a different way, hence is not included in this table.

Mental health and wellbeing among Asian youth

Youth19 data shows that many Asian youth have good mental health. However, Asian youth do report high rates of distress. Rates are particularly high among female Asian students (30% of Asian females and 19% of Asian males report significant depressive symptoms). A greater proportion of Asian youth experience significant depressive symptoms (25%) compared to their Pākehā and other European peers (20%).

A smaller proportion of Asian youth reported good wellbeing in 2019 (68%) than in 2012 (76%) and a greater proportion of Asian youth reported experiencing significant depressive symptoms in 2019 (25%) than in 2012 (13%).

These concerning statistics highlight the importance of:

- inclusive and supportive environments and culturally competent services to support the wellbeing of Asian youth
- addressing systemic issues that impact on the use of mental health and counselling services by Asian youth
- addressing racism and discrimination associated with feelings of exclusion and adverse mental health outcomes for Asian youth.

More in-depth publications regarding Asian youth mental health are coming soon.

Table 7: Asian youth emotional and mental health*

	Good emotional wellbeing[1]		Significant depressive symptoms[2]		Attempted suicide	
	n (N)	% [95% CI]	n (N)	% [95% CI]	n (N)	% [95% CI]
Total	1,166 (1,713)	67.7 [64.4-71.0]	436 (1,715)	24.5 [22.1-27.0]	78 (1,719)	4.4 [2.5-6.2]
Sex						
Male	633 (801)	78.1 [75.6-80.6]	144 (801)	19.1 [17.0-21.3]	21 (806)	2.2 [1.0-3.4]
Female	533 (912)	56.4 [52.9-59.9]	292 (914)	30.4 [27.1-33.6]	57 (913)	6.8 [3.7-9.9]
Neighbourhood Deprivation[3]						
Low	295 (428)	68.4 [63.5-73.3]	100 (424)	21.3 [17.9-24.7]	18 (425)	5.0 [0.6-9.4]
Medium	552 (801)	69.3 [65.6-73.1]	207 (806)	25.6 [22.3-28.9]	29 (807)	4.0 [2.2-5.8]
High	239 (356)	66.2 [60.6-71.8]	93 (357)	26.2 [20.6-31.8]	19 (356)	4.0 [1.7-6.2]

*Ethnicity is categorised using the NZ census ethnicity prioritisation method

1 Score of 13 or more on the World Health Organization Well-being Index (WHO-5)

2 Score of 28 or more on the Reynolds Adolescent Depression Scale - Short Form (RADS-SF)

3 NZ Deprivation Index 2018, Low deprivation (1-3), Medium deprivation (4-7), High deprivation (8-10)

Table 8: Asian youth emotional and mental health*

	Year 2001		Year 2007		Year 2012		Year 2019	
	n (N)	% [95% CI]	n (N)	% [95% CI]	n (N)	% [95% CI]	n (N)	% [95% CI]
Good emotional wellbeing[1]								
Total	NR	NR	816 (1,086)	75.0 [72.3-77.7]	764 (1,021)	76.1 [72.8-79.4]	1,166 (1,713)	67.7 [64.4-71.0]
Sex								
Male	NR	NR	475 (597)	79.7 [76.0-83.4]	403 (501)	81.7 [78.4-84.9]	633 (801)	78.1 [75.6-80.6]
Female	NR	NR	341 (489)	70.0 [65.7-74.3]	361 (520)	69.5 [63.7-75.3]	533 (912)	56.4 [52.9-59.9]
Significant depressive symptoms[2]								
Total	89 (643)	13.7 [11.4-16.0]	158 (1,079)	14.6 [12.6-16.6]	131 (1,017)	12.5 [10.7-14.2]	436 (1,715)	24.5 [22.1-27.0]
Sex								
Male	31 (299)	10.8 [6.8-14.8]	63 (593)	10.7 [8.6-12.9]	48 (500)	9.3 [6.8-11.7]	144 (801)	19.1 [17.0-21.3]
Female	58 (344)	16.7 [12.8-20.6]	95 (486)	18.7 [15.6-21.9]	83 (517)	16.2 [13.2-19.2]	292 (914)	30.4 [27.1-33.7]
Suicide attempts								
Total	NR	NR	35 (1,092)	3.2 [2.3-4.1]	38 (1,030)	3.2 [2.1-4.4]	78 (1,719)	4.4 [2.5-6.3]
Sex								
Male	NR	NR	14 (600)	2.5 [1.1-3.8]	14 (508)	2.6 [1.2-3.9]	21 (806)	2.2 [1.0-3.4]
Female	NR	NR	21 (492)	4.0 [2.8-5.2]	24 (522)	4.0 [2.3-5.8]	57 (913)	6.8 [3.7-9.9]

* Ethnicity is categorised using the NZ census ethnicity prioritisation method

1 Score of 13 or more on the World Health Organization Well-being Index (WHO-5)

2 Score of 28 or more on the Reynolds Adolescent Depression Scale - Short Form (RADS-SF)

Notes: when comparing survey years, students from kura kaupapa Māori are not included in 2019 results, as previous survey waves did not include kura kaupapa Māori students. The data reported has been calibrated to adjust for differences between the national population of students and those who took part in surveys. See *Youth19 Rangatahi Smart Survey, Initial Findings: Introduction and Methods* for details (available at www.youth19.ac.nz).

NR = not reported. In 2001, the WHO-5 was not included and the question about suicide attempts was asked in a different way, hence is not included in this table.

Mental health and wellbeing among Pākehā and other European youth

Pākehā and other European youth also reported high levels of distress. A smaller proportion of Pākehā and other European youth reported good wellbeing in 2019 (70%) than in 2012 (76%), and a greater proportion reported experiencing significant depressive symptoms in 2019 (20%) than in 2012 (13%).

As with other groups, depressive symptoms were higher among Pākehā and other European female students (24%) than their male peers (15%). Depressive symptoms and suicide attempts were particularly high among Pākehā and other European youth in high deprivation neighbourhoods (34% and 9% respectively) compared to those in wealthier areas.

The prevalence of suicide attempts among Pākehā and other European youth has not notably decreased from 2007.

As we found with other groups, Pākehā and other European youth have also seen a decline in mental health and wellbeing over the past 7 years. This is particularly true for those who live in high deprivation communities, highlighting the need to address the broader determinants of health, including adequate family income, housing and food security and future employment opportunities to improve youth mental health outcomes.

Table 9: Pākehā and other European youth emotional and mental health*

	Good emotional wellbeing[1]		Significant depressive symptoms[2]		Attempted suicide	
	n (N)	% [95% CI]	n (N)	% [95% CI]	n (N)	% [95% CI]
Total	2,072 (2,981)	69.5 [67.6-71.4]	636 (2,981)	19.6 [18.0-21.2]	99 (2,990)	3.3 [2.3-4.3]
Sex						
Male	1,051 (1,343)	77.0 [74.8-79.2]	191 (1,346)	14.6 [13.1-16.0]	36 (1,345)	3.3 [1.7-5.0]
Female	1,021 (1,638)	62.6 [60.2-65.0]	445 (1,635)	24.3 [22.0-26.6]	63 (1,645)	3.2 [2.4-4.0]
Neighbourhood Deprivation[3]						
Low	928 (1,270)	71.8 [68.6-74.9]	217 (1,270)	15.4 [13.7-17.0]	24 (1,272)	1.8 [1.1-2.4]
Medium	801 (1,158)	71.3 [68.8-73.8]	265 (1,156)	19.8 [16.8-22.8]	44 (1,159)	3.0 [2.0-4.0]
High	197 (319)	58.8 [51.6-66.0]	99 (323)	34.1 [21.0-47.2]	23 (324)	9.0 [2.7-15.3]

* Ethnicity is categorised using the NZ census ethnicity prioritisation method

1 Score of 13 or more on the World Health Organization Well-being Index (WHO-5)

2 Score of 28 or more on the Reynolds Adolescent Depression Scale - Short Form (RADS-SF)

3 NZ Deprivation Index 2018, Low deprivation (1-3), Medium deprivation (4-7), High deprivation (8-10)

Table 10: Pākehā and other European youth emotional and mental health*

	Year 2001		Year 2007		Year 2012		Year 2019	
	n (N)	% [95% CI]	n (N)	% [95% CI]	n (N)	% [95% CI]	n (N)	% [95% CI]
Good emotional wellbeing1								
Total	NR	NR	3,649 (4,610)	78.9 [77.7-80.1]	3,053 (3,972)	76.4 [75.0-77.7]	2,069 (2,978)	69.5 [67.6-71.4]
Sex								
Male	NR	NR	2,124 (2,506)	85.0 [83.4-86.5]	1,438 (1,761)	81.3 [79.7-82.8]	1,049 (1,341)	77.0 [74.8-79.2]
Female	NR	NR	1,525 (2,104)	72.6 [71.0-74.2]	1,615 (2,211)	71.7 [69.8-73.7]	1,020 (1,637)	62.6 [60.2-65.0]
Significant depressive symptoms2								
Total	545 (5,291)	10.0 [9.2-10.9]	461 (4,559)	10.4 [9.6-11.2]	486 (3,934)	12.5 [11.3-13.6]	635 (2,978)	19.6 [18.0-21.2]
Sex								
Male	181 (2,411)	7.7 [6.6- 8.8]	169 (2,472)	6.8 [5.8- 7.8]	136 (1,734)	8.4 [6.8-10.0]	190 (1,344)	14.5 [13.0-16.0]
Female	364 (2,880)	12.3 [11.0-13.6]	292 (2,087)	14.0 [12.7-15.3]	350 (2,200)	16.3 [15.1-17.5]	445 (1,634)	24.3 [22.0-26.6]
Suicide attempts								
Total	NR	NR	172 (4,631)	3.8 [3.3-4.3]	107 (3,976)	2.4 [2.0-2.9]	99 (2,987)	3.3 [2.3-4.3]
Sex								
Male	NR	NR	60 (2,513)	2.5 [1.9-3.0]	28 (1,763)	1.5 [0.9-2.2]	36 (1,343)	3.3 [1.7-5.0]
Female	NR	NR	112 (2,118)	5.2 [4.3-6.0]	79 (2,213)	3.3 [2.6-3.9]	63 (1,644)	3.2 [2.4-4.0]

* Ethnicity is categorised using the NZ census ethnicity prioritisation method

1 Score of 13 or more on the World Health Organization Well-being Index (WHO-5)

2 Score of 28 or more on the Reynolds Adolescent Depression Scale - Short Form (RADS-SF)

Notes: when comparing survey years, students from kura kaupapa Māori are not included in 2019 results, as previous survey waves did not include kura kaupapa Māori students. The data reported has been calibrated to adjust for differences between the national population of students and those who took part in surveys. See *Youth19 Rangatahi Smart Survey, Initial Findings: Introduction and Methods* for details (available at www.youth19.ac.nz).

NR = not reported. In 2001, the WHO-5 was not included and the question about suicide attempts was asked in a different way, hence is not included in this table.

Mental health among sexual and gender minority youth

Stress, distress and suicide risk are generally elevated among sexual and gender minority youth (Clark et al., 2014; Lucassen et al., 2017). Importantly, these risks are much lower in schools and communities that are rainbow friendly (Denny et al., 2016b; Lucassen et al., 2017).

Risks may also be elevated among those with intersectional identities (e.g., queer Asian youth or Māori who are disabled and bisexual; e.g., Chiang et al., 2017). Analyses of data representing these groups are underway and results will be available via our website www.youth19.ac.nz.

Why is mental health worsening?

As researchers and members of Aotearoa New Zealand communities, we consider that this data about youth mental and emotional health needs is concerning and attention to address long term causes and current needs is required. Increases in distress over the last decade have been reported in many developed nations. There are multiple hypotheses or theories about why this is. These ideas include that young people today may be more likely to express distress; the impact of smart phones and social media; the impact of early childhood experiences, including stressed parents, linked to poverty, inequity, housing costs or financial crisis issues; increased exposure to violence; the ongoing or increasing impact of intergenerational trauma and the impact of colonisation and racism; the impact of increased parental and social monitoring and lack of unstructured or unsupervised time; increases in perfectionism and expectations in schooling and other areas; and the impact of future worries as teens look to adulthood and consider climate crisis, employment and housing challenges.

No one of these explanations accounts for the changes for all groups. Research continues to understand why these changes have occurred. Fortunately there are some clear directions about what we should do to support the wellbeing of young people.

What helps to improve mental health?

There are many things we can do in our homes, schools and communities to help prevent problems and to support young people when times are tough. Things that help promote good emotional and mental wellbeing and reduce distress include:

- caring and supportive families, including a strong relationship with a caring adult
- fostering a strong sense of cultural identity and belonging
- acceptance of identity (ethnicity, abilities, sexual and gender identity, etc.)
- having fun and being around people who care
- a sense of purpose or achievement in daily life and hopes for the future
- supportive schools, where there are adults who care, teachers have high expectations and students are treated fairly
- activities, sports, arts, groups that offer a sense of belonging
- having good friends to talk to and who look out for each other
- other adult supports and mentors (coaches, youth workers, church leaders, etc.)
- freedom from violence, bullying and discrimination
- safe communities where there are things to do
- opportunities to achieve, lead and learn
- volunteering and employment opportunities
- help when things go wrong, such as from school-based health teams, youth one stop shops, or Whānau Ora, or via online, phone and texting services (e.g., Aunty Dee, Youthline, 1737 or Healthline).

For young people: Getting help for yourself or a friend

It is important to remember that most young people are doing okay, but dealing with tough times and mental health can be really challenging. It might not feel like it, but things can and do change. Sometimes it can take trying lots of different things to find what works for you or someone who can support you, but there will be things that will make the difference.

There are many groups and people who would like to support you, your family or your friends, but sometimes it can be hard to find help when you need it or know what to say. Please look up thelowdown.co.nz, contact Youthline (free call 0800 376 633, free text 234 or webchat on Youthline.co.nz), call or text 1737, call Healthline (free on 0800 611 116 for advice and information from a trusted registered nurse) or check out the options above. We have some extra hints on "What if I don't know what to say?", "What if they don't help?" "What if I am not bad enough" and other FAQ's on our website www.info.youth19.ac.nz.

For whānau/parents, teachers and other adults who are concerned: Getting help

Most people find asking for help really hard. Often getting help seems simple when you feel good, but it can be much harder when you feel down, depressed or overwhelmed. For these reasons, it is important for family/whānau, friends and schools to actively reach out to connect with and support young people. Sometimes this can be challenging, and it may take multiple offers before young people accept your help.

It can be hard to find a service when you are concerned about a young person, your student or your child. You can get help by talking with a health professional such as a GP, your school nurse or pastoral care team or calling a helpline (e.g., 1737, Youthline or Healthline). You can find other sources of help by visiting Health Navigator New Zealand (www.healthnavigator.org.nz) or Family Services Directory (www.familyservices.govt.nz/directory).

If you or someone you know might be unsafe right now, contact emergency services (111).

References

Bor, W., Dean, A. J., Najman, J., & Hayatbakhsh, R. (2014). Are child and adolescent mental health problems increasing in the 21st century? A systematic review. *Australian & New Zealand Journal of Psychiatry*, *48*(7), 606–616. https://doi.org/10.1177/0004867414533834

Chiang, S., Fleming, T., Lucassen, M., Fenaughty, J., Clark, T., & Denny, S. (2017). Mental health status of double minority adolescents: Findings from national cross-sectional health surveys. *Journal of Immigrant and Minority Health, 19*, 499–510. https://doi:10.1007/s10903-016-0530-z

Clark, T. C., Le Grice, J., Moselen, E., Fleming, T., Crengle, S., Tiatia-Seath, J., & Lewycka, S. (2018). Health and wellbeing of Māori secondary school students in New Zealand: Trends between 2001, 2007 and 2012. *Australian and New Zealand Journal of Public Health, 42*(6), 553–561. https://doi.org/10.1111/1753-6405.12839

Clark, T.C., Lucassen, M., Bullen, P., Denny, S., Fleming, T., Robinson, E.,… Rossen, F. (2014). The health and well-being of transgender high school students: Results from the New Zealand Adolescent Health Survey (Youth'12). *Journal of Adolescent Health, 55*(1), 93–9. https://doi: 10.1016/j.jadohealth.2013.11.008

Crengle, S., Clark, T. C., Robinson, E., Bullen, P., Dyson, B., Fleming, T., Fortune, S., Peiris-John, R., Utter, J., Rossen, F., Sheridan, J., Teevale, T., & The Adolescent Health Research Group. (2013). *The Health and Wellbeing of Māori New Zealand Secondary School Students in 2012. Te Ara Whakapiki Taitamarkiki: Youth'12.* The Adolescent Health Research Group. www.youthresearch.auckland.ac.nz

Denny, S., Lewycka, S., Utter, J., Fleming, T., Peiris-John, R., Rossen, F., Wynd, D., Teevale, T., Bullen, P., Sheridan, J., & Clark, T. (2016a). The association between socioeconomic deprivation and secondary school students' health: Findings from a latent class analysis of a national adolescent health survey. *International Journal for Equity in Health 15*,109. https://doi.org/10.1186/s12939-016-0398-5

Denny, S., Lucassen, M., Stuart, J., Fleming, T., Bullen, P., Peiris-John, R., Rossen, F., & Utter, J. (2016b). The association between supportive high school environments and depressive symptoms and suicidality among sexual minority students. *Journal of Clinical Child & Adolescent Psychology, 45(*3), 248–261. https://doi.org/10.1080/15374416.2014.958842

Fleming, T. M., Clark, T., Denny, S., Bullen, P., Crengle, S., Peiris-John, R., … Lucassen, M. (2014). Stability and change in the mental health of New Zealand secondary school students 2007–2012: Results from the national adolescent health surveys. *Australian & New Zealand Journal of Psychiatry, 48*(5), 472–480. https://doi.org/10.1177/0004867413514489

Keyes, K. M., Gary, D., O'Malley, P. M., Hamilton, A., & Schulenberg, J. (2019). Recent increases in depressive symptoms among US adolescents: Trends from 1991 to 2018. *Social Psychiatry and Psychiatric Epidemiology, 54*(8), 987–996. https://doi.org/10.1007/s00127-019-01697-8

Lawson-Te Aho, K., & Liu, J. H. (2010). Indigenous suicide and colonization: The legacy of violence and the necessity of self-determination. *International Journal of Conflict and Violence (IJCV), 4*(1), 124–133. https://doi.org/10.4119/IJCV-2819

Lessof, C., Ross, A., Brind, R., Bell, E., Newton, S. & TNS BMRB. (2016). *Longitudinal Study of Young People in England Cohort 2: Health and Wellbeing at Wave 2.* Department for Education. https://www.gov.uk/government/publications/longitudinal-study-of-young-people-in-england-cohort-2-wave-2

Lucassen, M. F., Stasiak, K., Samra, R., Frampton, C. M., & Merry, S. N. (2017). Sexual minority youth and depressive symptoms or depressive disorder: A systematic review and meta-analysis of population-based studies. *Australian & New Zealand Journal of Psychiatry, 51*(8), 774–787. https://doi.org/10.1177/0004867417713664

Milfont, T. L., Merry, S., Robinson, E., Denny, S., Crengle, S., & Ameratunga, S. (2008). Evaluating the short form of the Reynolds Adolescent Depression Scale in New Zealand adolescents. *Australian & New Zealand Journal of Psychiatry, 42*(11), 950–954. https://doi.org/10.1080/00048670802415343

Ngā Pou Arawhenua, Child and Youth Mortality Review Committee, & Suicide Mortality Review Committee. (2020). *Te Mauri The Life Force: Rangatahi Suicide Report: Te Pūrongo Mō te Mate Whakamomori o te Rangatahi.* Health Quality and Safety Commission. https://www.hqsc.govt.nz/our-programmes/mrc/sumrc/publications-and-resources/publication/3949/

Pihama, L., Reynolds, P., Smith, C., Reid, J., Smith, L. T., & Nana, R. Te. (2014). Positioning historical trauma theory within Aotearoa New Zealand. *AlterNative: An International Journal of Indigenous Peoples, 10*(3), 248–262. https://doi.org/10.1177/117718011401000304

Reynolds, W.M. (2002). *Reynolds Adolescent Depression Scale, 2nd edn:* Professional manual. Lutz, Florida: Psychological Assessment Resources.

World Health Organization. (1998). *Wellbeing Measures in Primary Health Care/The Depcare Project: Report on a WHO Meeting*. https://www.euro.who.int/__data/assets/pdf_file/0016/130750/E60246.pdf

YOUTH2000 SURVEY SERIES

www.youth19.ac.nz