



Malatest
International

Technical report:

Detailed description of the data collection and analysis methods for the National Youth Health and Wellbeing survey

What About Me?

2022



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1. Overview of the survey approach

1.1. Purpose of the technical report

This report provides a detailed description of our approach to delivering the National Youth Health and Wellbeing Survey *What About Me?*, which reached 7,209 young people in 71 schools and kura and an additional 502 young people in community settings.

It complements the other *What About Me?* resources available on the Ministry of Social Development website:¹

- Overview report describing the survey results
- Downloadable tables with all results included in this report and later a wider set of tables including results for other survey questions
- More information about accessing the dataset with data dictionary and supporting documentation held by Stats NZ.

1.2. Purpose of the survey

In late 2018, government agencies led by the Ministry of Social Development (MSD) commissioned a nationwide health and wellbeing survey of young people aged 12 to 18. After consultation with young people, the survey was branded as *What About Me?*

The survey was commissioned to build on existing information and to fill gaps in what was known about young people by profiling their wellbeing, resilience, strengths and hopes for the future. Indicators for the Child and Youth Wellbeing Strategy² were embedded in the survey. It was also important for the survey to identify parts of their lives where young people were struggling, in order to help inform how they could be supported.

The survey had two components: surveying a sample of usually resident students attending secondary school and surveying a sample of young people in the community in settings where they were less likely to be attending school.

¹ <https://msd.govt.nz/about-msd-and-our-work/publications-resources/consultations/youth-health-and-wellbeing-survey-results/index.html>

² See www.childyouthwellbeing.govt.nz/

1.3. The principles underpinning our approach

- A holistic approach to health and wellbeing that considered the different dimensions of young people's lives. e.g. inclusive of questions that covered the four domains of Te Whare Tapa Whā (taha wairua, taha hinengaro, taha whānau, taha tinana).
- A youth centred survey that collected meaningful information about how young people saw their lives.
- Useful and usable information to inform policy development and service delivery and to provide a foundation for tracking progress.
- Strengths-based measures to complement many of the administrative data measures that were deficit based.
- An accessible survey with length and language that did not exclude young people with literacy or language challenges.
- An interactive reporting tool to provide schools, and youth services with information about the young people they support.
- A full data set for government to underpin additional analyses.

1.4. Survey timing

The intention was to complete survey fieldwork in school terms 2-3 of 2019. However, delays in gaining ethics approval resulted in rescheduling the fieldwork to 2020. The 2020, COVID lockdown further postponed fieldwork to 2021.

In term 1 2021, young people completed a pilot survey. The main survey was planned for terms 2-3 of 2021. Fieldwork started in June 2021 but was paused during the COVID lockdown in August and September 2021. Fieldwork was extended post-lockdown to October and November 2021 with a few schools who were still willing to take part. As a result, the number of schools participating and survey completions were lower than planned.

2. Ethics and privacy

2.1. Ethics and privacy approvals

An opinion was sought from the Health and Disability Ethics Committee (HDEC) about whether the survey and its focus on wellbeing fell into the scope of the Committee's review. The Committee's response was that the survey required full review. The ethics process was extensive and when approval was granted it limited survey participation to young people aged 14 and older.

Following an appeal process and a pilot study, ethics approval was gained to include all year 9 to 13 students in the survey. The safety process was clearly defined and is described below.

2.2. Approaches to participant safety

The table below provides an overview of the plan to support the safety of rangatahi participating in the survey (Table 1).

Table 1. Components of the safety plan

Safety plan components	Details
Project design	
Team training	The research team was trained by Youthline to identify and respond to signs of distress. A youth worker was included in the data collection alongside a researcher both for additional safety and to introduce survey participants to someone they could contact locally.
Ethics review	The study protocol has been extensively reviewed by the Health and Disability Ethics committee and the Health Research Council in addition to review from experts in working with at-risk young people.
Pilot study	A pilot study with eight schools was undertaken to assess if there were any additional safety considerations for the main data collection.
School and organisation planning	
Safety and operational plan development	An operational and safety plan was filled out with each participating school and community organisation. The plans ensured each aspect of the approach to managing risk had been agreed with schools/ community organisations in advance and were in place during data collection.

Safety plan components	Details
Identification of at-risk young people	Part of the planning process was identifying students who were at higher risk of requiring support during or after completing the survey. Once the sampled school classes were identified, the researchers and school staff consulted teachers and school counsellors to identify any students who were at higher risk. Community organisations identified young people at higher risk based on their professional expertise and/or knowledge of each young person. Individual safety plans were created for these young people.
Whānau were advised of the survey	Whānau were advised of the survey through school newsletter inserts and whānau information sheets sent home through the school's usual communication channels. Young people were encouraged to discuss the survey with their whānau. They were able to opt-out of the survey in advance by contacting the school or the research team directly. In the community settings, young people were encouraged to share the survey information sheet with their whānau.
Safety during survey completion	
Pastoral care available on-site during data collection	We confirmed with schools that pastoral care staff would be available when survey data collection took place. A process for connecting any young people who become distressed or made a disclosure to the pastoral care team was developed and agreed with the team. Similarly, in the community setting, the organisation confirmed there would be clinical and/or youth/social worker staff present when data collection was taking place.
Verbal briefing before survey starts	Before commencing the survey consent process, we conducted a verbal briefing to young people about what support was available and how to access it. That included talking to young people about local services and introducing the youth worker in the room and in some cases pastoral care staff.
Youth workers in data collection teams	Our research staff were complemented by a youth worker. Where feasible the youth worker was from the school or a local organisation. The youth worker was qualified and experienced in working with at-risk young people, including how to respond to disclosures or safety concerns. Youth workers were responsible for responding to participants who become distressed or made disclosures.
'Where to get help' cards	Every young person was given a 'Where to get help' card which had contact details for Youthline, school support and other support services. These contact details included phone, text, email and web-based modes. Copies can be seen on the website www.whataboutme.nz .

Safety plan components	Details
Help form in survey	A 'get help' button was visible on every page of the survey. Clicking the 'get help' button exited young people from the survey and to a 'help' form. This was not connected to the survey data. Completing the form generated an email to one of the school's pastoral care staff so they could follow-up with the student. The email contact and process were agreed and tested before data collection and details recorded in the school's operational and safety plan. The young person could not re-enter the survey.

In total:

- Fifteen young people required support during the survey from the youth worker: approximately one per five schools.
- Fifty-five young people used the 'get help' button to send an email message to their school pastoral care team: approximately three per four schools.

It is possible that other safety events occurred after survey delivery however none were reported to our team.

2.3. Importance of anonymity

In our consultation with young people, they emphasised the importance of their views being heard and the importance of anonymity. Survey material explained that young people's responses were anonymous. Young people's emphasis on anonymity has implications for any future linking of the survey to other datasets such as the Integrated Data Infrastructure (IDI).

3. The survey tool

3.1. Questionnaire design

The basis of questionnaire development was:

- A holistic perspective of wellbeing that included questions across the four domains of Te Whare Tapa Whā
- Alignment with child and youth wellbeing framework indicators
- Use of some questions tested in the Office of the Children’s Commissioner survey of 677 college aged young people
- Inclusion of some Youth2000 series questions to provide longitudinal trend information.

Where possible we have taken a strengths-based approach in the questionnaire design that could flow through to reporting. This has not always been possible, for example where there is a need to continue the timeseries of deficit-based questions or where a deficit-based standardised tool is included. It also posed challenges in reporting findings where the negative, rather than the positive, is customarily reported.

The questionnaire content was developed collaboratively through interviews with people who supported young people, focus groups with young people and workshops with representatives from government agencies and organisations working with or representing young people. Input was sought from Māori and Pacific advisory groups we formed for the project. Additional questions were added by agencies after the consultation process.

The survey was cognitively pre-tested with diverse groups of young people including young people from State School settings, young people from private school settings, Rainbow young people, disabled young people, Māori and Pacific young people, Asian young people, and young people in Department of Corrections facilities.

In the final review of the questionnaire, agencies and academics requested the addition of several questions based on validated scales and to align with national and international reporting requirements.

Survey respondents included young people with learning and cognitive difficulties, and low literacy levels. Challenges in the final questionnaire were:

- Inclusion of too many questions making the survey too long for some young people to complete within the intended time of one school period.
- The language used in some of the validated scales and questions was complex, dated and difficult for some young people to understand.

- Use of different scale ranges and types within the same questionnaire because we were not able to modify validated questions.

Questionnaire topics are listed in Appendix 1 and online at <https://www.whataboutme.nz/>.

3.2. Questions related to Youth2000 series questions³

The survey included questions used or based on the Youth19 survey or previous surveys in the Youth2000 series. They are identified in the *What about me?* data dictionary and listed below. Some response options were modified for consistency with other items in the questionnaire. A full list of the questions with details is included in Appendix 2. Most of the questions were based on Youth'12 as Youth'19 was developed simultaneously with *What about me?* Some of the wording of questions was adjusted between Youth'12 and Youth'19 surveys.

Table 2. Youth19 and other Youth2000 series questions included in the questionnaire

Topics and questions	Youth2000 series topics and questions
Self-assessed wellbeing	'Are you happy or satisfied with your life?'
Number of homes	'How many homes do you have?'
People in the home	'Who do you live with?'
Parental figures	'Who usually looks after you or acts as a parent for you?'
Relationship with carers	Supportive whānau/family members section
Caring for others	'Do you do extra work around your home because someone is disabled or sick or can't do things?' 'Is there anyone like this who lives here with you that you have to look after on a regular basis?'
Safety at home	'Do you feel safe at home?'
Food and Money Deprivation	Multiple questions about parental worry about basic needs
Moving house	'In the last 12 months, how many times have you moved homes?'
Oranga Tamariki	'Have you ever been involved with Oranga Tamariki (OT) or Child, Youth and Family Services?'
Trouble with police	'In the last 12 months have you been in trouble with the police?'
Age	'How old are you?'

³ Information and publications on the Youth2000 series are collated at: www.fmhs.auckland.ac.nz/en/faculty/adolescent-health-research-group/publications-and-reports/publications-by-topic.html

Topics and questions	Youth2000 series topics and questions
Sex	'What sex are you?'
School type	'Do you go to:'
Year group	'What year (form) are you at school?'
School attendance	'In the last 12 months, have you wagged or skipped school for a full day or more without an excuse?'
Moving schools	'How many schools have you been to since you began Year 9?'
School belonging	'Do you feel like you are part of your school?'
Qualification aspirations	'What do you think will be the last year (or form) at secondary school for you?'
Leaving school	'What do you plan to do when you leave secondary school?'
Paid jobs	'Have you worked for money or had a paid job?'
Work type	'What kind of work do you do?'
Ethnicity	'Which ethnic group do you belong to?'
Birth country	'Where were you born?'
Immigration	'About how old were you when you first came to Aotearoa/New Zealand?'
Refugee status	'Did you come to Aotearoa/New Zealand as a refugee?'
Language	'Which languages can you speak well enough to have a conversation in?'
Cultural belonging	'Are the values of your family's culture important to you?'
Religion	'What faith or religion are you?'
Importance of religion	'How important to you are your spiritual beliefs or religious faith?'
Subjective health	'In general how would you say your health is?'
Internet use	'Are you worried by how much you use the Internet?'
Pornography	'How often do you look at porn?' 'Have you ever felt pressured to do things that you or someone else saw in porn?'
Gambling	'Have you ever gambled or bet precious things for money on any of these activities?'
Cigarettes	'Have you ever smoked a whole cigarette?'
Vaping	'Have you ever vaped or used an e- cigarette?' 'When you first began vaping or using e-cigarettes did you smoke ordinary cigarettes?'
Alcohol	'Have you ever drunk alcohol?'
Binge drinking	'In the past 4 weeks, how many times did you have 5 or more alcoholic drinks in one session - within 4 hours?'

Topics and questions	Youth2000 series topics and questions
Marijuana	'Have you ever smoked marijuana?'
Other drugs	'How many times have you used any of the following drugs?'
Worrying about drugs and alcohol	Section containing multiple questions about worry about drugs and alcohol
Clubs	'Do you belong to a group, club or team which is not run by your school?'
Community behaviours	'Do you give your time to help others in your community?'
Community belonging	'Do you feel you really belong in your neighbourhood?'
Community safety	'Do you feel safe in your neighbourhood?'
Sexual experiences	'Have you ever had sex? (by this we mean sexual intercourse) 'About how old were you when you first had an experience of sex?'
STI prevention	'The last time you had sex did you use condoms as protection against sexually transmitted disease or infection?'
Contraception	'How often do you or your partner use contraception? 'Which, if any, forms of contraception are you or your partner(s) currently using?'
Bullying	'In the last 12 months how often have you been bullied in school?'
Ethnicity discrimination	'Have you ever been treated unfairly (e.g. treated differently) by a teacher/tutor because of your ethnic group?'
Violence at home	Witnessing violence at home section
Physical abuse	'Have you ever been hit or physically harmed by anyone on purpose?'
Sexual abuse	'Have you ever been touched in a sexual way or made to do sexual things that you didn't want to do?'
Self-harm	'During the last 12 months have you deliberately hurt yourself or done anything you knew might harm you (but not kill you)?'
Suicide ideation	'Seriously thought about killing yourself (attempting suicide)?'
Suicide attempt	'Tried to kill yourself (attempted suicide)?'
Support	'If you were having a serious problem is there an adult (who is not in your family) you would feel okay talking to?'
Support person	'In the last 12 months, have you ever seen a health professional such as a doctor, nurse or school guidance counsellor for emotional health worries?'
Healthcare	'Which of the following places have you used for health care in the last 12 months?'
Not able to access healthcare	'In the last 12 months, has there been any time when you wanted or needed to see a doctor or nurse (or other health care worker) about your health, but you weren't able to?'

3.3. Accessibility

We took the following steps to increase the accessibility of the survey:

- Youth co-design with marketing experts helped to make the survey interesting and appealing to complete.
- The survey was translated into Te Reo Māori and New Zealand sign language and some tablets were available for young people with visual disability to use with a reader. The English version was completed by most young people (7,441) with the Te Reo Māori version completed by 23 and the NZ sign language version by 7⁴.
- The survey included Te Reo Māori and English audio versions and earphones were provided to assist young people who found it easier to hear the questions alongside reading them.
- Support from the researcher, youth worker or reader/writer was permitted by the Health and Disability Ethics Committee for young people with literacy or language challenges if young people completed the survey responses themselves.
- A youth worker and a researcher were on site and available to answer any questions about the meaning of words or questions.

3.4. The survey platform

The survey was set up on an Aotearoa New Zealand based server. It was programmed as a secure application to meet ethics and privacy requirements.

⁴ n = 2 young people did not have a preferred language recorded in the dataset.

4. School sample design

4.1. School sample objectives

What About Me? was completed by a sample of Aotearoa New Zealand's young people. The objectives of the sample were to:

- Collect data from a group representative of the usually resident population attending secondary school in Aotearoa New Zealand.
- Collect enough responses to enable comparison at the national level between young people:
 - From different ethnic groups
 - Of different ages
 - Of different genders.
- Collect enough responses at the regional council level to enable comparison between young people in different regions by junior or senior school age and gender.

The reduced number of completions means some sub-group comparisons require grouping across regions.

4.2. The target population

The target population of the youth health and wellbeing survey was Aotearoa New Zealand's youth population attending secondary school. As only a small proportion of 12-year-olds attend secondary school, the survey focused more on the 13-18 age group with 12 year olds included if they were in Year 9 classes and older students included if they attended Year 13 classes. The population (Census 2018) of this target population is shown on the map below divided across the Regional Council boundaries.

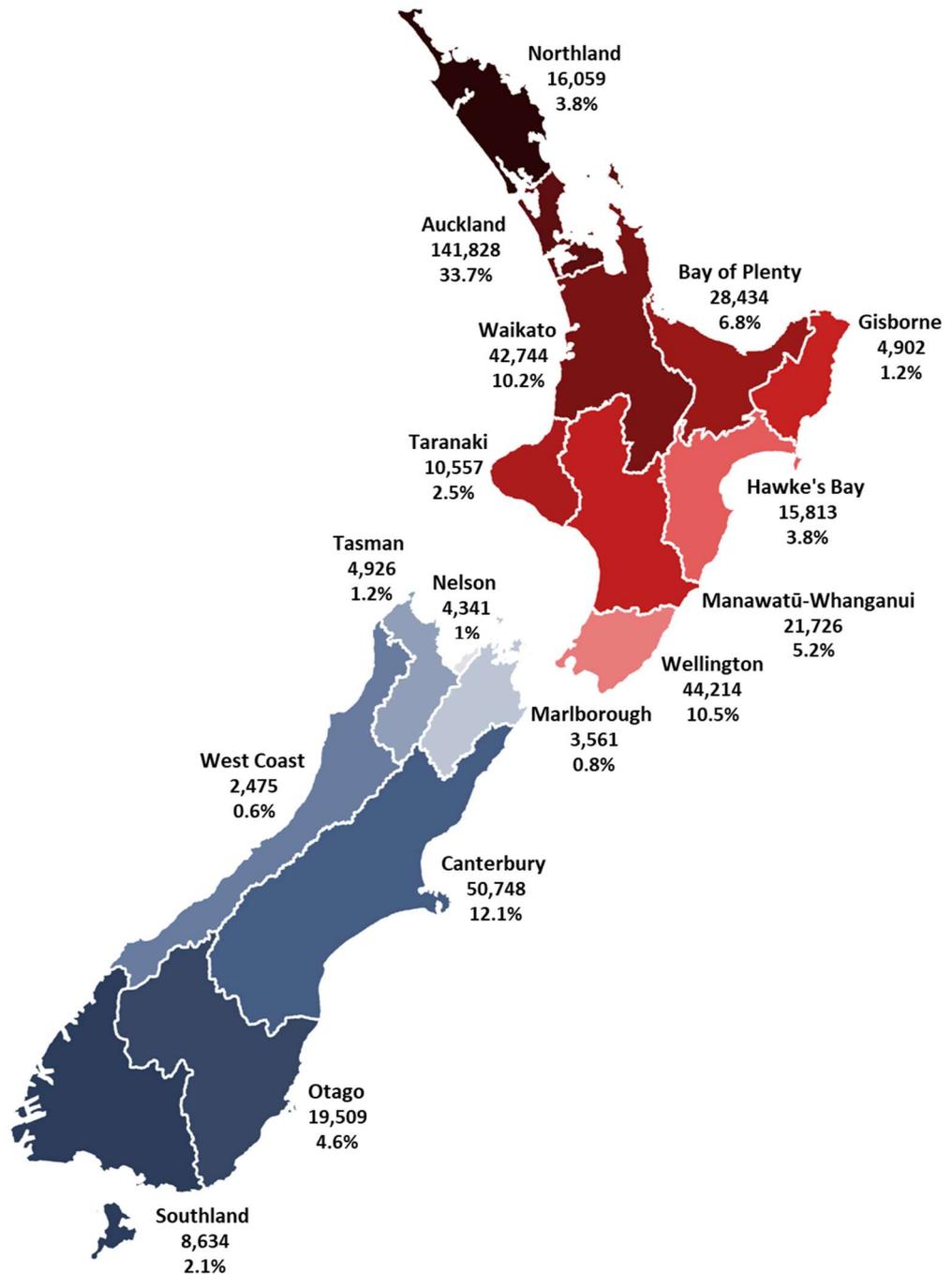


Figure 1. Number and proportion of the 12–18-year-old population across regional councils (Census 2018). Numbers are also shown in Table 3.

We aimed to reach the young people who were regularly attending school, in their school settings. The school sample was able to be structured because school rolls were available to define the student population. Young people were also only likely to be recorded on a roll for one school.

Table 3 provides an overview of the 2018 Census figures for the number of young people aged 12-18 in each region (excluding Chatham Islands), Years 9-13 school roll totals for an estimate of the in-school population and the difference between those two figures for an estimate of the population not enrolled in school.

Table 3. 12-18 year old population of Aotearoa New Zealand in total and by regional council (Statistics NZ 2018 Census, Education Counts 2021)

Regional Council	Census (2018)	Education Counts 2021		Difference between population and enrolment numbers	
	12-18 year olds	School rolls (year 9 to 13)	% enrolled in Y9-13	Difference	% not enrolled
Auckland	141,828	100,311	70.7%	41,517	29.3%
Bay of Plenty	28,434	19,246	67.7%	9,188	32.3%
Canterbury	50,748	36,555	72.0%	14,193	28.0%
Gisborne	4,902	3,017	61.5%	1,885	38.5%
Hawke's Bay	15,813	10,564	66.8%	5,249	33.2%
Manawatū-Whanganui	21,726	14,215	65.4%	7,511	34.6%
Marlborough	3,561	2,201	61.8%	1,360	38.2%
Nelson	4,341	3,726	85.8%	615	14.2%
Northland	16,059	10,053	62.6%	6,006	37.4%
Otago	19,509	12,040	61.7%	7,469	38.3%
Southland	8,634	5,725	66.3%	2,909	33.7%
Taranaki	10,557	7,178	68.0%	3,379	32.0%
Tasman	4,926	2,618	53.1%	2,308	46.9%
Waikato	42,744	28,667	67.1%	14,077	32.9%
Wellington	44,214	30,368	68.7%	13,846	31.3%
West Coast	2,475	1,483	59.9%	992	40.1%
NATIONAL	420,471	287,967	68.5%	132,504	31.5%

The differences between the overall youth population and the school rolls provide an estimate of the youth population we are less likely to reach in secondary schools. Many of the 12-year-olds are still enrolled in Year 8 classes so would not be reached in secondary schools⁵. The school roll data showed that within the sample frame, 5%

⁵ Year 8 students at a few secondary schools were not included as the survey was not developed for this age group and ethics approval limited participation to Year 9 students.

of students were 12 years old at and 4% were eighteen years or older. Proportions were between 16% and 20% for the other ages.

Overall, the population not enrolled in year 9-13 comprised one-third (31.5%) of the Census population.

4.3. Overview of the sample

Figure 2 provides an overview of the planned sample. The final sample collected was smaller than the planned sample due to the impact of COVID-19 on data collection, which is discussed further in section 7.2.

Total national sample - 14,000 completions

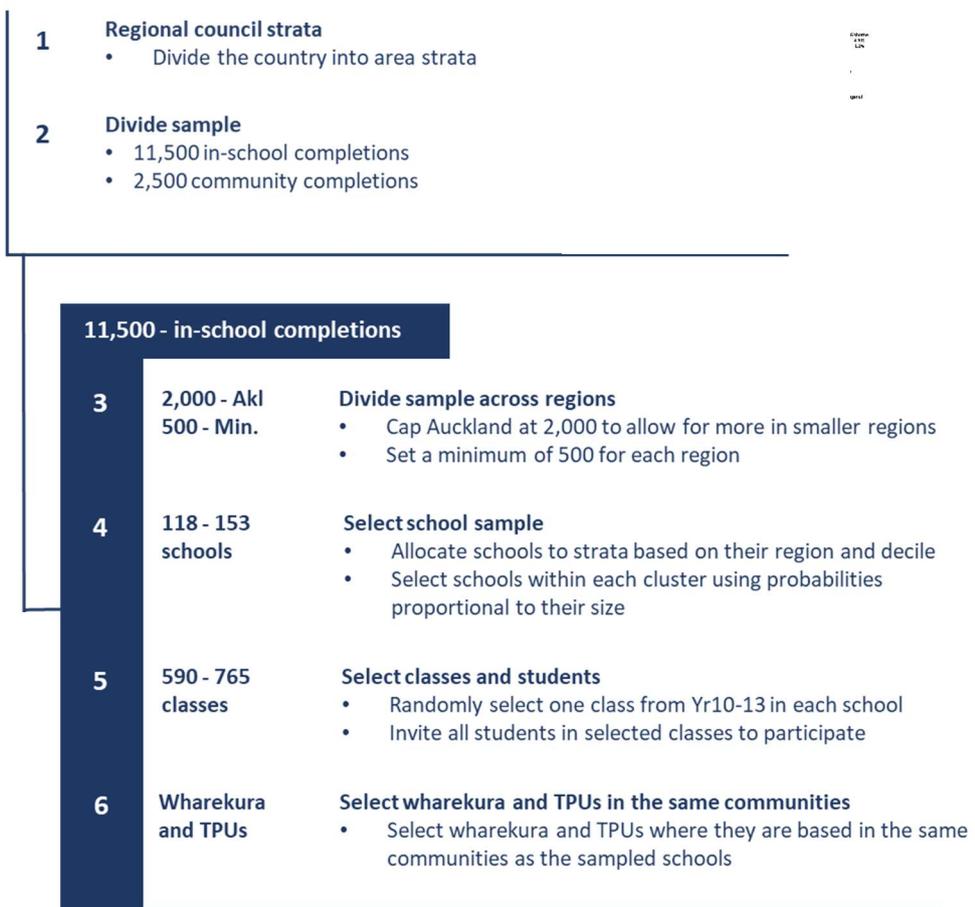


Figure 2. Overview of the planned sample of young people in schools

The final planned sample size was intended to enable regional comparison by reducing the representation of Auckland in the sample and increasing the representation of all regions that would have a sample size of below 500 based on their proportion of the school roll. We capped the Auckland sample at 2,000 and

distributed the remaining sample across the other regions. With a minimum sample of 500, results could be analysed for even the smallest regions without combining them with other regions (Table 4).

Table 4. Allocation of the targeted school sample to each region by proportion and number

	Region's estimated proportion of school sample	Targeted school sample completions	Estimated schools needed
Auckland Region	17.4%	2,000	20
Bay of Plenty Region	5.9%	683	7
Canterbury Region	10.7%	1,235	12
Gisborne Region	4.3%	500	5
Hawkes Bay Region	4.3%	500	5
Manawatu-Wanganui Region	4.4%	510	5
Marlborough Region	4.3%	500	5
Nelson Region	4.3%	500	5
Northland Region	4.3%	500	5
Otago Region	4.3%	500	5
Southland Region	4.3%	500	5
Taranaki Region	4.3%	500	5
Tasman Region	4.3%	500	5
Waikato Region	8.7%	1,005	10
Wellington Region	9.3%	1,067	11
West Coast Region	4.3%	500	5
Total	100%	11,500	115

We implemented this approach by:

- Setting the sample size for Auckland to 2,000
- Setting the sample size for small regions (<500) to 500
- Dividing the remainder of the 11,500 target across other regions proportionate to their relative size (for example, a region with 20% of the

population in regions excluding Auckland and small regions was allocated 20% of the remaining sample).

We planned to weight findings to correct the regional proportions for national analysis. Overall, this approach was intended to strengthen regional comparisons while not compromising the national results.

4.4. Sample selection

The in-school sample had two stages. In the first stage we selected a sample of schools through stratifying them by region and decile. We did not opt for an entirely random sample because of the risk of selecting schools which are not representative of the schools in the region.

The second stage was the selection of students within schools. We sampled classrooms as the strong preference of schools because it would be far less disruptive and logistically simpler than a simple random sample of students from the school roll.

4.4.1. Selection of schools

We expected the characteristics of the schools each young person attended to represent a higher/lower likelihood of certain characteristics. For example, young people attending lower decile schools are more likely to come from families with lower socioeconomic status than young people attending higher decile schools⁶. A purely random sample may result in a set of schools which does not match the regional profile. It may also be that schools with certain characteristics may be more or less likely to agree to take part.

We therefore selected a stratified sample of schools based on region and low (1-3), medium (4-7) or high (8-10) decile. The probability of selection was proportional to each school's size as defined by the estimated number of classes in each year group, the sampling unit for the next stage of selection. The number of classes was estimated by dividing each school's total roll by 25 and setting a minimum of five classes (one class per year group). Smaller schools therefore had a lower chance of selection than larger schools but all schools with 125 students or fewer had an equal probability of selection.

⁶ Decile ratings reflect the socioeconomic status of their catchment areas. Low decile ratings do not mean all students come from families with lower socioeconomic status, but that is more likely to be the case than at higher decile schools.

We limited the population of secondary schools by:

- Size: Schools must have more than 24 students in years 9-13.
- Type: Alternative education providers were excluded because they were captured in the community sample. Teen parent units were excluded from the in-school sample but included in the project as additional completions.
- Youth19: Schools included in Youth19 were excluded from our sample⁷.

In total, the sample frame contained 359 mainstream schools along with 25 special schools and 38 wharekura. Some regions had very few or no schools in some decile groupings.

The selection was carried out using the Statistics Package for the Social Sciences (SPSS) complex samples tool. The software sorted schools by size, calculated a sample interval based on the desired sample size and the population within each stratum and systematically selected schools. Schools with a population greater than the sampling interval were moved to a selection with certainty stratum and the sample size and populations of their source stratum reduced accordingly.

4.4.2. Selection of classes within schools

In most schools we randomly selected one class per year group to complete the survey. The implications of this approach were:

- An anticipated higher response rate for individual students when whole classes were taking part
- Easier for schools so possible increase in the school response rate
- Different probability of selection for students in different sized schools
- Increase in standard error due to clustering.

Some schools had class arrangements or other factors that required random selection of individual students.

The risk of selection bias in class selection had the potential to impact the accuracy of the survey results. We managed the risk of bias by working with the school contacts to select classes to participate in the survey. We asked the school contact to choose a year group for each school period and consider all the different classes students would be in for the selected school period and to choose one randomly

⁷ Youth19 was a survey undertaken by a consortium of four universities. Fieldwork was planned at the same time as the planned data collection for *What About Me?* Schools included in the Youth19 sample were excluded from our sample frame to avoid overburdening the schools. The excluded schools were randomly selected by the Youth19 team and represent about one-third of schools in Auckland, Northland and Waikato. Schools selected for Youth19 but declined or were excluded from Youth19 because they had fewer than 50 students were included in the *What About Me?* sample frame.

from among those classes. We discussed the potential for bias in the selection (for example, picking the best-behaved classes or the most at-risk classes or choosing a class at a time when students would be in streamed classes) and how it could be avoided.

5. Community sample design

The community data collection component aimed to reach those not attending school regularly to provide some insights into their wellbeing. In the community, the population was not well defined in terms of its size and young people were likely to be present in different locations at different times. Locations where young people not attending school regularly were more likely to be reached were also likely to include some proportion of young people who were attending school.

The approaches to sampling and data collection were therefore different and have resulted in two separate datasets.

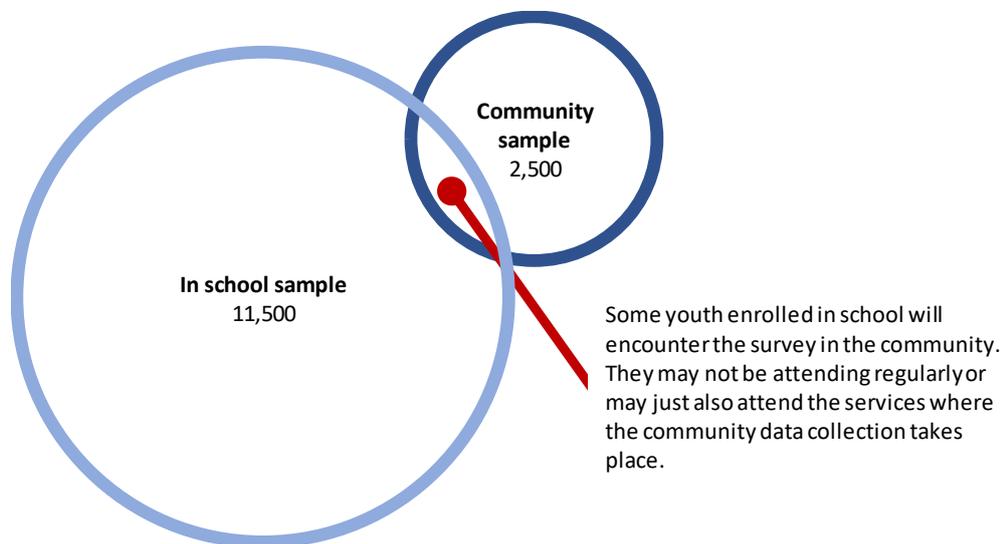


Figure 3. Illustration of potential overlap between young people in the two samples.

The project board, with advice from technical advisory group, concluded that the samples should be treated separately in both data collection and analysis. Respondents in both samples answered the same survey questions, but their data have been separated for analysis and will be reported separately.

Further description of the community sample and data collection approach is included in Appendix 3.

6. Survey delivery in schools

6.1. Promotion of the survey

We worked with Luvly⁸, an advertising and marketing organisation, to develop a brand and communication strategy for the survey. Survey materials are available on the survey website – www.whataboutme.nz.

The awareness campaign for the rollout of *What about me?* ran on the Facebook Network commencing February 2019 but was then postponed to align with fieldwork timing. The campaign included videos of young people and Malatest talking about the survey, what it involved and why it was important. It included *What About Me?* branding publicly. It was hoped that this advertising would raise awareness amongst young people and the wider community to increase willingness to participate.

Two separate audiences were set: parents of potential participants and potential participants. Advertisements appeared in each region for a two-week period prior to and during the survey taking place. While there are no measures of its effectiveness in influencing participation, the campaign resulted in:

- Impressions: 3,574,247
- Reach: 1,105,312
- Estimated advertisement recall lift results: 157,650
- Link clicks: 3,440
- Unique link clicks: 3,373.

6.2. Approach to delivery

Figure 4 and Figure 5 describe the data collection process from first contact with schools to administering the survey including points of communication with staff, whānau and young people.

⁸ <http://www.luvly.co.nz/>

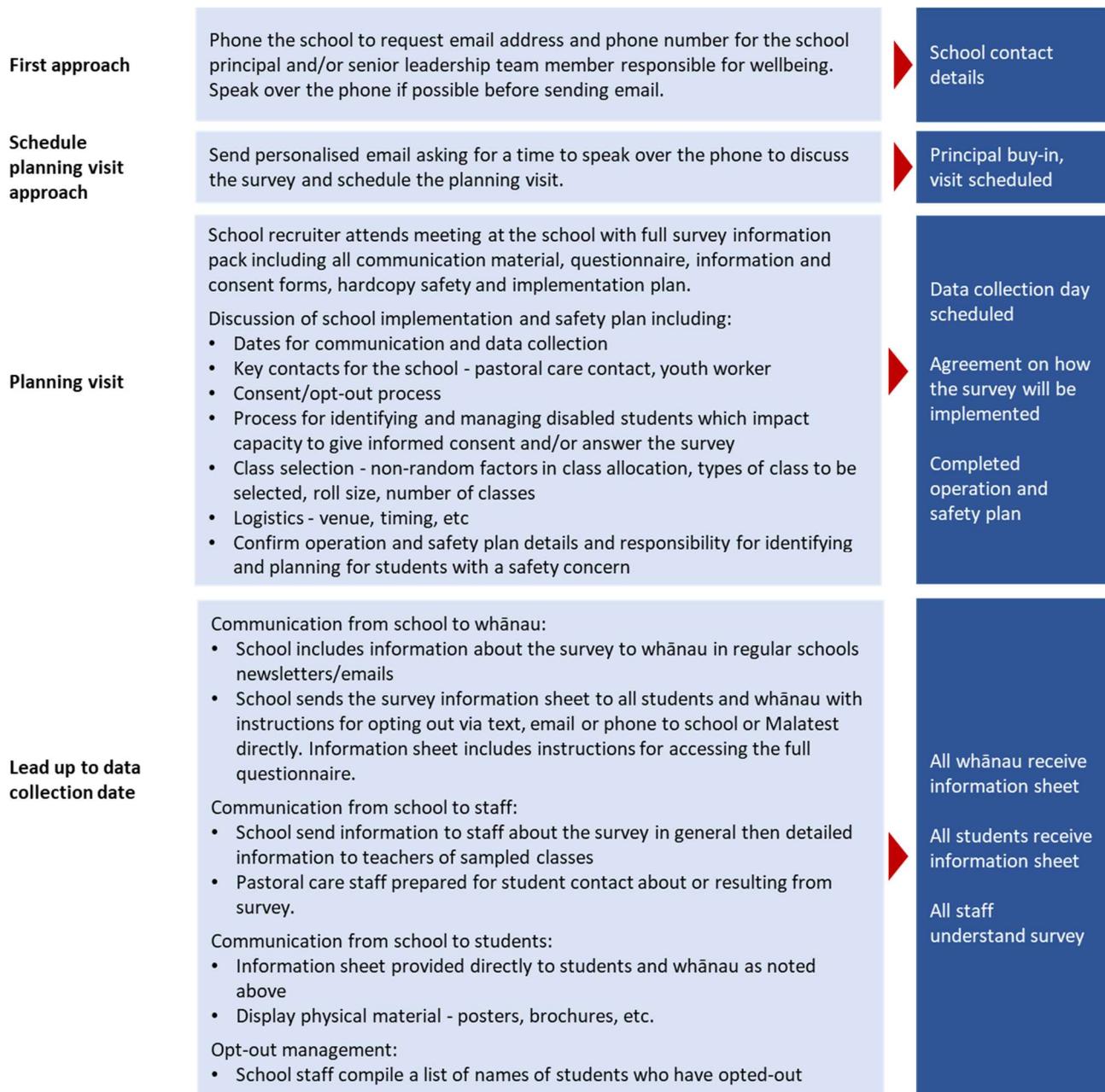


Figure 4. Survey delivery process – Recruitment and planning



Figure 5. Survey delivery process – school arrival and data collection.

7. Survey responses

7.1. Survey participation by schools and young people

The table below provides an overview of the survey responses in the school sample (Table 5). The school response rate of 43% was affected by the disruption caused by COVID-19 in the data collection period (see section 6.2).

Table 5. Breakdown of *What about me?* school sample participation by region

Regional Council	All schools (sampled schools)	Participating schools	Participating schools (% of all schools)	School response rate (% of sampled schools)	Student responses (pre-weighting)
Mainstream schools					
Auckland Region	105 (23)	6	6%	26%	679
Bay of Plenty Region	21 (7)	4	19%	57%	412
Canterbury Region	56 (16)	9	16%	56%	910
Gisborne Region	7 (7)	3	43%	43%	322
Hawkes Bay Region	23 (5)	4	17%	80%	429
Manawatū-Whanganui Region	27 (9)	5	19%	56%	583
Marlborough Region	4 (4)	3	75%	75%	287
Nelson Region	4 (4)	1	25%	25%	112
Northland Region	27 (6)	2	7%	33%	278
Otago Region	27 (7)	3	11%	43%	303
Southland Region	13 (7)	5	38%	71%	670
Taranaki Region	13 (6)	3	23%	50%	278
Tasman Region	6 (5)	3	50%	60%	272
Waikato Region	48 (15)	5	10%	33%	555
Wellington Region	44 (14)	9	20%	64%	842
West Coast Region	7 (7)	2	29%	29%	140
National mainstream	432 (142)	67	16%	47%	7,072
Other schools in the school sample					
Wharekura	36 (17)	2	6%	12%	359
Special schools	22 (10)	2	9%	20%	64

The schools participating in the sample are compared to the population of mainstream schools (excluding kura kaupapa, special schools, activity centres and teen parent units) in Table 6. Smaller schools are under-represented in the *What About Me?* sample because of the exclusion of schools with fewer than 25 students across Years 9 to 13 and the increased probability of selection for larger schools included in the sample design. Differences in decile and gender were addressed in the calibration of selection weights (see section 8.4.2).

Table 6. Characteristics of participating schools (mainstream)

School characteristics ⁹	All mainstream schools (Education Counts 2021)	Schools participating in <i>What About Me?</i>
School gender profile¹⁰		
Co-ed	418 (80%)	50 (72%)
Single sex – boys	46 (9%)	8 (12%)
Single sex - girls	60 (12%)	11 (16%)
School decile¹¹		
Low (1-3)	152 (31%)	13 (19%)
Medium (4-7)	209 (42%)	33 (48%)
High (8-10)	135 (27%)	23 (33%)
School size¹²		
25-499	262 (55%)	22 (32%)
500-999	117 (25%)	25 (36%)
1,000-1,499	59 (12%)	12 (17%)
1,500-1,999	23 (5%)	8 (12%)
2,000+	16 (3%)	2 (3%)

Kura kaupapa and special schools were assigned to their own strata in the sample selection process. Participation was low for schools in these groups. There were more barriers to participation and scheduling discussions continued with many up to the beginning of the COVID-19 affected period.

⁹ Excluding Kura Kaupapa Māori, kura teina (primary), kura teina (composite), full primary, activity centres, teen parent units, and correspondence school.

¹⁰ n = 2 schools with differing gender profiles for primary/junior and senior schools were upcoded to their senior school gender profile.

¹¹ n = 29 schools had not applicable school decile.

¹² Schools (n=43) with < 25 students excluded.

7.2. Effect of COVID-19 on fieldwork

As well as delays in the start of fieldwork, *What About Me?* data collection was impacted by the COVID-19 lockdown in the second half of school term 3. Schools had been booked to meet the original school sample target of 11,500 school students but the lockdown meant all bookings had to be cancelled or postponed. The survey project board decided to:

- Extend the data collection period into term 4, acknowledging that term 4 is more difficult for schools, even without the COVID-19 disruption, because of exams and exam preparation
- Attempt to rebook schools whose bookings were cancelled due to the lockdown for a time in term 4
- Not attempt to contact and recruit any additional schools because of the pressure schools were under.

Table 7 shows the number of responses collected before and after the lockdown for the outbreak of the COVID-19 Delta variant in the latter half of fieldwork in 2021. Auckland was particularly affected because we had paused Auckland recruitment earlier in the year during the Auckland-only COVID outbreak and lockdown.

School participation after the national COVID lockdown in 2021 was impacted by the focus on exams for senior students, the impact of COVID-19 on reducing teaching time for all students, desire to avoid the risk of outside visitors in the school and increased anxiety from students. One school said:

“We have made the decision not to have outside groups in this year, partly for perception and partly to ensure that all teaching time is kept sacred.”

We had a lower student turn-out in schools who did choose to participate after the lockdown (average 99 compared to 110 before lockdown).

After the national 2021 COVID-19 lockdown we had some success with survey completions in community settings, particularly Alternative Education and some YOSS. But numbers there too were lower than previously, as many young people were not attending schools.

Table 7. Number of responses by region before and after the 2021 COVID-19 Delta lockdown

Region	Pre-lockdown responses	Post-lockdown responses
Auckland	817	0
Bay of Plenty	412	0
Canterbury	681	229
Gisborne	322	0
Hawke's Bay	451	0
Manawatū-Whanganui	419	164
Marlborough	287	0
Nelson	112	0
Northland	195	83
Otago	303	0
Southland	520	150
Taranaki	278	0
Tasman	56	216
Waikato	818	0
Wellington	501	341
West Coast	140	0
Total	6,312	1,183

7.3. Coverage assessment

Survey coverage is an assessment of how well the sample frame for the survey contained the entire population of interest: young people aged 12-18. Table 8 gives an overview of the coverage rate for *What About Me?* along with description of the sources of coverage error (exclusion of members of the population from the sample frame).

Table 8. Comparison between the young people included in the sample frame and the populations of interest

Populations	Population information	Coverage rate (potential to be sampled)	Sources of coverage error
School population	Defined by the Ministry of Education mainstream school rolls for year 9-13 (publicly available via EducationCounts.govt.nz): 287,967	77%	Young people enrolled in school in years 9-13 who: <ul style="list-style-type: none"> • Attend schools with 25 or fewer students • Attend schools included in the Youth19 sample (excluded from the <i>What About Me?</i> sample frame).
Youth not enrolled in secondary school	Difference between school roll for years 9 to 13 and Census totals: 132,504	No estimate – no defined sample frame	<ul style="list-style-type: none"> • Young people in the targeted age range attending year 8 • Young people employed or in tertiary training organisations • No data on how much of the population not enrolled in school were also not attending the community organisations we approached to participate.

8. Preparation of the school sample data for analysis

8.1. Data cleaning

The data cleaning process comprised:

- Data transfer: Secure transfer of data from the survey platform provider to our secure storage. This process was reviewed in the Ministry of Social Development's Privacy Impact Assessment.
- Data import: Importing the data from CSV to SPSS¹³ and converting the data from a long format (one row per question answer) to a wide format (one row per individual respondent).
- Splitting multiselect variables: Multiselect variables were split into a series of binary variables (for example, ethnicity data were converted from a list of all selected ethnicities to a series of yes or no columns, one for each ethnic group).
- Removing duplicates: Removing a small number of responses (64) which were empty duplicates of other responses.
- Adding school information: Some data on schools has been added to the dataset to support weighting and comparison of responses to the population of schools. The information added is limited by the need to preserve the anonymity of the contributing schools.

There were two sources of information for student year groups:

- Survey codes: Each class of students completing the survey used a survey code to access it. Each code was assigned to a year group. However, some students may have been attending classes for a particular year group while belonging to another year group (for example, a year 10 student attending a year 11 chemistry class).
- Student responses: Students recorded the year group they belonged to. Some students did not answer this question. Where the student response for year group was missing, we used the year group assigned to their survey code.

For the purposes of weighting, all students in year 13 and above were combined into a year 13 weighting group.

¹³ Statistics Package for the Social Sciences (SPSS) is an IBM computer software package used for the *What about me?* survey analysis.

8.2. Responses with missing data

Questions could be missing data for several reasons:

- Student stopped the survey before finishing: Answers could be missing because the respondent stopped the survey before finishing. In the school setting, the time available to complete the survey was generally limited by the time available in the school period, between 45 and 60 minutes in most cases. Young people could also decline to continue at any time or exit the survey by clicking the 'get help' button, which ended their survey session (described in Section 2).
- Question logic: The survey used question logic for some questions to avoid asking young people irrelevant or unnecessary questions. For example, only young people who reported they were parents were asked questions about parenting.
- Question skipped or not sure response: As required by HDEC in the ethics review process, almost all questions in the survey were optional. Therefore, a skip button was included in most questions so young people could skip any question they did not want to answer.
- Many questions also included a 'not sure' option: This is often coded as a missing value, but is included as a meaningful answer in some cases (for example, sexual identity).

Figure 6 shows the proportions of responses with missing or not sure/skip responses recorded through the progression of the survey questionnaire. Inclusion of questions with particularly high not sure/skip proportions should have their wording or inclusion closely examined in future questionnaire design.

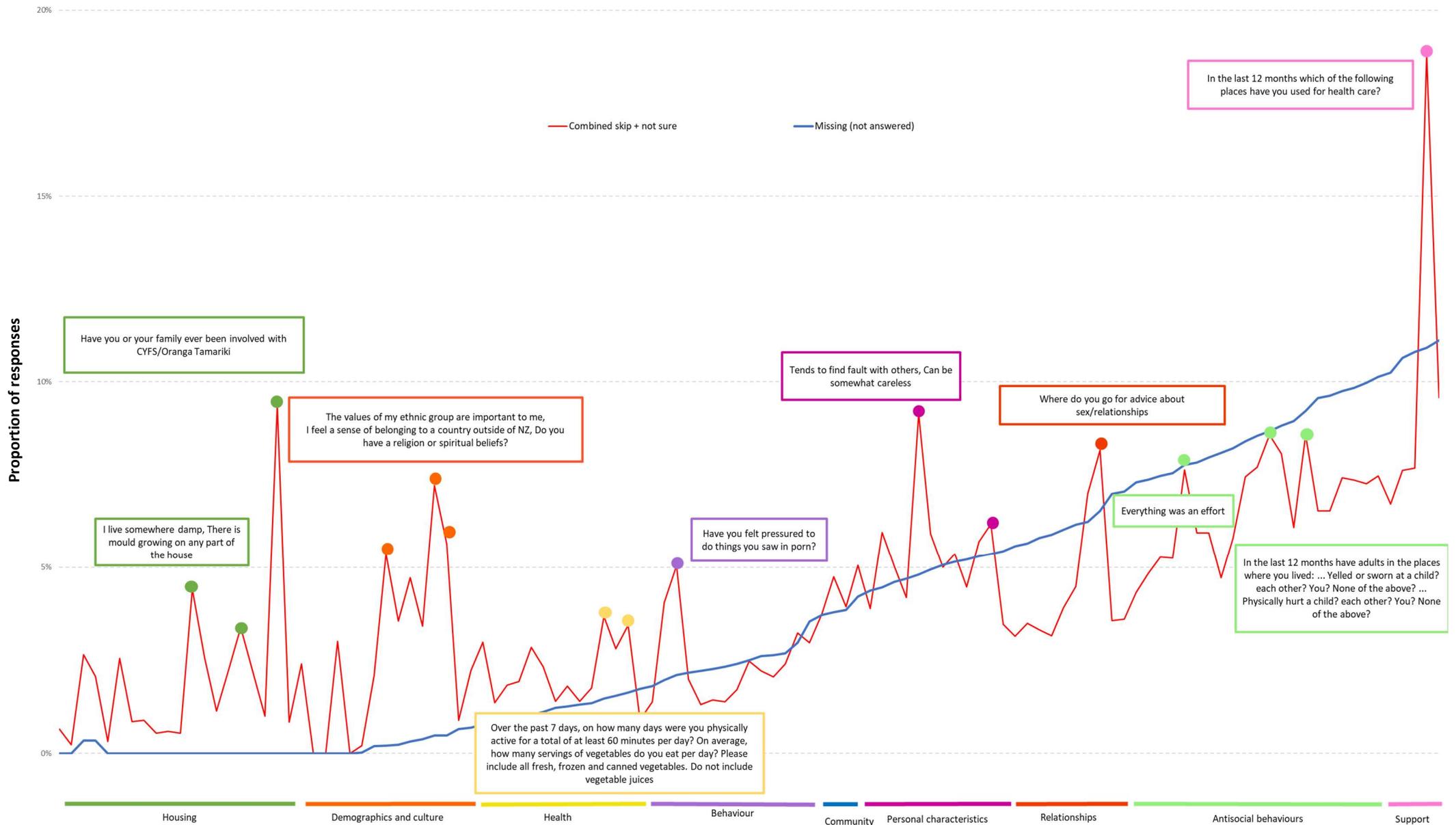


Figure 6. Proportion of responses to each question which were either skipped or not sure, or missing (not answered). Questions with logic were excluded (for example, education questions were only answered by those who said they were attending regularly and so are excluded). Some questions with high proportions of skip/not sure responses relative to adjacent questions are highlighted.

Students with different characteristics had different numbers of skipped/not sure or missing questions (Figure 7).

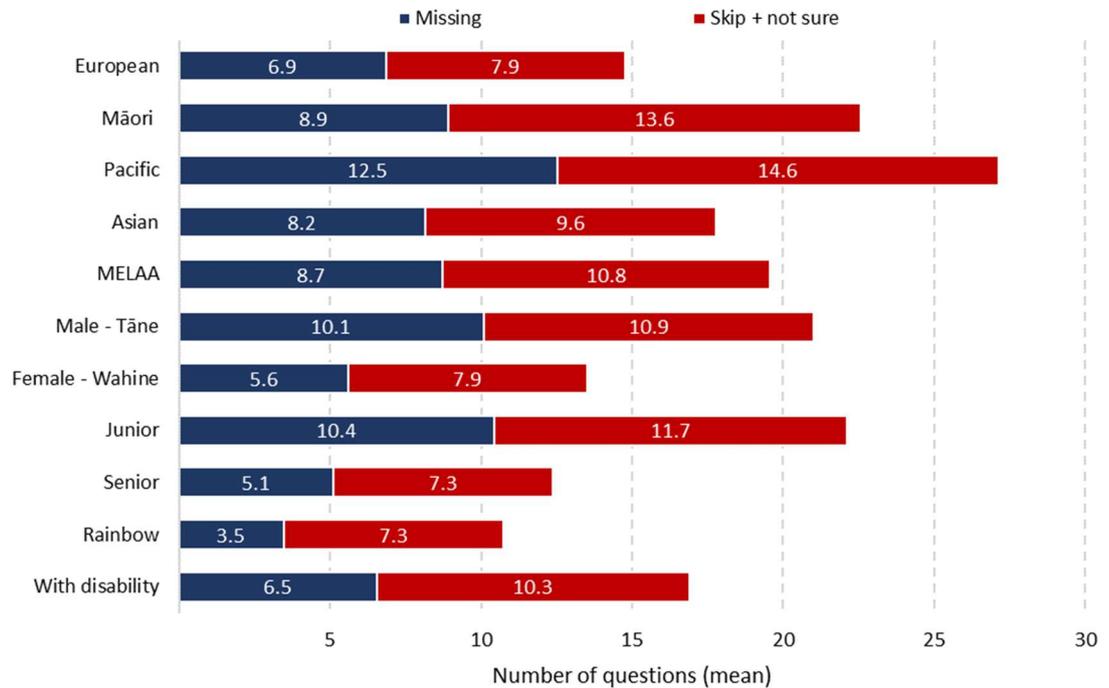


Figure 7. Number of questions with either missing or skip/not sure responses from young people with different characteristics

We speculate that there were a few key reasons a high number of respondents skipped or selected 'not sure' to specific questions. These reasons included:

- Respondents did not understand what the question was asking them. For example, the high proportion of respondents who skipped the "Tends to find fault with others" statement is likely related to the high number of respondents that asked researchers what "find fault" means while they were doing the survey. Our survey team recalled being asked for clarification about many of the questions identified in Figure 6.
- Some respondents may have skipped questions they did not see as relevant to them. For example, respondents who were born in Aotearoa New Zealand may have not seen the statement "I feel a sense of belonging to a country outside of NZ" as relevant to them. The question "Have you felt pressured to do things you saw in porn?" was presented to respondents regardless of whether or not they had previous sexual experiences or had watched pornography. Respondents who had not had either of those experiences may have seen the question as not relevant to them and skipped it.

- Survey fatigue may have led to participants not answering questions with a large number of options. For example, the question "In the last 12 months which of the following places have you used for health care?" was one of the last questions in the survey, included over ten options, and the most common place for healthcare (general practice) was sixth on the list. Students may have skipped the question to avoid reading all the options.

We have included other responses from students with high proportions of missing data so that their contributions to the survey are valued.

Responses that did not include ethnicity and gender have been excluded from weighted results because the weight calibration uses those variables and respondents missing them were not able to be weighted (see section 8.4.2 for details).

8.3. Derived variables

The final dataset includes derived variables. These are variables where questions in the survey have been recoded or used (individually or with other questions) in calculations. Some derived variables are straightforward (for example, age calculated from birth date) and others more complex (for example, the WHO-5 score formed by adding up the answers from five different questions).

Appendix 4 has a full list of the derived variables.

8.4. Weighting the dataset

The aim of the survey weighting is to increase the representativeness of the survey data by correcting imbalances in the sample of responding young people compared to the population. We can weight the school sample because of the known sample frame and the data on school rolls from the Ministry of Education on the Education Counts website. The weighting approach for the school sample is described in the sections below.

8.4.1. Selection weights for the school sample

The first stage of the weighting process for the school sample involved generating selection weights to reflect:

- The probability of a school being selected
- The probability of a given young person being selected from their year group to participate.

School probability was computed for each school using their school roll size, the number of schools to be selected within their stratum and the total roll size of all schools in their stratum.

The formula used was:

$$\text{School probability} = (\text{School size} * \text{sample number}) / \text{Strata population}$$

The second component of the selection weights was the probability that a given young person would be selected from within their year group. The size of each school's year group was defined using the Ministry of Education data from Education Counts. The formula for probability of selection was:

$$\text{Individual probability} = \text{number year responses} / \text{school year roll}$$

The final school base weight was the inverse of these two probabilities:

$$\text{Final base weight} = 1 / (\text{school probability} * \text{individual probability})$$

High weights were then identified and trimmed. Any weights that exceeded the threshold below within their regions were recoded to their region's upper or lower limit. Trimming took five iterations before no weights breached the limits. The definition of the limits is provided below (Figure 8).

$\omega_i^{(1)}$ = weight before adjustment (non-response, calibration, etc)

$\omega_i^{(2)}$ = weight determined after adjustment

$\bar{\omega}^{(1)}, \bar{\omega}^{(2)}$ their respective mean values

Any computed adjusted weights outside the following limits should be recoded to the boundary of these limits:

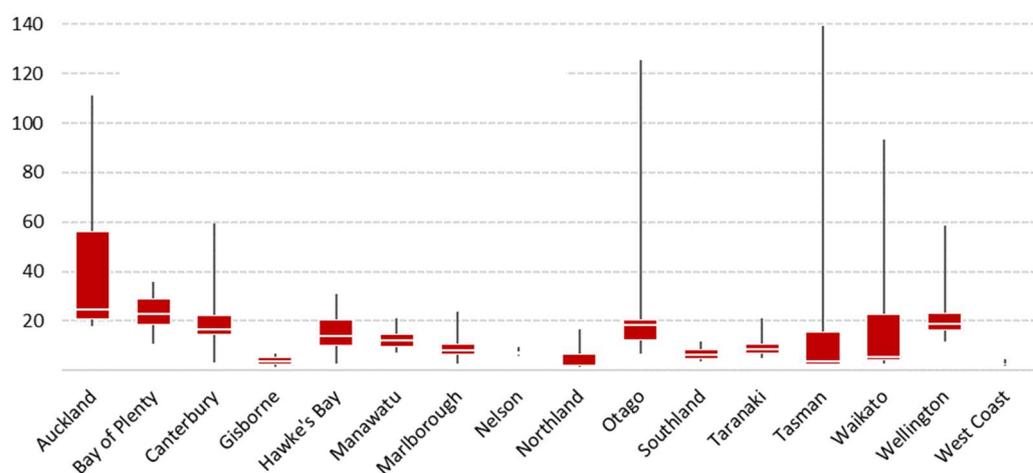
$$1/C \leq \frac{\omega_i^{(2)} / \bar{\omega}^{(2)}}{\omega_i^{(1)} / \bar{\omega}^{(1)}} \leq C$$

A reasonable value for the parameter is C=3. Since trimming alters the mean value of the weights, the above adjustment may be applied iteratively, with the mean redetermined after each cycle. Typically, a very small number of cycles should suffice.

Figure 8. Definition of upper and lower limits used to select for weights for trimming.

Source: [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=EU_statistics_on_income_and_living_conditions_\(EU-SILC\)_methodology](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=EU_statistics_on_income_and_living_conditions_(EU-SILC)_methodology)

The weights before and after trimming are shown in Figure 9 below.



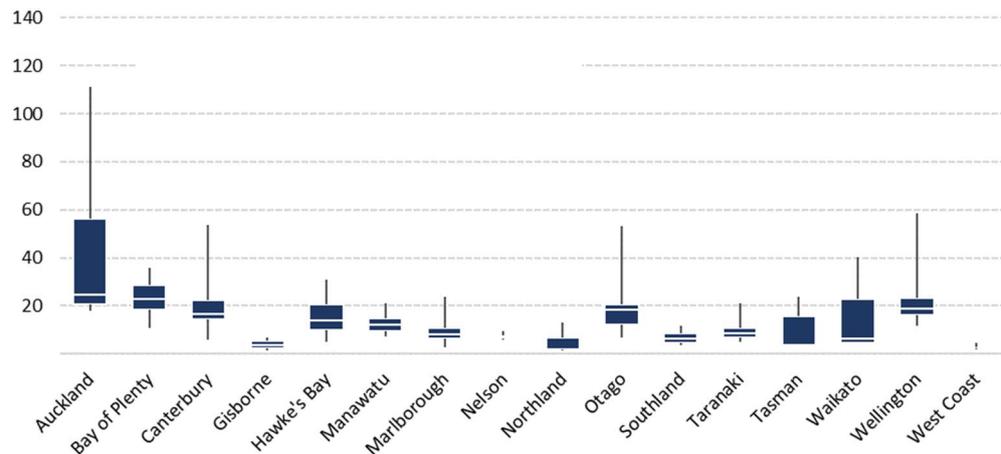


Figure 9. Selection weights before (top) and after (bottom) trimming. Box plots show the values for 0/25/50/75/100th percentiles

8.4.2. Weight calibration

Applying the school base weights accounted for probability of selection, but did not account for mismatches in the number of young people in each region in the sample and the actual school rolls or differences in the profile of those young people (for example, gender, ethnicity, or school decile). We calibrated the weights to correct these differences using the rake weighting extension in SPSS (iterative proportional fitting).

The process involved the following steps:

- Split the dataset into individual regions/region combinations: For the calibration of weights we combined the following regions to reduce the incidence of very high weights and manage 'blind spots' in the data (where the sample did not include young people with a certain characteristic present in the population). The region combinations used for the calibration were: Auckland, the rest of the North Island, all the South Island. This meant the population totals and profiles for the characteristics included in calibration matched the population for those combinations and the overall national picture but could vary from the population in individual regions.
- Define population totals: Define a total for each region group based on the total population enrolled in schools in years 9-13.
- Select characteristics to use for calibration: The rake weighting extension allowed a maximum of ten weighting dimensions. We used the proportions of the following characteristics for the weighting:
 - Total count ethnicity (Māori, Pacific, European, Asian): Total count data included in Education Counts. Collection of ethnicity data may have been different to the way ethnicity was collected in the *What*

About Me? survey but we have used it as the most appropriate source.

- School decile (1-3, 4-7, 8-10): The school decile for each response was able to be linked using the unique school identifier.
- Gender (male, female, gender diverse or questioning): School roll data only included male and female. We managed this difference in the data by maintaining the proportion of gender diverse or don't know responses in the pre-weighting dataset through to the post-weighting dataset. This assumes that the proportion of gender diverse or questioning young people reached in the sample and final dataset reflected the population proportion, which we are not able to confirm.

The rake weighting resulted in the removal of 286 responses from the dataset. These responses had a far higher rate of missing data across the survey compared to the remaining responses (Figure 10).

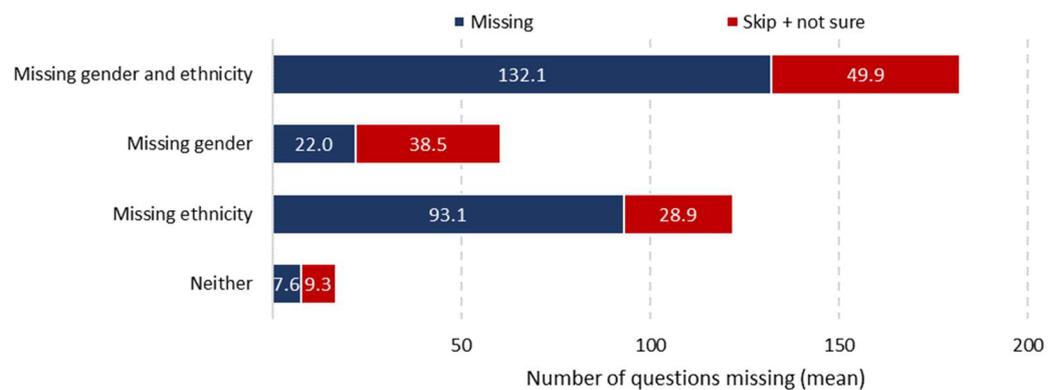


Figure 10. Number of questions with either missing or skip/not sure responses from the young people who did not have missing data for none, one or both of gender and ethnicity

The profile of responses excluded for missing calibration variables showed they were more likely to be male, Māori and/or Pacific and in year 9 classes (Table 9).

Table 9. Comparison between school sample responses included in the final dataset and those excluded due to missing data for ethnicity and/or gender

Characteristic	Final dataset (weights not applied) - (n = 7,209)	Excluded from final dataset (n = 286)
Male	3,288 (46%)	90 (61%)
Female	3,604 (50%)	45 (30%)
Gender diverse	228 (3%)	12 (8%)
I'm not sure/questioning	89 (1%)	1 (1%)
Missing gender	0	138

European	5,641 (78%)	33 (66%)
Māori	2265 (31%)	23 (46%)
Pacific	880 (12%)	12 (24%)
Asian	900 (12%)	6 (12%)
MELAA	114 (2%)	0 (0%)
Missing ethnicity	0	231
Year 9	1,688 (23%)	106 (37%)
Year 10	1,648 (23%)	63 (22%)
Year 11	1,442 (20%)	47 (16%)
Year 12	1,234 (17%)	38 (13%)
Year 13	1,197 (17%)	32 (11%)
Missing year	0	0

We then applied the same trimming process as described above for school base weights, comparing the calibrated weights to the trimmed school base weights. Trimming took five iterations. The weights before and after trimming are shown in Figure 11 below.

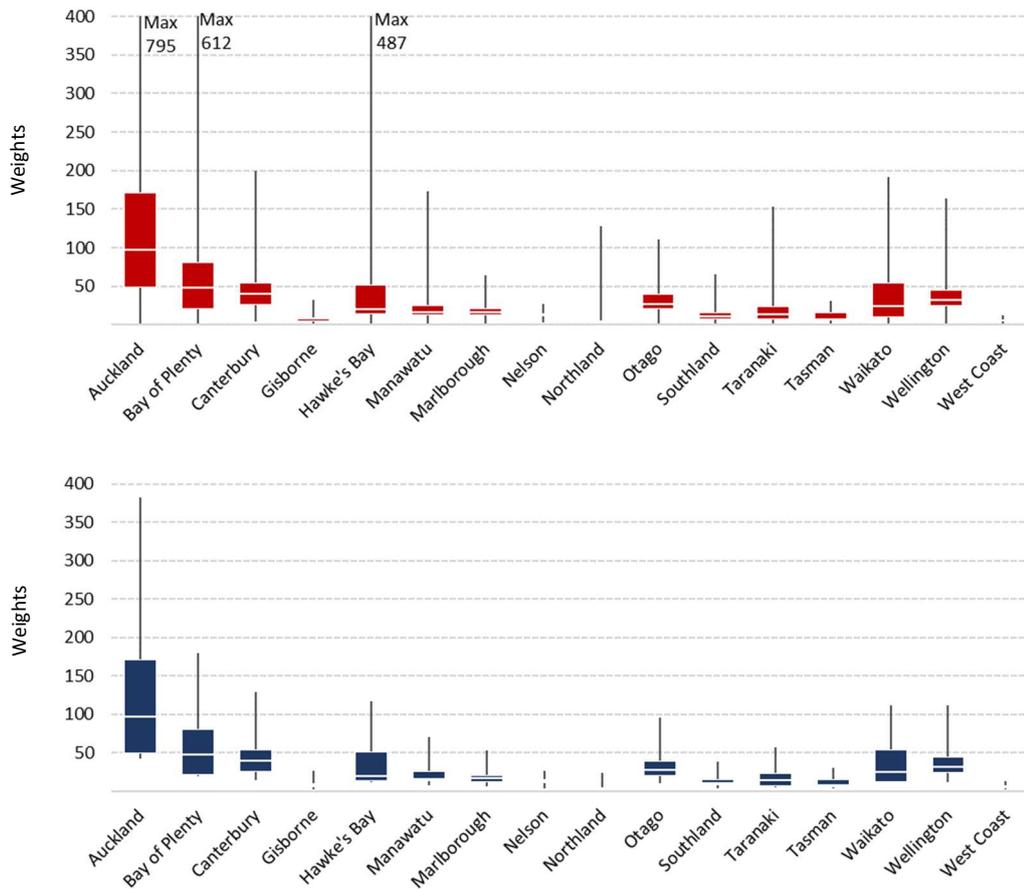


Figure 11. Calibrated weights before (top) and after (bottom) trimming. Note the maximum value of the y-axis in the before trimming chart does not show the maximum points for Auckland, Bay of Plenty and Hawke’s Bay for clarity. Box plots show the values for 0/25/50/75/100th percentiles.

8.5. Bootstrapping

Our approach to estimating the standard error for *What about me?* results required an approach that considered the sample design. In *What about me?* students were sampled from school strata and then from each year group. We selected bootstrapping as an approach to generate more robust estimates of the standard error and confidence intervals.

Bootstrapping involves repeatedly resampling with replacement from the primary sampling units (schools) in the dataset to build a large set of samples from within the original sample. We resampled 500 times, creating 500 sets of replicate weights, using the *Survey* package in R. The final number of replicates was determined by initially testing the stability of confidence intervals with 200 replicates and varying sized subsets within that. While there was little change between 100 and 200, we

generated the final 500 to be sure they would adequately support any future analysis.

We used each school's probability of selection to select the schools for each replicate. The bootstrap approach means that within each replicate some schools were not selected (assigned a 0 weight) and some schools were selected more than once (assigned higher weights). We then treated the replicate weights in the same way we treated the main weight:

- Combined with the weight generated using the probability of each student being selected within their school year
- Trimmed using the method outlined above
- Calibrated to regional totals
- Trimmed again.

The weights for each replicate had a sum consistent with that of the main weights, with small differences arising from the trimming process applied after calibration.

We generated confidence intervals using the replicates by:

- Calculating an estimate for each result (most often a mean or proportion) using each of the replicates
- Calculating confidence intervals based on the standard deviation and standard error of the results for each of the replicates.

Figure 12 shows the distribution of the mean scores across the 500 replicates for the WHO-5 score (ranging 0-100, labelled DV18 in the dataset). The resulting mean was 54.1 with confidence intervals at the 95% level from a lower bound of 53.0 to an upper bound of 55.2. The final dataset will include the replicate weights for use in future research.

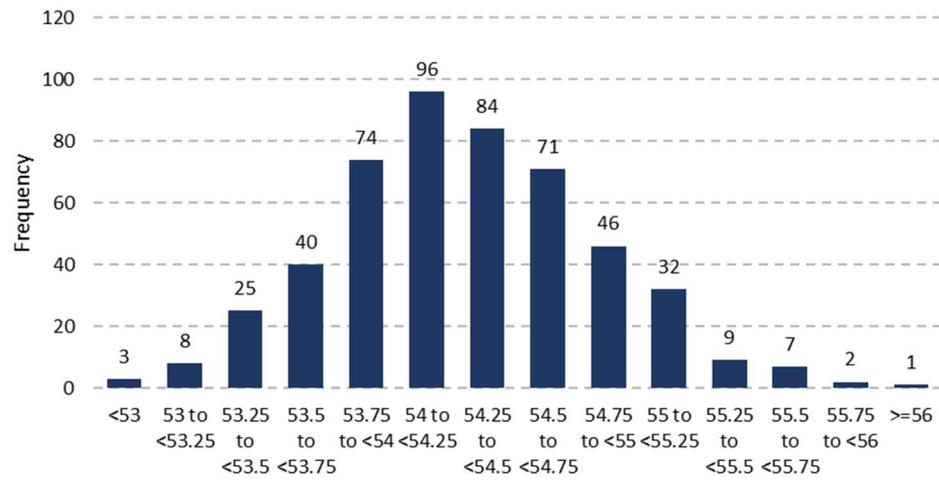


Figure 12. Frequency of replicate means within 0.25 width ranges for DV18 across the 500 replicate weight sets

9. Analysis and interpretation of findings

Our overview report summarises key findings from the survey. Our analyses are descriptive. We have identified indicators of positive wellbeing and risk factors that are more prevalent among some population groups compared with others, but have not explored the reasons why.

In our analyses we drew on the principles underpinning the questionnaire design (outlined in Section 1). We sought advice from Māori and Pacific advisory groups we formed to provide advice on priorities for their population groups and to provide peer review of the final report to ensure we have appropriately interpreted findings. Across the two groups, there were fourteen members contributing academic, community, government and health perspectives. We will also report results back to young people from participating schools in a series of webinars.

There are many opportunities for central and local government, researchers, organisations, schools and young people to further analyse the findings. Further analyses are likely to include more complex statistical analyses to look at causal associations between a range of variables and positive outcomes for young people.

Cultural safety in interpreting and presenting findings is essential. Statistics New Zealand will provide guardianship of the survey dataset. Access to the data includes a requirement for those wanting to access the data to complete a detailed application form explaining how the information will be used. The review process at Statistics New Zealand includes review by Māori experts.

There is the potential for the findings in the summary tables available more widely to be reported in a way that misrepresents the findings. This risk needs to be balanced against the benefits of making information from *What About Me?* widely available so it can be used to support our young people. We hope the advice from our advisory groups and the way we frame the findings in our summary report will enable culturally safe interpretation of the information by others.

10. Access to the survey dataset

The principal deliverable of *What About Me?* is the survey dataset as a resource for researchers.

The final datasets will be hosted by Statistics New Zealand in the Data Lab. They will sit alongside the IDI and be subject to the same security and access restrictions but will not be connected to it. More information about accessing the dataset can be found on the Ministry of Social Development website.

Appendix 1: Survey questionnaire topics

A full list of the survey items (including derived variables and school information) can be found at: <https://www.whataboutme.nz/>

<p>Work</p> <ul style="list-style-type: none"> • Paid and unpaid work • Feelings about work 	<p>My life overall</p> <ul style="list-style-type: none"> • Feeling about life in general 	<p>Relationships and friends</p> <ul style="list-style-type: none"> • Friendships and relationships • Sexual attraction • Consensual and unconsensual sex • Sources of advice • Contraception and protection against STIs
<p>Culture</p> <ul style="list-style-type: none"> • Ethnicity, language and culture • Immigration • Spirituality 	<p>Where you live and who you live with</p> <ul style="list-style-type: none"> • Type of accommodation • People you live with and who look after you • Parenting • Basic needs - food, power 	<p>Safety and things that might not be working well</p> <ul style="list-style-type: none"> • Bullying • Verbal and physical abuse • Self-harm and suicide • Negative mental health • Discrimination
<p>Health</p> <ul style="list-style-type: none"> • General, physical and mental health • Disability • WHO-5 wellbeing 	<p>Age, sex and gender</p> <ul style="list-style-type: none"> • Age group, gender, sex 	<p>Where you go if you need help</p> <ul style="list-style-type: none"> • Where you would go for help • Accessing healthcare
<p>Physical activity</p> <ul style="list-style-type: none"> • Nutrition • Physically active time 	<p>Education and training</p> <ul style="list-style-type: none"> • School attendance • Feelings about school or kura • Qualifications - aspirations, expectations, achievements 	
<p>The things you do</p> <ul style="list-style-type: none"> • Social media and the internet • Gambling • Smoking and substance use • Pornography 		
<p>Community and neighbourhood</p> <ul style="list-style-type: none"> • Participation in clubs or teams • Volunteering • Belonging and safety 		

Appendix 2: Survey questions related to Youth2000 series questions

The table below provides a list of Youth'19 questions comparable to *What About Me?* questions included in the overview report. Further information on Youth2000 series questions can be accessed at: Archer, D., Clark, T.C., Lewycka, S., DaRocha, M & Fleming, T. (2021). Youth19 Rangatahi Smart Survey, Data Dictionary. (Edited from The Adolescent Health Research Group previous Youth2000 series Data Dictionaries). The Youth19 Research Group, The University of Auckland and Victoria University of Wellington, New Zealand. Available on www.youth19.ac.nz/the-surveys

<i>What About Me?</i> (2021)		Rangatahi Smart Youth 19 (2019)		Youth 19 assessment of comparability
Question	Response options	Question	Response options	
How important to you are your spiritual beliefs or religious faith?	0-10 scale	How important to you are your spiritual beliefs or religious faith?	Very important Somewhat important Not important	Yes, although response options differ so caution should be exercised
Do you help others in your neighbourhood or community (e.g. help-out on the marae or church, belong to a volunteer organisation, mow lawns, collect for charity, give people food)?	Yes Occasionally No	Do you give your time to help others in your school or community (e.g. as a peer supporter at school, help out on the Marae or church, help coach a team or belong to a volunteer organisation)?	Yes, within the last 12 months Yes, but not within the last 12 months No I don't know	Yes, although response options differ so caution should be exercised
I feel safe in the community/s where I live	0-10 scale	Do you feel safe in your neighbourhood?	All the time Sometimes Not often Never	Yes, although response options differ so caution should be exercised
In the last 12 months did you do any of the following types of paid work?	Regular part-time job, job in school holidays, casual or occasional work or full-time job	Over the last 12 months have you worked for money or had a paid job? (You may choose as many as you need) Yes, a regular part-time job (e.g. paper run) Yes, I worked during the school holidays Yes, I sometimes worked during the school term No, I didn't work for pay in the last year	Yes, No	Yes (note slightly different response options)

<i>What About Me? (2021)</i>		<i>Rangatahi Smart Youth 19 (2019)</i>		Youth 19 assessment of comparability
Question	Response options	Question	Response options	
		<p>Thinking about the last time you had sex, what forms of contraception did you use to prevent pregnancy ? (This is sex that you wanted or consented to, do not include sexual abuse or rape.) (You may choose as many as you need)</p> <p>The pill (oral contraceptive); Condoms; The morning after pill or the emergency contraceptive pill (pills a female takes within 72 hours of unprotected sex to prevent pregnancy); Depo provera (the injection); LARC (long acting reversable contraceptive (e.g. an implant, Jadelle, IUDs; Withdrawal method (e.g. pulling the penis out of the vagina before the male cums); Rhythm method (e.g. an App/calendar that tells me when I would be fertile); This does not apply to me; I don't know if my partner uses contraception. NB for prior surveys, it is not 'last sex' but which forms of contraception you 'currently use'</p>	<p>Yes, No to each</p>	<p>Yes (although WAM doesn't specify consent)</p>

<i>What About Me? (2021)</i>		<i>Rangatahi Smart Youth 19 (2019)</i>		Youth 19 assessment of comparability
Question	Response options	Question	Response options	
Are you part of any groups, clubs or teams (e.g. a cultural group, dance or music group, choir, environmental organisation, sports team)?		Which of the following groups, clubs or teams do you belong to? This could be at school or somewhere else. (You may choose as many as you need) (NB 2012 and earlier years exclude school groups) A sports team or group; A cultural group, e.g. kapa haka; A diversity group that supports sexuality and gender diverse youth, gay/straight alliance, or rainbow group Another type of group or club, e.g. music, drama, gaming; None	Yes, No	Yes
Do you or your family or whānau worry about not having enough money to pay the rent or mortgage where you live?		Do your parents, or the people who act as your parents, ever worry about: [Not having enough money to pay the rent/mortgage where you live?]	Never Occasionally Sometimes Often All the time I don't know	Yes
Do you or your family or whānau worry about not having enough money to buy kai /food?		Do your parents, or the people who act as your parents, ever worry about: [Not having enough money to buy food?]	Never Occasionally Sometimes Often All the time I don't know	Yes
How many times have you moved in the last 12 months?		In the last 12 months, how many times have you moved homes?	I haven't moved I have moved once I have moved two times I have moved three or more times	Yes

<i>What About Me? (2021)</i>		<i>Rangatahi Smart Youth 19 (2019)</i>		Youth 19 assessment of comparability
Question	Response options	Question	Response options	
Thinking about the school you go to, or the last school you went to.....I feel safe there	0-10 scale	Do you feel safe in your school/course?	Yes, all the time Yes, most of the time Sometimes No, mostly not Not at all	Yes
Thinking about the school you go to, or the last school you went to.....People expect me to do well	0-10 scale	Do teachers/tutors expect you to do well with your studies?	Yes, No	Yes
In the last 12 months did you do any of the following types of paid work?	Regular part-time job, job in school holidays, casual or occasional work or full-time job	As above (part-time answer options)	Yes, No	Yes
In general would you say your health is good/very good/excellent	Poor Fair Good Very good Excellent	In general, how would you say your health is?	Excellent Very good Good Fair Poor	Yes
In the last 12 months, which of the following places have you used for health care?	Family doctor, medical centre, or GP clinic	Which of the following places have you used for health care in the last 12 months? (You may choose as many as you need) Family doctor, medical centre or GP clinic	Yes, No	Yes
In the last 12 months, which of the following places have you used for health care?	School health clinic	Which of the following places have you used for health care in the last 12 months? (You may choose as many as you need) School health clinic	Yes, No	Yes

<i>What About Me? (2021)</i>		<i>Rangatahi Smart Youth 19 (2019)</i>		Youth 19 assessment of comparability
Question	Response options	Question	Response options	
Thinking about the last time you had sex, did you or your partner use a condom (or dam) against sexually transmitted disease (STD) or infection (STI)?	Yes/no	Thinking of the last time you had sex, did you or your partner use condoms as protection against sexually transmitted infections?	Yes, No	Yes
WHO-5 Wellbeing Scale	Standard WHO 5 questions and responses	WHO 5 Wellbeing Scale	All of the time Most of the time More than half the time Less than half of the time Some of the time At no time	Yes
Have you deliberately hurt yourself or done anything you know might harm you (but not kill you) in the last 12 months	No/yes once/yes two times/yes three or more times	During the last 12 months have you deliberately hurt yourself or done anything you knew might harm you (but not kill you)? NB in 2007 does not specify 'but not kill you' and not asked in 2001.	No, never Yes - once or twice Yes - three or more times	Yes
In the last 12 months have you seriously thought about killing yourself (attempting suicide)?	Yes/no	During the last 12 months have you seriously thought about killing yourself (attempting suicide)?	Yes, No	Yes
In the last 12 months have you attempted suicide tried to kill yourself (attempted suicide)?	Yes/no	During the last 12 months have you tried to kill yourself (attempted suicide)?	Yes, No	Yes
In the last 12 months, has there been any time when you wanted or needed to see a doctor or nurse (or other health care worker) about your health, but you weren't able to?	Yes/no	In the last 12 months, has there been any time when you wanted or needed to see a doctor or nurse (or other health care worker) about your health, but you weren't able to?	Yes, No	Yes

<i>What About Me? (2021)</i>		<i>Rangatahi Smart Youth 19 (2019)</i>		Youth 19 assessment of comparability
Question	Response options	Question	Response options	
I feel safe there (... about your kura, school, alt-ed or teen parent unit, education or training provider)	0-10 scale	Do you feel safe in your school/course?	Yes, all the time Yes, most of the time Sometimes No, mostly not Not at all	Yes
I feel safe where I live (thinking about the places you usually live)	0-10 scale	Do you feel safe at home, or the place you live? (in 2007 and 2012 this was 'Do you feel safe at home')	Yes, all the time Yes, most of the time Sometimes No, mostly not Not at all	Yes
In the last 12 months have adults in the places where you usually live hit or physically hurt you?		In the last 12 months have adults in your home hit or physically hurt you?	Yes, No	Yes
In the last 12 months have adults in the places where you usually live hit or physically hit a child (other than yourself)?	A child other than yourself?	In the last 12 months have adults in the places where you usually live hit or physically hit a child (other than yourself)?	Yes, No	Yes
In the last 12 months have adults in the places where you usually live hit or physically hurt each other?	Each other?	In the last 12 months have adults in the places where you usually live hit or physically hurt each other?	Yes, No	Yes
Have you ever been touched in a sexual way or made to do sexual things that you didn't want to?	Yes/no	Have you ever been touched in a sexual way or made to do sexual things that you didn't want to do? (including sexual abuse or rape)	Yes, No, Not sure	Yes
In the last 12 months have you ever been in trouble with the police?	No/once/more than once	In the last 12 months have you been in trouble with the police?	Never Not in the last 12 months Once Two or more times	Yes

<i>What About Me? (2021)</i>		<i>Rangatahi Smart Youth 19 (2019)</i>		Youth 19 assessment of comparability
Question	Response options	Question	Response options	
Have you ever smoked a whole cigarette e.g. cigarettes, tobacco, roll-your-owns?	Yes/no	We would now like to ask some questions about smoking cigarettes (not including e-cigarettes, vaping or marijuana). Have you ever smoked a whole cigarette?	Yes, No	Yes
Have you ever drunk alcohol (e.g. beer, wine, spirits, pre-mixed drinks, etc.)?	Yes/no	We would like to now ask some questions about alcohol. By this we mean beer, wine, spirits, pre-mixed drinks. Have you ever drunk alcohol (not counting a few sips)?	Yes, No	Yes
During the past four weeks, how often did you drink 5 or more alcoholic drinks in one session (within 4 hours)?	Never/1/2/3/about once a week/more often	In the past 4 weeks, how many times did you have 5 or more alcoholic drinks in one session	None at all Once in the past 4 weeks Two or three times in the past 4 weeks Every week Several times a week	Yes
Have you ever used cannabis (e.g. marijuana, weed, pot, hash, grass etc.)?	Yes/no	Now there are some questions about marijuana. You don't have to answer if you don't want to. Remember there is no way to identify you from your answers. Have you ever used or smoked marijuana?	Yes, No	Yes
Many young people experience bullying. Bullying can include name calling, teasing, spreading rumours, instant messaging, being left out, being pushed or shoved, physically hit or harmed, and having your stuff taken or damaged. In the last 12 months has this ever happened to you?	Yes/no	In the last 12 months how often have you been bullied in school/course?	I haven't been bullied in the past 12 months It has happened once or twice About once a week or more	Partly (note very different time period)

<i>What About Me? (2021)</i>		<i>Rangatahi Smart Youth 19 (2019)</i>		Youth 19 assessment of comparability
Question	Response options	Question	Response options	
They spend enough time with me [Thinking about those who look after you or care for you]	0-10 scale	Now we are going to ask you some questions about your whānau or family (e.g. parents, siblings, step-parent or other carer, aunty, grandparent etc).. I feel like I get enough quality time with my family/whānau (NB 2012 and eariler asked about mother/father)	Strongly Agree Agree Neutral Disagree Strongly Disagree	Partly (note differences in response options)
They love me [Thinking about those who look after you or care for you]	0-10 scale	How much do you feel the following people care about you? My mum (or someone who acts as your mum) My dad or someone who acts as your dad Other family members	Not at all A little Some A lot Does not apply to me	Partly (note 'care' and differences in response options)
Thinking about the school you go to, or the last school you went to.....My teachers treat me fairly	0-10 scale	How often do the teachers/tutors treat students fairly?	Hardly ever Sometimes Most of the time All of the time	Partly (note "teachers treat students fairly" not 'me')
Thinking about the school you go to, or the last school you went to..... I feel like I belong	0-10 scale	Do you feel like you are part of your school, alternative education or course?	Yes, No	Partly
How do you feel about your life in general?	0-10 scale	Are you happy or satisfied with your life?	Very happy or satisfied It's okay Not very happy or satisfied Not at all happy or satisfied	Partly

<i>What About Me? (2021)</i>		<i>Rangatahi Smart Youth 19 (2019)</i>		Youth 19 assessment of comparability
Question	Response options	Question	Response options	
In the last 4 weeks, have you ever gambled for money or bet precious things?	Yes/no	Have you ever gambled or bet precious things or money on any of these activities? (You may choose as many as you need) Instant Kiwi (scratchies) Lotto (including Strike, Powerball and Big Wednesday) Pub or club (pokies) A casino (e.g. roulette, pokies) TAB betting (e.g. on track racing or sports) Games and gambling on a cell/mobile phone for money or prizes (e.g. txt games) Gambling on the Internet for money or prizes (e.g. internet casinos or poker) Bets with friends or family Cards or coin games (e.g. poker) None of these	Yes, No	2012 & 2007 yes. 2019 - very different time period
How important to you are your spiritual beliefs or religious faith?	0-10 scale	How important to you are your spiritual beliefs or religious faith?	Very important Somewhat important Not important	Yes although response options differ so caution should be exercised
Do you help others in your neighbourhood or community (e.g. help-out on the marae or church, belong to a volunteer organisation, mow lawns, collect for charity, give people food)?	Yes Occasionally No	Do you give your time to help others in your school or community (e.g. as a peer supporter at school, help out on the Marae or church, help coach a team or belong to a volunteer organisation)?	Yes, within the last 12 months Yes, but not within the last 12 months No I don't know	Yes although response options differ so caution should be exercised

Appendix 3: Community sample and data collection approach

Community sample overview

Figure 13 describes the planned size and approach to the community sample.

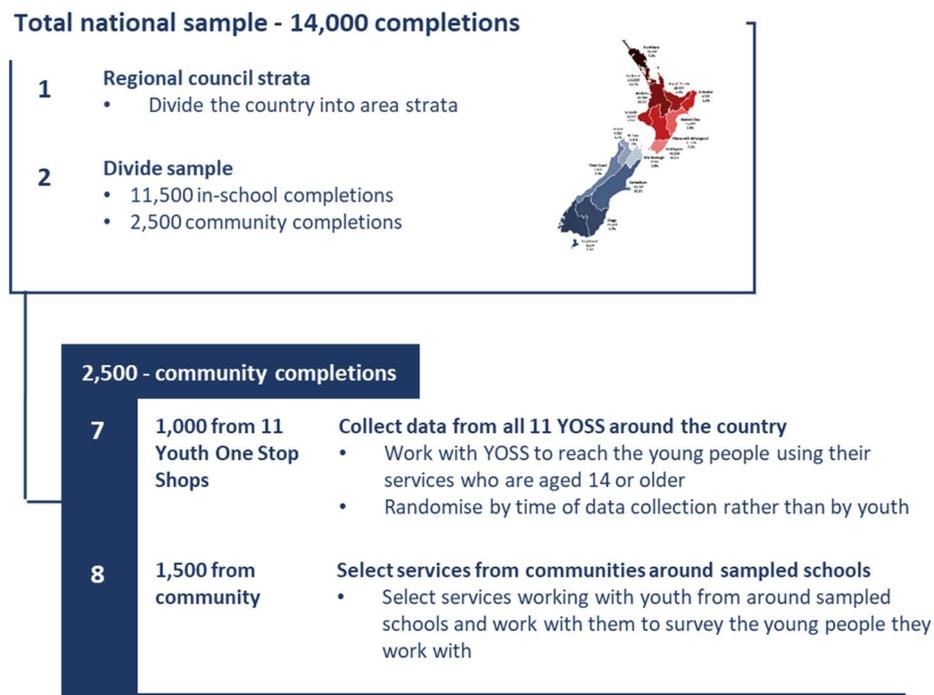


Figure 13. Overview of the planned community sample

The population of young people in the community

The community sample targeted approximately 2,500 survey responses from young people who were less likely to be attending school and therefore less likely to be captured through school-based data collection. As shown in Table 3, there was a gap between the number of young people reported by Census results and the number of young people enrolled in school. Students can leave school at 16 years of age or can apply for an early leaving exemption from the Ministry at 15 (522 were approved in 2017).

Nationally, the 2018 December Household Labour Force Survey results found that of the total 314,300 working age population in the 15-19 year old age group:

- 49,600 were employed and not in education

- 28,400 were not in employment, education or training (NEET)
- 16,400 were not in the labour force, not in education and not caregiving
- 1,400 were not in the labour force and caregiving.

There are a range of other methods to describe segments of the youth population unlikely to be reached in schools (Table 10).

Table 10. Household Labour force Survey (2018) figures for NEET (not in employment, education or training) population by regional council and Youth Payment (YP)/Young Parent Payment (YPP) and not in education, employment or training (NEET) numbers for Work and Income (2018). Note Work and Income figures use Work and Income regions rather than regional councils.

Regional Council	15-19 year old population not in employment, education or training		Work and Income support for people under the age of 18 – numbers independent	
	Number	Regional rate	Young people receiving YP and YPP	NEET young people
Auckland Region	8,808	8.4%	977	3,106
Bay of Plenty Region	1,473	8.4%	448	700
Canterbury Region	3,347	9.1%	362	514
Gisborne Region	400	13.5%	366	413
Hawkes Bay Region	1,415	13.5%		
Manawatu-Wanganui Region	2,051	12.2%	285	357
Marlborough Region	221	8.8%		
Nelson Region	272	8.8%	128	231
Northland Region	1,056	11.0%	247	341
Otago Region	1,132	6.2%		
Southland Region	443	7.3%	283	389
Taranaki Region	602	8.8%	272	284
Tasman Region	276	8.8%		
Waikato Region	2,810	9.6%	360	480
Wellington Region	2,962	8.8%	290	348
West Coast Region	168	8.8%		
NATIONAL	27,436	9.5%	4,018	7,163

The sample size for the community sample was driven by the resource available to collect survey responses from community organisations and the need to balance the sizes of the in-school and community samples. The enrolled in school sample (82%) and community sample (18%) proportions within the planned sample were close to enrolled in school and not enrolled proportions nationally (83% and 17% respectively).

Data collection approaches were limited by the safety requirement that all respondents complete the survey with a staff member from the community organisation able to provide support if needed and/or Malatest team member. This requirement meant email invitations to online surveys were not possible.

Recruitment in the community

We approached organisations located in the same communities as schools participating in the data collection, prioritising larger organisations who were more likely to have capacity to participate and be able to reach larger numbers of young people. The participating organisations included:

- YOSSs – eleven YOSS around the country support a large number of young people with a range of health and social services
- Other organisations – for example, alternative education providers, youth services, Industry Training Organisations, etc, linked with schools selected in the school sample.

The approach to selecting individual participants was agreed with each participating organisation. Most often, this involved bringing together a group of young people or attending an existing group to deliver the survey.

Responses collected in the community

As for the school sample, the community sample data collection was impacted by COVID. In addition to limitations imposed by lockdowns, many of the community organisations were healthcare providers and so had roles in the COVID response, limiting their capacity to be involved in the survey.

The number of community responses in each region and the number of organisations they were collected from are shown in Table 11.

Table 11. Community participation – number of organisations and number of survey responses

Regional Council	Number of organisations	Number of responses
Auckland	2	65
Bay of Plenty	3	90
Canterbury	0	0
Gisborne	2	35
Hawke's Bay	1	4
Manawatū-Whanganui	3	29
Marlborough	2	14
Nelson	7	71
Northland	4	69
Otago	2	7
Southland	1	33
Taranaki	0	0
Tasman	0	0
Waikato	2	32
Wellington	7	53
West Coast	0	0
NATIONAL	36	502

Analysis of the community sample

The community sample does not have a well described population, the sample size is smaller and its selection was less structured. It has therefore not been weighted. Instead, analysis will focus on describing the young people reached and producing results as a point of limited comparison to the school sample. They will be reported separately.

Appendix 4: Derived variables

ID	Question title	Brief description	Data type/categories	Logic used to create variable	References
DV1	DV1. Age grouped in years (rounded down)	Assigning young people to age groups based on year/month of birth	Categories: <=13 14-16 17-18 19+	Difference in years between survey completion date and month/year of birth rounded down to nearest year.	
DV2	DV2. Gender identity - Stats NZ	Assigning young people to gender identity based on Stats NZ classification.	Categories: Male/Tāne Female/Wahine Gender diverse/Ira tāngata I'm not sure yet/questioning	Upcodes gender identity response into a Stats NZ classification.	Stats NZ - Statistical classification of gender identity V1.0.0 Error! Hyperlink reference not valid.
DV3	DV3. Junior or senior year group	Assigning young people to a year group based on seniority.	Categories: Junior Senior	Upcodes year at kura/school to junior (9-11) or senior (12-13).	
DV4	DV4. Highest qualification	Highest qualification for all young people (those currently in education and not currently in education)	Categories: I do not have any qualifications or NCEA credits yet I have some NCEA credits but no qualifications yet NCEA 1 NCEA 2 NCEA 3 Other school qualification (e.g. Cambridge, IB or International Baccalaureate)	Uses response to highest qualification young person currently has for both school/kura attenders and non-attenders.	Stats NZ - The New Zealand Qualifications Framework - Qualification Level 2003 V1.0.0

ID	Question title	Brief description	Data type/categories	Logic used to create variable	References
			Trade training certificate or diploma		
DV5	DV5. Last year group attended - Junior or senior	Last year group attended by young person who is no longer attending kura/school	Categories: Junior Senior	Upcodes last year group attended at kura/school to junior (9-11) or senior (12-13).	
DV6	DV6. Participation in any paid employment	Young people in paid employment. Paid work does not include any work done for pocket money around the house.	Categories: None Any paid employment	Upcodes if young person has completed any type of paid work in the 12 months.	
DV7	DV7. NEET status	Young people not in employment, education or training (NEET)	Categories: In school and/or employment NEET - not attending school or paid employment	Upcodes based on young person's response to completing any type of paid work in the last 12 months and whether young person is attending kura/school	Stats NZ - Household Labour Force Survey
DV8	DV8. European	European	Yes/No	Upcodes based on young person's responses to which ethnic group(s) do you belong tousing Stats NZ classification for all ethnicities included in European.	Stats NZ - Ethnicity New Zealand Standard Classification 2005V2.0.0 Error! Hyperlink reference not valid.
DV9	DV9. Māori	Māori	Yes/No	Upcodes based on young person's responses to which ethnic group(s) do you belong to using Stats NZ classification for all ethnicities included in in Māori.	
DV10	DV10. Pacific	Pacific	Yes/No	Upcodes based on young person's	

	Peoples			responses to which ethnic group(s) do you belong to using Stats NZ classification for all ethnicities included in in Pacific.	
DV11	DV11. Asian	Asian	Yes/No	Upcodes based on young person's responses to which ethnic group(s) do you belong to using Stats NZ classification for all ethnicities included in in Asian.	
DV12	DV12. MELAA	Middle Eastern/Latin American/African	Yes/No	Upcodes based on young person's responses to which ethnic group(s) do you belong to using Stats NZ classification for all ethnicities included in in Middle Eastern/Latin American/African.	
DV13	DV13. Other Ethnicity	Other Ethnicity	Yes/No	Upcodes based on young person's responses to which ethnic group(s) do you belong to using Stats NZ classification for all ethnicities included in in Other Ethnicity.	
DV14	DV14. WG-SS Disability 1	At least one question is coded SOME DIFFICULTY or A LOT OF DIFFICULTY or CANNOT DO AT ALL for WG-SS.	Yes/No		
DV15					

		any one question is coded A LOT OF DIFFICULTY or CANNOT DO AT ALL for WG-SS.			
DV16	DV16. WG-SS Disability 3	Any one question is coded A LOT OF DIFFICULTY or CANNOT DO AT ALL for WG-SS.	Yes/No		
DV17	DV17. WG-SS Disability 4	Any one domain is coded CANNOT DO AT ALL for WG-SS.	Yes/No		
DV18	DV18. WHO-5 Final Score	Raw WHO5 score (0-25) multiplied by 4 to give a final score.	Sum of integer point rating questions multiplied by 4	Raw score is calculated by summing the ratings of the five items on a scale from 0 to 5. The total raw score is then multiplied by 4 to give the final score.	
DV19	DV19. Binary WHO-5	Who-5 raw score split into two categories based on a threshold of 13 to indicate poor or good to excellent wellbeing.	Categories Poor wellbeing Good wellbeing	Based on WHO-5 raw score; a raw score less than 13 indicates poor wellbeing and greater than or equal to 13 is good wellbeing.	
DV20	DV20. Binned WHO-5 raw score	Splitting the WHO-5 raw score into categories based on differing levels of wellbeing.	Categories Poor (0-12) Good (13-17) Very Good (18-21) Excellent (22-25)	WHO-5 raw scores split as follows: Poor (0-12) Good (13-17) Very Good (18-21) Excellent (22-25)	
DV21_1 to DV21_5					

ID	Question title	Brief description	Data type/categories	Logic used to create variable	References
				DV21_1. Heterosexual DV21_2. Gay/Lesbian DV21_3. Bisexual/Pansexual DV21_4. Other rainbow identity DV21_5. Unknown sexual identity	
DV22	DV22. Kessler 6 sum score	A score range from 0 to 24 is calculated from summing the six items on a scale from 0 to 4.	Sum of integer point rating questions	Outputs score from 0-24, calculated by summing responses to K-6 (excl missing values)	Harvard Medical School - Kessler 6 (K-6)
DV23	DV23. Prevalence of severe mental illness (SMI) based on K-6	Splitting K-6 into low and high risk for severe mental illness (SMI) according to Kessler-6 sum score	Categories Low risk High risk	Outputs either low risk (0-12) or high risk (13-24) according to Kessler-6 sum score	
DV24	DV24. Rainbow status	Constructed using young people's answers to questions about gender, sexual identity and sexual preference.	Non-Rainbow Rainbow	Young people are included in the rainbow grouping if: Their sex at birth and gender identity were different; or for sexual identity they selected one or more of: gay or lesbian, mostly gay or lesbian, bisexual, pansexual, asexual, Takatāpui, Mahu, Vakasalewalewa, Palopa, Faafafine, Akavaine, Fakaleiti, or Fakafifini, Faafatama or Faatama, queer, something else not listed above, I'm not sure yet/questioning; or for gender they selected one or more of: transgender male, transgender	StatsNZ - Statistical standard for gender, sex, and variations of sex characteristics

ID	Question title	Brief description	Data type/categories	Logic used to create variable	References
				female, takatāpui, Mahu, Vakasalewalewa, Palopa, Faafafine, Akavaine, Fakaleiti, or Fakafifini, Faafatama or Faatama, non-binary, genderqueer or gender fluid, agender, something else not listed above, I'm not sure yet/questioning.	