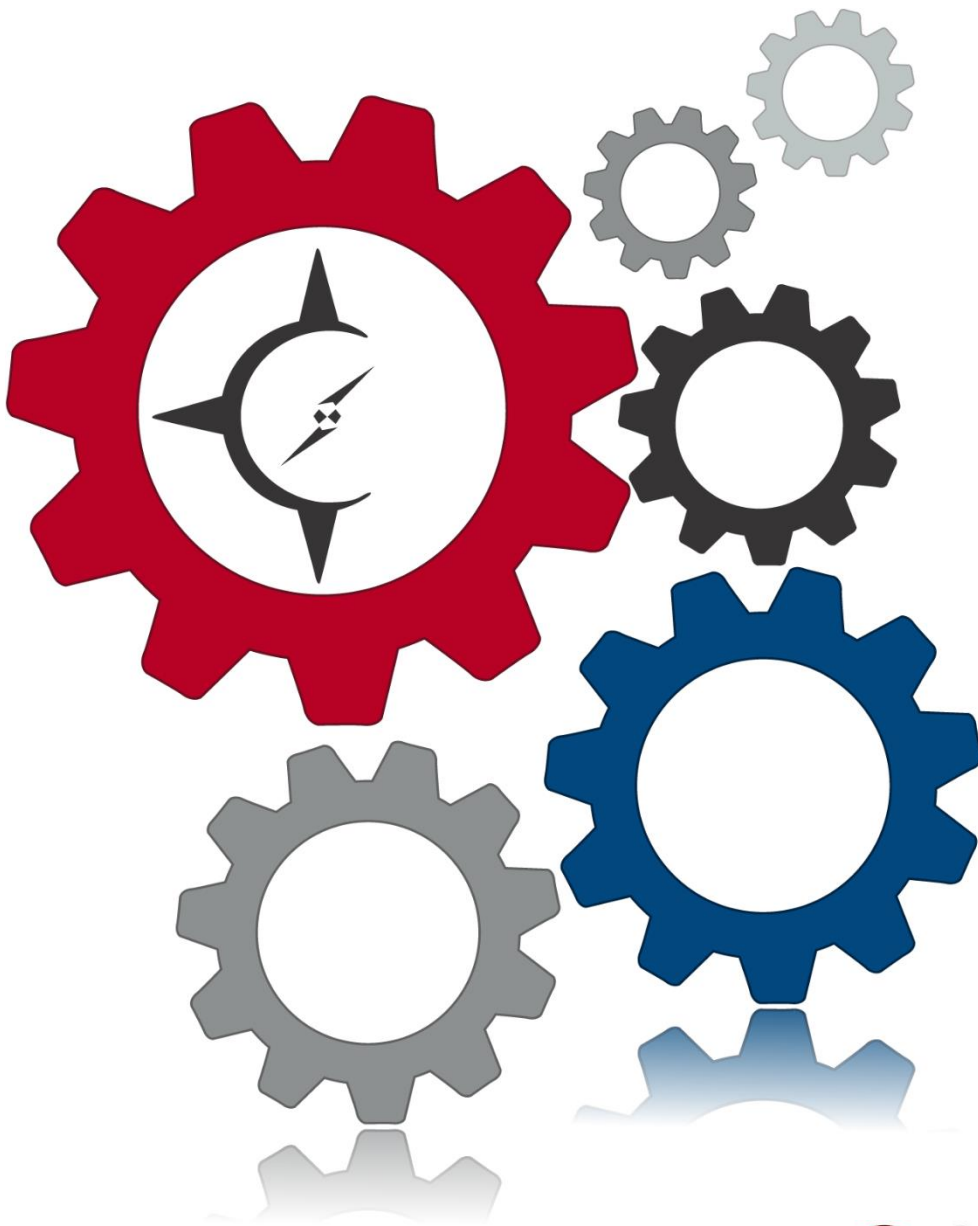


**Methods and procedures for  
International Social Survey Programme (ISSP)  
2022: Family and Changing Gender Roles V  
New Zealand**



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# Background

This report summarises the survey sampling and weighting procedures for the 2022 International Social Survey Programme (ISSP) 'Family & Changing Gender Roles' survey for New Zealand (NZ), undertaken by COMPASS Research Centre (<https://www.auckland.ac.nz/compassresearch>), Waipapa Taumata Rau, University of Auckland. COMPASS is the New Zealand Representative on the ISSP.

The ISSP is a cross-national collaboration on surveys covering a different social science topic each year. The 2022 topic, Family & Changing Gender Roles, has been previously run in 1988, 1994, 2002, and 2012. New Zealand began its association with the ISSP in 1991, and ran the 1994 and 2002 Family & Changing Gender Roles surveys. The 2012 Family & Changing Gender Roles survey was not run in NZ due to a period of changeover from Phil Gendall, the previous custodian of the ISSP who retired in 2010, to COMPASS, the current custodian of the ISSP, which began running ISSP surveys in 2013. The present survey enables international comparisons in attitudes around:

- Employment of women and its connection to childcare responsibilities;
- Societal views on marriage, cohabitation beforehand, and having children;
- Gendered divisions of domestic labour and household financial management;
- The stresses of work-life balance.

We collected the data for the 2022 survey between May and October 2023 – like for many other ISSP countries, data collection for the 2022 survey was delayed by the COVID-19 pandemic.



## Methods

In New Zealand, response rates tend to be lower among certain demographic groups. For instance, males are less likely to respond than females; younger people are less likely to respond than older people; and Māori and minority ethnicities are less likely to respond than Europeans, which can lead to non-response bias (Fink, et al. 2011; 't Mannetje, et al. 2011; Meiklejohn, et al. 2012). Oversampling is commonly used in survey design to overcome this challenge and achieve a response base that is more representative of the population.

We have used consistent oversampling methods in our surveys for the ISSP since 2018 (see [tinyurl.com/compass-issp](https://tinyurl.com/compass-issp)). We stratify by age group, gender, and ethnicity, and specifically oversample groups that are less likely to respond. We define 40 strata from the electoral roll, from which we draw our sample: 4 'ethnic' groups (Māori Descent, High Pacific meshblocks, High Asian meshblocks, Other) × 2 gender categories (male, female) × 5 age groups (18–30, 31–45, 46–60, 61–75, 76+).

The electoral roll provides names and addresses but has no information on gender. To approximate a gender variable for the purposes of sampling and weighting, we impute gender based on title, available for 92% of the electoral roll, and on first name(s) for the remaining 8%. Note that the imputed gender variable is not used for data analysis; it is used only for weighting. We consider it appropriate for weighting purposes – for our responses, the Phi coefficient between the imputed variable and gender (where binary) as reported was 0.97, so achieving representativeness on the imputed variable is likely to achieve it on gender overall. To avoid the need to impute for the entire electoral roll (N = 3,333,818 enrolled NZ citizens or permanent residents aged 18 or over, with NZ mailing addresses), we randomly sampled n = 120,000.

The electoral roll provides an indicator for Māori descent, but nothing for other ethnicities. To define our ethnic strata, we use published ethnicity counts for each geographical meshblock in the country – the smallest unit for which StatsNZ collects data, typically representing 30–60 dwellings (Statistics New Zealand 2016) – based on the boundaries as at the 2018 New Zealand Census of Population and Dwellings. We then define percentage cutoffs for “High Pacific” and “High Asian” meshblocks, to be high enough to ensure there is a good chance of sampling from these ethnic groups within strata, while still ensuring there are enough individuals in each stratum for our pre-defined numbers, shown in Table 1.

As described earlier, we have used the same methods for the last several surveys, and the cutoffs used in the present survey were informed from the previous ones, and our developed understanding of where we can set the “high” cutoffs for ethnicities. In this case, the cutoff for High Pacific was “at least 38% Pacific”, and that for High Asian was “at least 50% Asian”.

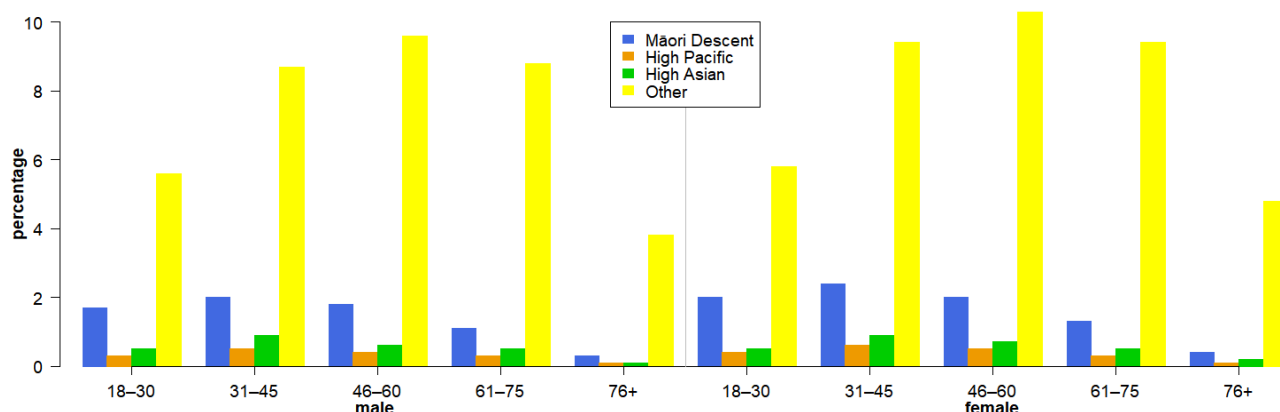
Table 1 provides the number selected from each stratum. With a target of 1,200 responses, we made the number selected in each stratum roughly the same as for our survey for ISSP 2021 Health and Healthcare II, where we received n = 1,135 responses, but we boosted numbers sent to the “other ethnicity” strata by 5% (see von Randow, et al. 2022). Across our previous surveys, the “other ethnicity” strata have been the highest responding strata, across age and gender groups.

Thus, 6,126 questionnaires were sent out on Monday, 15 May, 2023. By the end of July it was clear we were likely to achieve just under the ISSP minimum requirement of 1,000 responses, so we added a top-up sample of n = 255 to the strata with the highest response rates to date, which were the 61–75 and 76+ age groups among those of Māori descent and those in the “Other” ethnic strata. Table 1 shows in red where these numbers were added.

**Table 1. Number selected to be mailed to each stratum**

	Māori descent	High Pacific	High Asian	Other	Total
<b>Male</b>					
18–30 years	160	180	160	289	<b>789</b>
31–45 years	160	180	160	289	<b>789</b>
46–60 years	120	120	120	275	<b>635</b>
61–75 years	80 (+ 30 = 110)	60	80	192 (+ 30 = 222)	<b>412 (472)</b>
76+ years	60 (+ 30 = 90)	60	70	234 (+ 35 = 269)	<b>424 (489)</b>
Total	<b>580 (640)</b>	<b>600</b>	<b>590</b>	<b>1279 (1,344)</b>	<b>3,049 (3,174)</b>
<b>Female</b>					
18–30 years	170	180	150	358	<b>858</b>
31–45 years	130	120	120	344	<b>714</b>
46–60 years	120	120	100	220	<b>560</b>
61–75 years	70 (+ 30 = 100)	90	70	248 (+ 35 = 283)	<b>478 (543)</b>
76+ years	70 (+ 35 = 105)	90	100	207 (+ 30 = 237)	<b>467 (532)</b>
Total	<b>560 (625)</b>	<b>600</b>	<b>540</b>	<b>1,377 (1,442)</b>	<b>3,077 (3,207)</b>
<b>Total</b>					
18–30 years	330	360	310	647	<b>1,647</b>
31–45 years	290	300	280	633	<b>1,503</b>
46–60 years	240	240	220	495	<b>1,195</b>
61–75 years	150 (+ 60 = 210)	150	150	440 (+ 65 = 505)	<b>890 (1,015)</b>
76+ years	130 (+ 65 = 195)	150	170	441 (+ 65 = 506)	<b>891 (1,021)</b>
Total	<b>1,140 (1,265)</b>	<b>1,200</b>	<b>1,130</b>	<b>2,656 (2,786)</b>	<b>6,126 (6,381)</b>

Questionnaires were mailed to a random sample from each stratum. Figure 1 illustrates the distribution of these strata in the electoral roll.

**Figure 1. Demographic distributions in our sampling strata, from the random sample of 120,000 from the New Zealand electoral rolls**

Everyone sampled was mailed the questionnaire, a cover letter, return mail instructions, and a participant information sheet. The latter three are provided as Appendices to this report. The cover letter explained:

- what the survey was about and that it was approved by the University of Auckland Human Participants Ethics Committee (ref. UAHPEC25526);
- how we obtained their names and addresses, and how we selected participants;
- that their participation was voluntary;
- that they could complete the survey either on the paper questionnaire they had received or online via Qualtrics, and that either would put them in a draw for one of ten \$100 gift cards;
- that they could have the completed survey picked up by a courier, with instructions to this end.

The participant information sheet went into more detail on all of the above and explained:

- steps we take to ensure their confidentiality;
- that we take their completing the questionnaire as their consenting to participate;
- that an anonymised data set would be permanently stored in both NZ and international data archives as a historical record of the 2022 ISSP survey.

The return mail instructions sheet gave full details of how to fill in the information on the NZ Post website and have the questionnaire picked up from their home, and included screenshots from the online form.

On Monday, 12 June, we sent a reminder postcard to the 5,250 of the initially sampled 6,126 people we had not heard from. On Monday, 10 July, we sent a second full invitation (cover letter, information sheet, courier return instructions, questionnaire) to the remaining 4,958 non-respondents. By the end of July, we had received only  $n = 887$  responses that were complete enough for inclusion in the ISSP. On Monday, 7 August, we sent a full invitation to the top-up sample of 255 described earlier. We did not send any reminders to the top-up group.

By the end of October 2023, we had a total of 1,041 valid responses, including 45 from the top-up sample – a raw response rate of 16.31% and a standardised response rate of 21.16% (the response rate we would have been achieved had each stratum been sent questionnaires proportional to their actual share of the population). Figure 2 shows the timing of the returned responses.

**Figure 2. Questionnaires returned, by date**

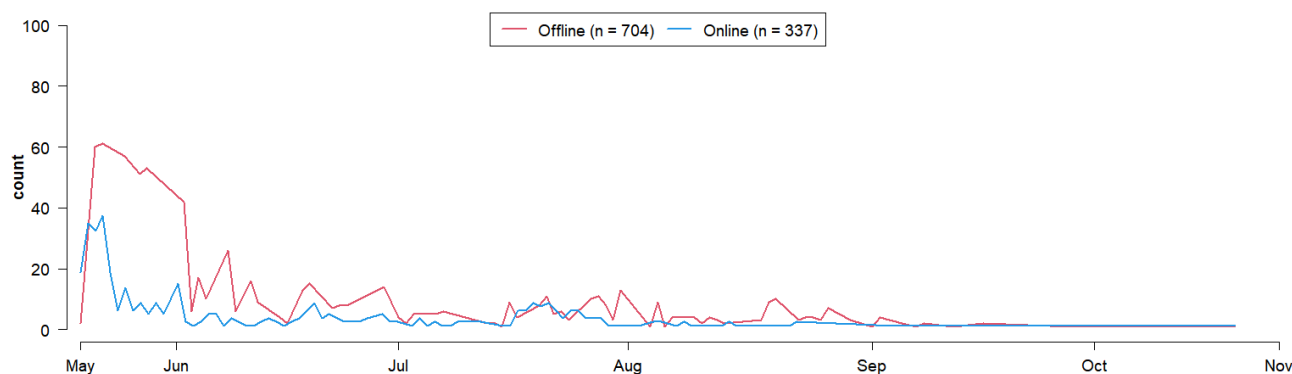


Table 2 shows the number of people that responded from each stratum, using the total numbers that were mailed to each stratum as denominators. The younger Māori descent and High Pacific strata exhibited the lowest response rates, which has usually been the case.

Response rates were lower than in our 2021 ISSP survey on Health and Healthcare for most strata. The 61–75 and 76+ age groups responded at the highest rates, as they do each year, but even their rates were down by around 10 percentage points year on year. As very little changed in sampling methodology between the two surveys, this change could be due to topic. The “Environment” and “Family & Changing Gender Roles” ISSP modules have drawn some of the lowest response rates in our experience, while the “Health & Healthcare” and “Religion” modules have drawn the highest.

**Table 2. Number of respondents (response rate %) within each stratum**

Age	Māori descent	High Pacific	High Asian	Other	Total	% of responses
<b>Male</b>						
18–30 years	8 ( 5.0%)	11 ( 6.1%)	12 ( 7.5%)	29 (10.0%)	60 ( 7.6%)	5.76%
31–45 years	11 ( 6.9%)	4 ( 2.2%)	13 ( 8.1%)	59 (20.4%)	87 (11.0%)	8.36%
46–60 years	15 (12.5%)	9 ( 7.5%)	16 (13.3%)	46 (16.7%)	86 (13.5%)	8.26%
61–75 years	15 (13.6%)	9 (15.0%)	15 (18.8%)	69 (31.1%)	108 (22.9%)	10.37%
76+ years	25 (27.8%)	8 (13.3%)	12 (17.1%)	86 (32.0%)	131 (26.8%)	12.58%
Total	74 (11.6%)	41 ( 6.8%)	68 (11.5%)	289 (18.8%)	472 (14.9%)	45.34%
<b>Female</b>						
18–30 years	7 ( 4.1%)	13 ( 7.2%)	11 ( 7.3%)	39 (10.9%)	70 ( 8.2%)	6.72%
31–45 years	13 (10.0%)	17 (14.2%)	15 (12.5%)	77 (22.4%)	122 (17.1%)	11.72%
46–60 years	25 (20.8%)	10 ( 8.3%)	15 (15.0%)	72 (32.7%)	122 (21.8%)	11.72%
61–75 years	22 (20.0%)	14 (15.6%)	9 (12.9%)	92 (32.5%)	137 (25.2%)	13.16%
76+ years	26 (28.9%)	13 (14.4%)	14 (14.0%)	65 (27.4%)	118 (22.2%)	11.34%
Total	93 (14.9%)	67 (11.2%)	64 (11.9%)	345 (23.9%)	569 (17.7%)	54.66%
<b>Total</b>						
18–30 years	15 ( 4.5%)	24 ( 6.7%)	23 ( 7.4%)	68 (10.5%)	130 ( 7.9%)	12.49%
31–45 years	24 ( 8.3%)	21 ( 7.0%)	28 (10.0%)	136 (21.5%)	209 (13.9%)	20.08%
46–60 years	40 (16.7%)	19 ( 7.9%)	31 (14.1%)	118 (23.8%)	208 (17.4%)	19.98%
61–75 years	37 (17.6%)	23 (15.3%)	24 (16.0%)	161 (31.9%)	245 (23.7%)	23.54%
76+ years	51 (26.2%)	21 (14.0%)	26 (15.3%)	151 (29.8%)	249 (24.4%)	23.92%
Total	167 (13.2%)	108 ( 9.0%)	132 (11.7%)	634 (22.8%)	1,041 (16.3%)	100.00%
% of responses	16.04%	10.37%	12.68%	60.90%	100.00%	1,041 (100%)

**Note:** Percentages in shaded cells show row and column percentages of responses out of the total responses ( $n = 1,041$ ).

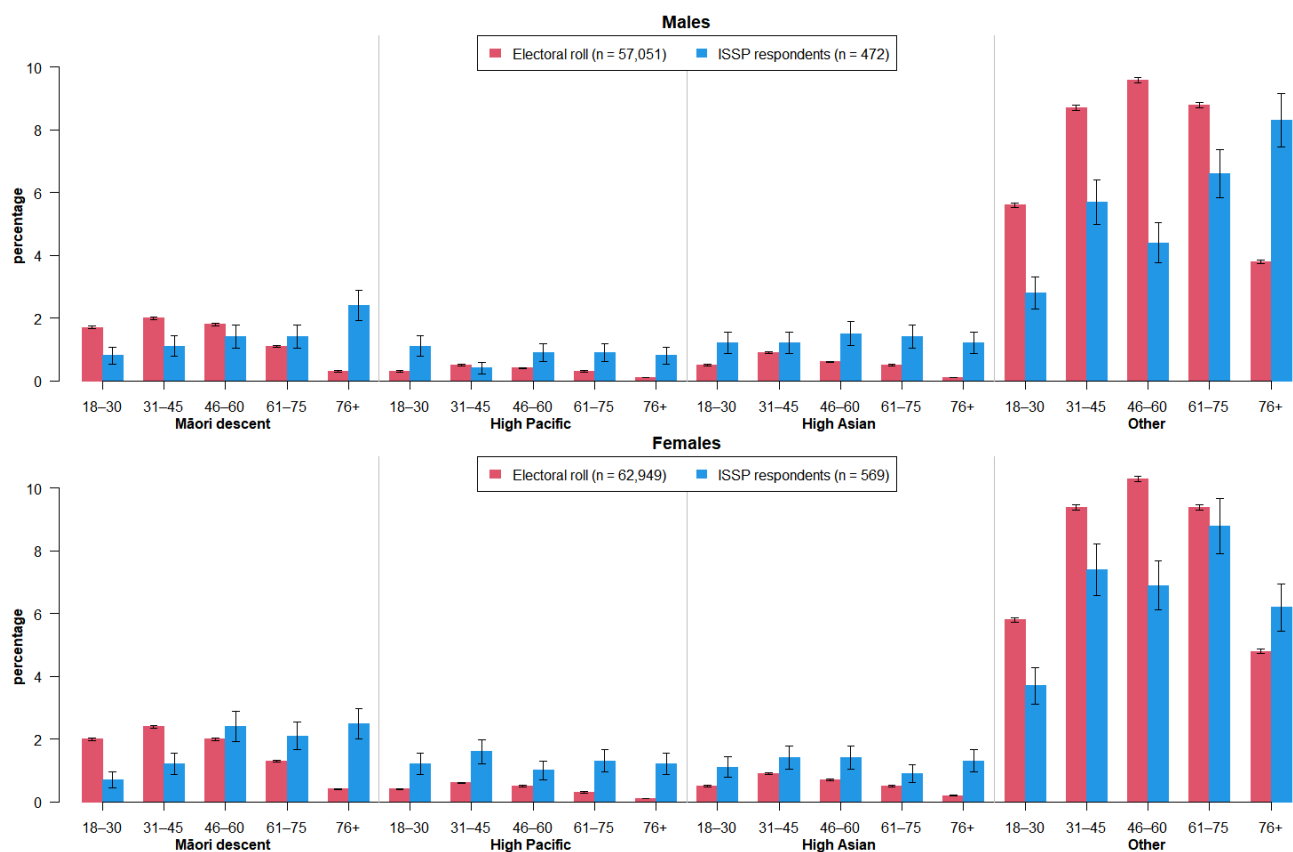


# Representativeness

## Was oversampling of Māori, Pacific, and Asian groups successful?

Figure 3 shows each stratum's percentages in the electoral roll and our ISSP responses. Comparison of stratum percentages shows that the sampling strategy resulted in higher representations of: people of Māori descent in the older age groups; all High Pacific groups except 31–45-year-old males; and all High Asian groups. All of our “other ethnicity” strata were underrepresented except for in the oldest age group.

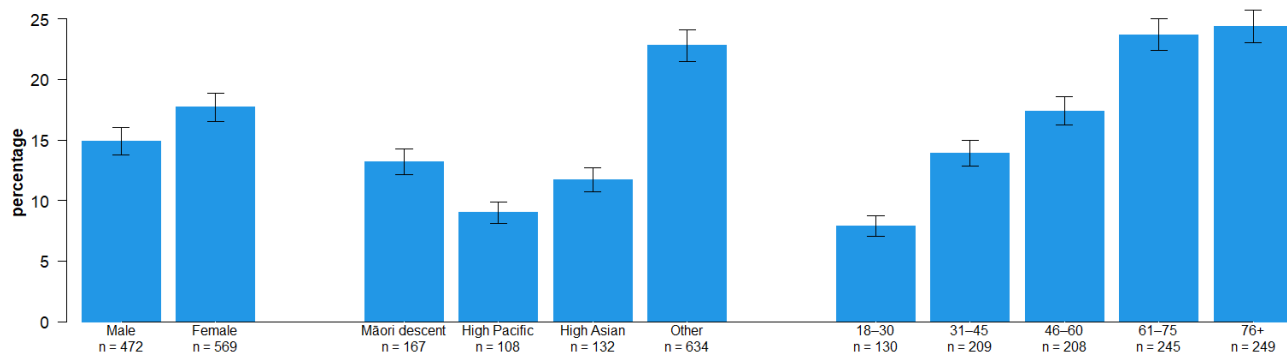
**Figure 3. Percentage of each stratum in electoral roll sample and among ISSP respondents**



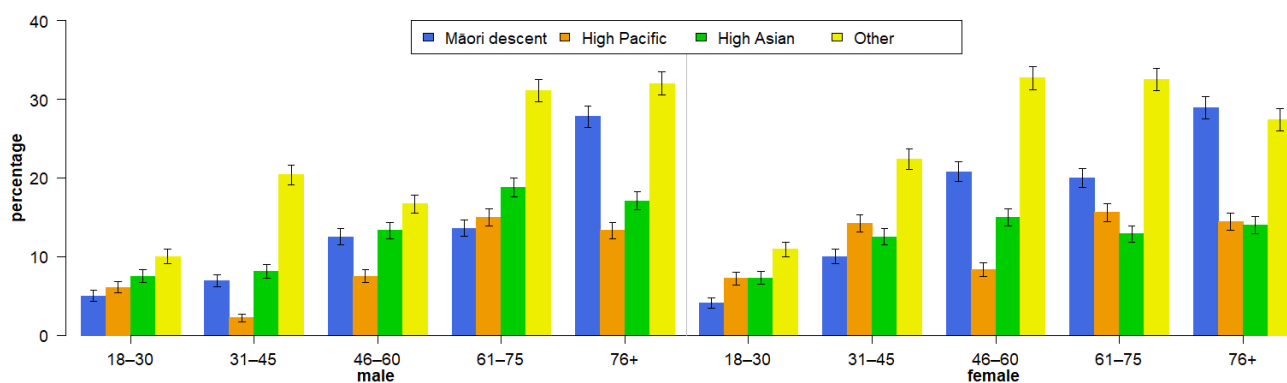
## What were the response rates by gender, age group, and ethnicity?

Figure 4 shows that, as expected, response rates were highest for the “other ethnicity” strata, and generally increased with age. High Pacific strata and the younger age groups saw the lowest response rates among our stratification variables. These differences were also reflected in the individual stratum response rates presented in Figure 5. Males aged 31–45 years from High Pacific meshblocks had the lowest response rate (2.2%), while females aged 46–60 years of “other ethnicity” had the highest (32.7%).

**Figure 4. Response rates for stratification variables**

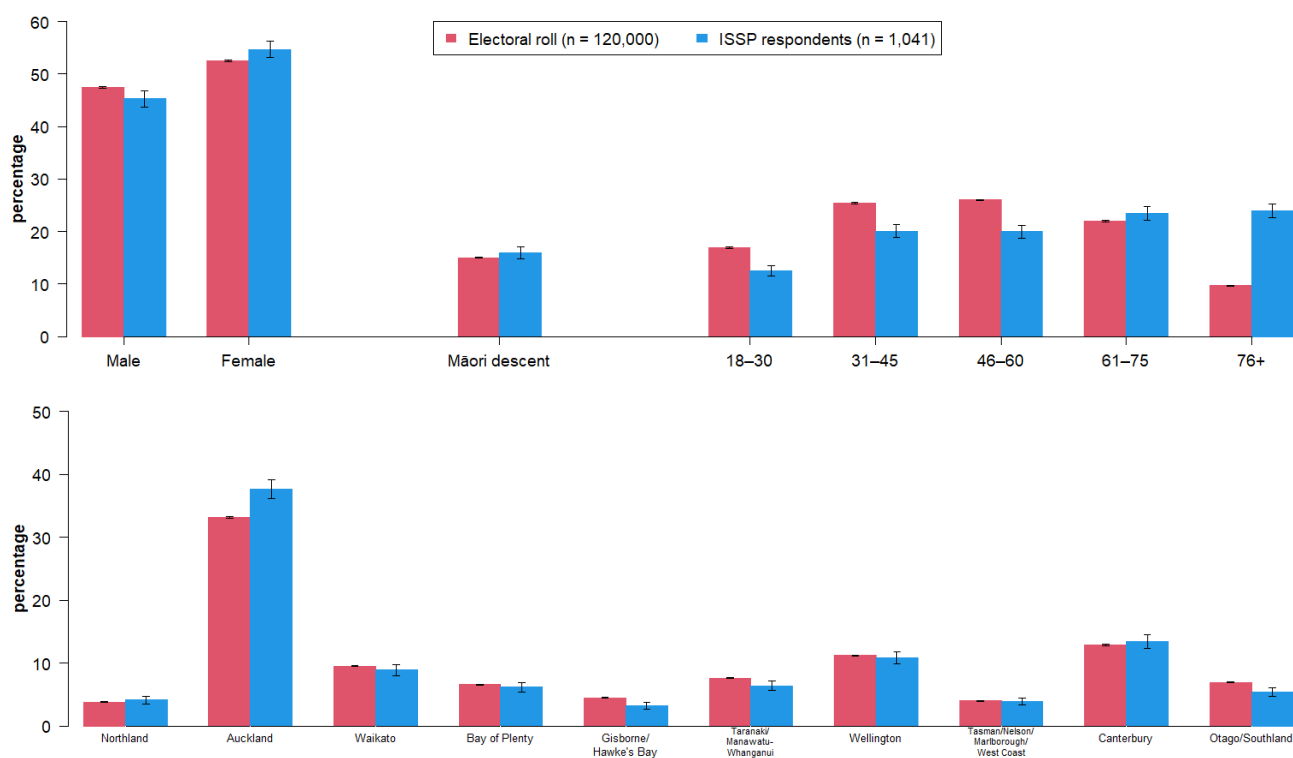


**Figure 5. Response rates for each sampling stratum**

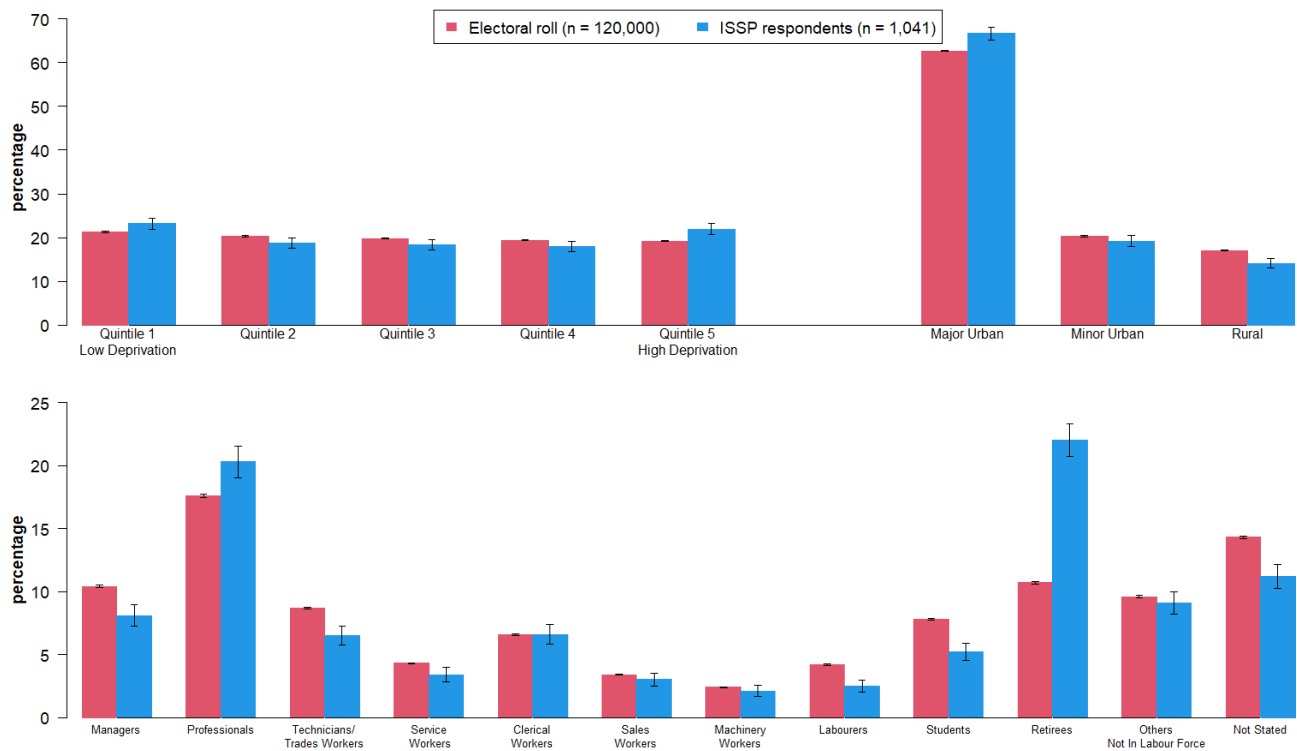


## How was the distribution of responses relative to the electoral roll?

**Figure 6. Percentages of demographics in the electoral roll sample and in our ISSP data set unweighted**

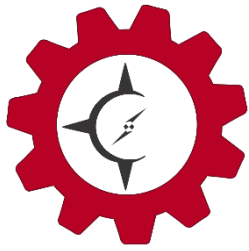






The comparisons in Figure 6 show that the percentage distributions of all variables differed slightly from those in the electoral roll. Most noticeably:

- Males were underrepresented, and females were overrepresented;
- The 76+ age group was overrepresented, while the youngest three groups were underrepresented;
- Auckland was significantly overrepresented, while Otago/Southland, Gisborne/Hawke's Bay, and Taranaki/Manawatū-Whanganui were all slightly underrepresented;
- Major urban areas were overrepresented, while rural areas were underrepresented;
- Professionals were significantly overrepresented, while Managers, Technicians & Trades Workers, Labourers, Students, and those listed as Not Stated in the electoral roll were underrepresented. Retirees were by far the most overrepresented, something that we observe every year and is common in survey research (Gigliotti & Dietsch 2014).



# Weighting

## Electoral roll

We constructed weights based on the inverse response probability to account for the differences described above. We conducted a logistic regression using the  $n = 120,000$  that were taken as a simple random sample from the electoral roll, with 'responded' (Yes/No) as the outcome, and gender, age group, Māori descent, region, NZDep deprivation quintile, urbanicity, and occupation as explanatory variables. A main effects model was computed, and all possible two-way interactions were tested in separate models. Seven were found to be significant:

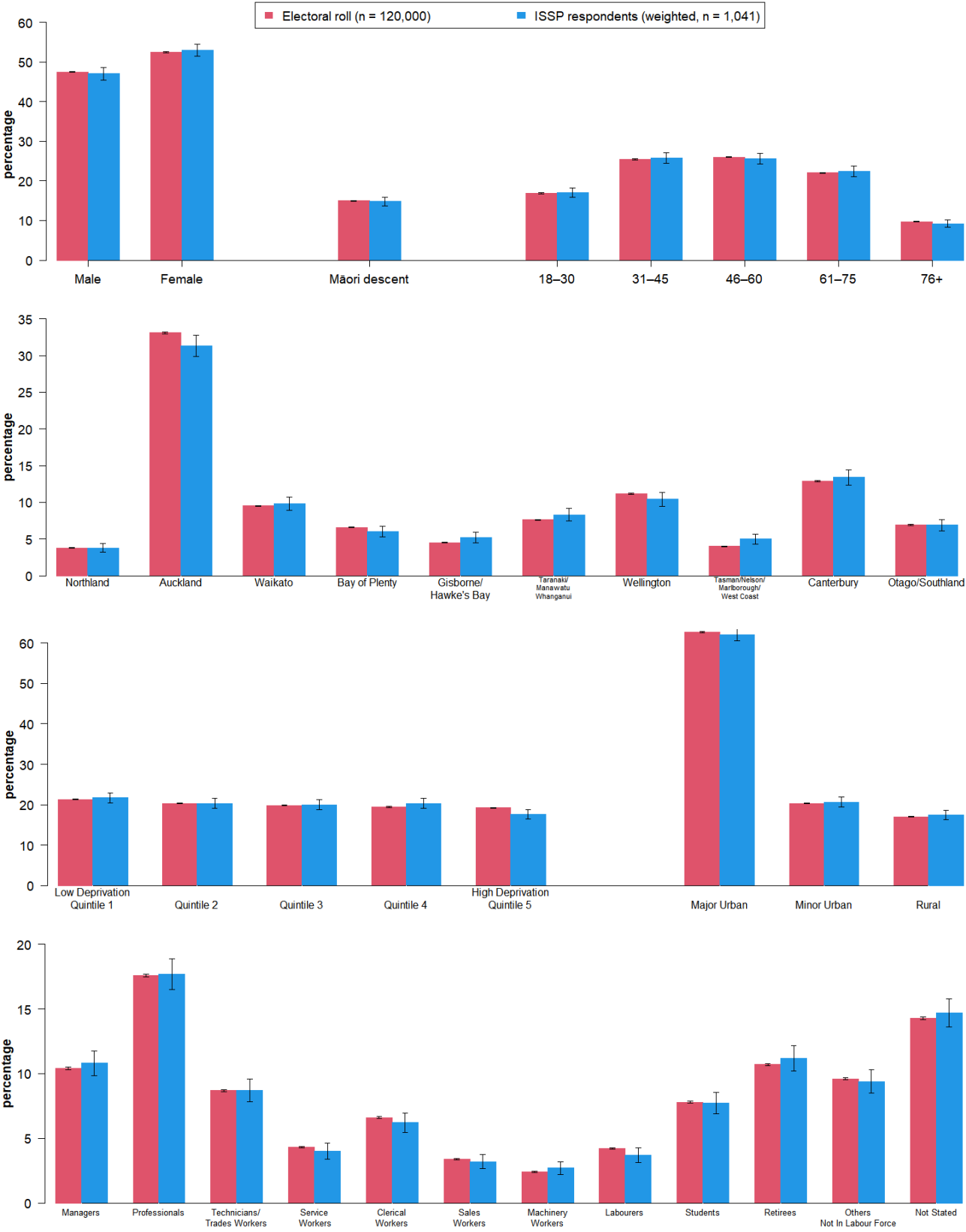
- Gender  $\times$  age group;
- Age group  $\times$  Māori descent;
- Māori descent  $\times$  region;
- Māori descent  $\times$  deprivation quintile;
- Māori descent  $\times$  occupation;
- Region  $\times$  deprivation quintile;
- Deprivation quintile  $\times$  occupation.

These interactions and all main effects were included in the final model. As we had found in previous years, gender was not significant in the model, but as weights calculated for the most recent preceding ISSP survey (2021) resulted in the distribution of gender being further from the population figures than the raw data, gender was included as a predictor to avert this happening again.

The resulting weights were capped at both ends to a range of 0.10 through 7.00. In this case, only 22 records were affected by this, all but one of which were at the low end – the minimum raw weight was 0.03. After this, all weights were adjusted such that the total weighted  $n$  was the same as the total unweighted  $n$  of 1,041, i.e. the average was 1 while respecting the caps described.

The odds ratios from the final model are presented in Table A1 in the Appendices. The graphs in Figure 7 show the same comparisons to the electoral roll sample as Figure 6 with weights applied. These show that our weighting removed most of the differences we observed earlier, including a better balance of the male/female split as we had hoped by including gender in the model. The most noticeable deviation here is that the weights appear to have overcorrected our overrepresentation of people living in Auckland.

**Figure 7. Percentages of demographics in the electoral roll sample and in our ISSP data set weighted to it**



## Administrative Population Census

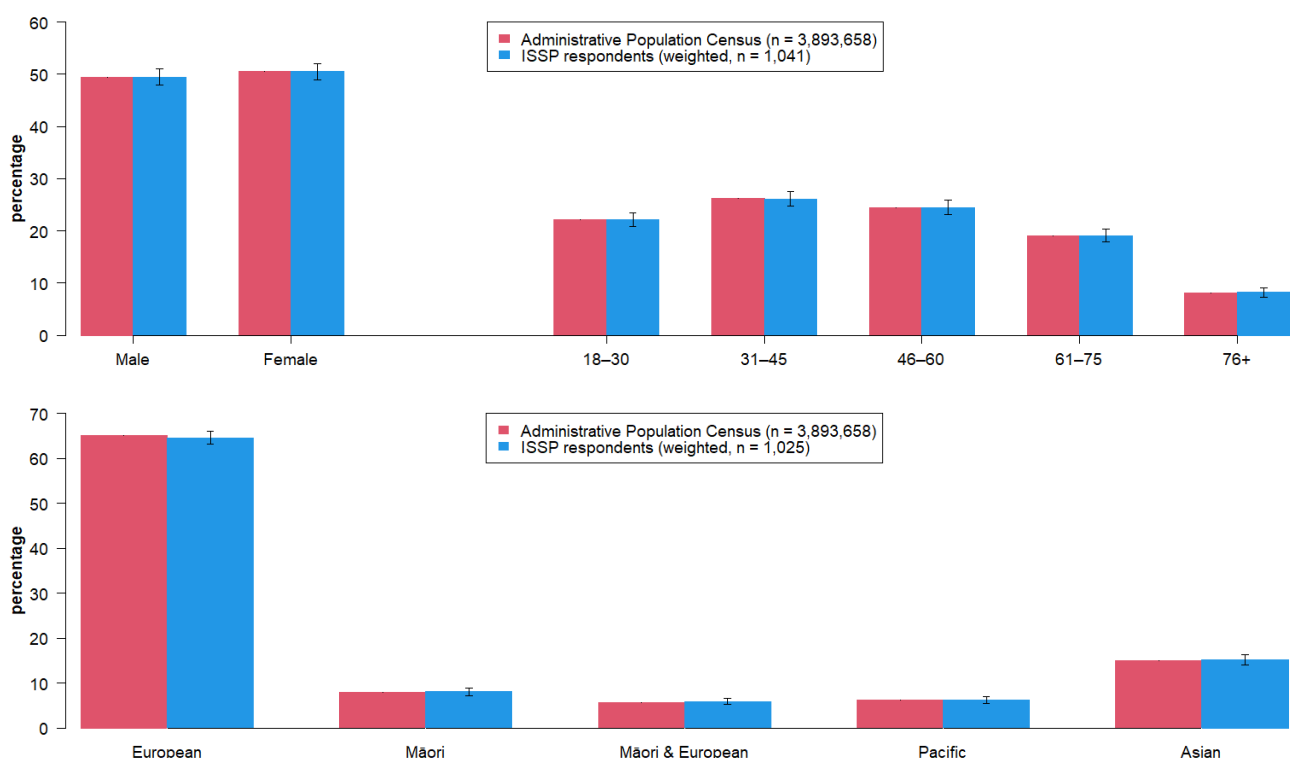
The weights described in the previous section weighted the sample to the adult population in New Zealand who were enrolled to vote. However, those enrolled to vote are not perfectly representative of adults in the New Zealand population, particularly with respect to age (See [Electoral Commission 2024](#)), and possibly with respect to other factors. As such, weighting to the electoral roll may still underrepresent or overrepresent some population groups.

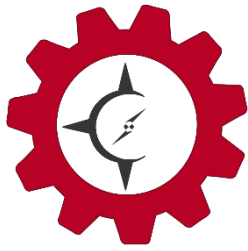
To ensure representativeness to the entire New Zealand population – not just those enrolled to vote – we used the Administrative Population Census (APC), recently established by Stats NZ (Stats NZ 2022). The APC uses linked data from administrative sources to provide annual distributions and crosstabulations of several demographic variables for the (estimated) full New Zealand population. Our analysis uses the APC from June 2022. Of the APC variables available, we chose gender, age and ethnicity to use as weighting variables, as we believed these were the most important to achieve representativeness.

Our survey collected ethnicity in a multiple response question, i.e. respondents could choose more than one ethnicity, which enabled us to map to ethnic combinations provided by the APC. An examination of responses found that we had enough to retain the age groups we were already using, and to include “Māori and European” as its own category for ethnicity, alongside Māori, Pacific, Asian, and “European and other ethnicities” (including “not elsewhere classified” and “missing”, as 19 respondents did not give an ethnicity), prioritised in that order.

We compared the percentage distributions in the response data set, using gender and age group as assigned from the electoral roll data and ethnicity as described above, to those in the APC, and created a weight to adjust each combination of these to match the APC. We multiplied these by the weights, adjusting the data to the electoral roll to give a final weight, once again keeping them within our range of 0.1–7. Figure 8 compares our data with these weights applied back to the APC distributions, showing that for gender, age, and ethnicity we achieved almost perfect weighting to the estimated New Zealand population.

**Figure 8. Percentages of demographic variables in the Administrative Population Census (APC) at June 2022 and in our ISSP data set weighted to it and to the electoral roll**





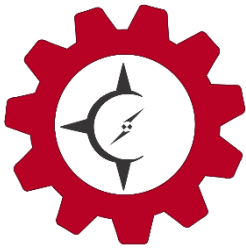
## Conclusion

This report summarises the sampling procedures for ISSP 2022 Family & Changing Gender Roles V in New Zealand, and the weighting methods used to ensure the data are representative of the adult population of New Zealand.

Weighting the data set on characteristics that predict response enabled a representative sample across gender, age group, Māori descent, region, occupation, deprivation, and urbanicity, as represented in the New Zealand Electoral Roll. The further adjustment to the Administrative Population Census enabled a more accurate representation of the overall adult population by gender, age group, and ethnicity.

Weighting allows respondents from underrepresented groups to act as ‘spokespeople’ for others like them in the population, i.e. respondents with the lowest capped weight ‘speak’ for 0.1 of a person who shares their demographic characteristics, each, while those with the highest capped weight ‘speak’ for 7 people who share theirs. We set the average weight at 1 so that the weighted sample size is the same as the unweighted.

We cannot know if our ‘weighted’ respondents’ views are, in fact, typical of people within their demographic groups in the population, but weights explain some of the variation in survey responses based on the variables in our models. Weighted responses provide descriptive and analytic results that are closer to those that would be observed in the whole population.



## References

't Mannetje A, Eng A, Douwes J, Ellison-Loschmann L, McLean D, Pearce N (2011). Determinants of non-response in an occupational exposure and health survey in New Zealand. *Australian and New Zealand Journal of Public Health* 35(3): 256–263, doi:[10.1111/j.1753-6405.2011.00703.x](https://doi.org/10.1111/j.1753-6405.2011.00703.x).

Electoral Commission (2024). Enrolment by general electorate. Retrieved 13 May, 2024, from <https://elections.nz/stats-and-research/enrolment-statistics/enrolment-by-general-electorate>.

Fink JW, Paine SJ, Gander PH, Harris RB, Purdie G (2011). Changing response rates from Māori and non-Māori in national sleep health surveys. *New Zealand Medical Journal* 124(1328): 52–63, <https://pubmed.ncbi.nlm.nih.gov/21475339>.

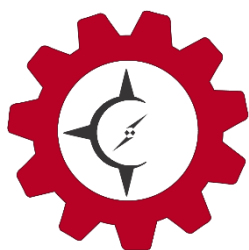
Gigliotti L & Dietsch A (2014). Does Age Matter? The Influence of Age on Response Rates in a Mixed-Mode Survey. *Human Dimensions of Wildlife* 19: 280–287, doi: [10.1080/10871209.2014.880137](https://doi.org/10.1080/10871209.2014.880137).

Meiklejohn J, Connor J, Kypri K (2012). The Effect of Low Survey Response Rates on Estimates of Alcohol Consumption in a General Population Survey. *PLOS ONE* 7(4), doi: [10.1371/journal.pone.0035527](https://doi.org/10.1371/journal.pone.0035527).

Statistics New Zealand (2016). *Statistical Standard for Meshblock*. <https://www.stats.govt.nz/assets/Uploads/Retirement-of-archive-website-project-files/Methods/Statistical-standard-for-meshblock/stats-stnd-meshblock.pdf>.

Statistics New Zealand (2022). Experimental administrative population census: Data sources, methods, and quality (second iteration): 42. Retrieved 13 May, 2024, from <https://www.stats.govt.nz/assets/Research/Experimental-administrative-population-census-data-sources-methods-and-quality-second-iteration/Download-data/Experimental-administrative-population-census-Data-sources-methods-and-quality-second-iteration.pdf>.

von Randow M, Kolandai K, Milne BJ (2022). Methods and procedures for International Social Survey Programme (ISSP) 2021: Health & Healthcare II New Zealand. Retrieved 13 May, 2024, from <https://www.auckland.ac.nz/assets/arts/our-research/research-institutes-centres-groups/compass/surveys/ISSP2021-methods.pdf>



# Appendices

## Model results

**Table A1. Logistic regression model predicting response for ISSP 2022 in New Zealand  
(n = 1,041 of n = 120,000 individuals sampled from the New Zealand electoral roll)**

Parameter	Odds Ratio (95% Confidence Interval)
<b>Gender</b>	
Male	<i>Reference</i>
Female	1.077 (0.761, 1.525)
<b>Age group</b>	
18–30 years	<i>Reference</i>
31–45 years	0.817 (0.575, 1.161)
46–60 years	0.719 (0.500, 1.034)
61–75 years	1.061 (0.745, 1.511)
76+ years	2.601 (1.784, 3.791)
<b>Māori Descent</b>	
Yes	<i>Reference</i>
No	0.877 (0.312, 2.463)
<b>Region</b>	
Northland	<i>Reference</i>
Auckland	0.515 (0.231, 1.147)
Waikato	0.678 (0.284, 1.624)
Bay Of Plenty	0.431 (0.166, 1.116)
Gisborne / Hawke's Bay	0.355 (0.116, 1.086)
Taranaki / Manawatū-Whanganui	0.322 (0.110, 0.941)
Wellington	0.533 (0.231, 1.229)
Tasman / Nelson / Marlborough / West Coast	0.460 (0.158, 1.340)
Canterbury	0.586 (0.259, 1.328)
Otago / Southland	0.509 (0.209, 1.237)

Parameter	Odds Ratio (95% Confidence Interval)
<b>Deprivation Quintile</b>	
Quintile 1 – Lowest Deprivation	<i>Reference</i>
Quintile 2	0.519 (0.161, 1.679)
Quintile 3	0.334 (0.100, 1.113)
Quintile 4	0.339 (0.105, 1.096)
Quintile 5 – Highest Deprivation	0.224 (0.074, 0.679)
<b>Urbanicity</b>	
Major urban	<i>Reference</i>
Minor urban	0.869 (0.741, 1.019)
Rural	0.795 (0.664, 0.952)
<b>Occupation</b>	
Not Stated	<i>Reference</i>
Managers	1.001 (0.595, 1.682)
Professionals	0.942 (0.588, 1.510)
Technicians & Trades Workers	0.920 (0.505, 1.677)
Community & Personal Service Workers	0.663 (0.278, 1.582)
Clerical & Administrative Workers	1.411 (0.799, 2.492)
Sales Workers	0.645 (0.244, 1.701)
Machinery Operators & Drivers	0.623 (0.143, 2.711)
Labourers	0.223 (0.030, 1.658)
Students	0.742 (0.377, 1.458)
Retirees	0.799 (0.469, 1.360)
Others Not In Labour Force	0.903 (0.489, 1.669)
<b>Gender × Age Group</b>	
Male × 18–30	<i>Reference</i>
Female × 31–45	1.147 (0.736, 1.787)
Female × 46–60	1.152 (0.738, 1.798)
Female × 61–75	1.057 (0.686, 1.626)
Female × 76+	0.655 (0.425, 1.010)
<b>Age Group × Māori Descent</b>	
18–30 × Yes	<i>Reference</i>
31–45 × No	1.491 (0.726, 3.061)
46–60 × No	3.164 (1.570, 6.377)
61–75 × No	3.096 (1.508, 6.354)
76+ × No	8.126 (3.686, 17.911)



Parameter	Odds Ratio (95% Confidence Interval)
<b>Māori Descent × Region</b>	
Yes × Northland	<i>Reference</i>
No × Auckland	0.594 (0.278, 1.270)
No × Waikato	0.981 (0.423, 2.273)
No × Bay Of Plenty	1.495 (0.635, 3.519)
No × Gisborne / Hawke's Bay	1.291 (0.475, 3.505)
No × Taranaki / Manawatū-Whanganui	1.016 (0.412, 2.506)
No × Wellington	0.600 (0.245, 1.471)
No × Tasman / Nelson / Marlborough / West Coast	0.307 (0.063, 1.502)
No × Canterbury	1.227 (0.531, 2.836)
No × Otago / Southland	1.513 (0.575, 3.980)
<b>Māori Descent × Deprivation Quintile</b>	
Yes × Quintile 1 – Lowest Deprivation	<i>Reference</i>
No × Quintile 2	1.169 (0.650, 2.099)
No × Quintile 3	0.982 (0.543, 1.775)
No × Quintile 4	0.595 (0.328, 1.080)
No × Quintile 5	0.421 (0.239, 0.744)
<b>Māori Descent × Occupation</b>	
Yes × Not Stated	<i>Reference</i>
No × Managers	0.786 (0.331, 1.870)
No × Professionals	0.593 (0.285, 1.235)
No × Technicians & Trades Workers	1.595 (0.737, 3.451)
No × Community & Personal Service Workers	1.646 (0.680, 3.984)
No × Clerical & Administrative Workers	0.735 (0.302, 1.790)
No × Sales Workers	1.139 (0.378, 3.431)
No × Machinery Operators & Drivers	1.104 (0.382, 3.191)
No × Labourers	0.709 (0.245, 2.054)
No × Students	0.819 (0.279, 2.407)
No × Retirees	0.949 (0.445, 2.022)
No × Others Not In Labour Force	0.837 (0.393, 1.785)

Parameter	Odds Ratio (95% Confidence Interval)
Region × Deprivation Quintile	
Northland × Quintile 1 – Lowest Deprivation	<i>Reference</i>
Auckland × Quintile 2	1.215 (0.421, 3.507)
Auckland × Quintile 3	2.570 (0.842, 7.846)
Auckland × Quintile 4	2.974 (1.001, 8.839)
Auckland × Quintile 5	5.281 (1.919, 14.533)
Waikato × Quintile 2	0.448 (0.126, 1.594)
Waikato × Quintile 3	1.540 (0.449, 5.279)
Waikato × Quintile 4	1.946 (0.599, 6.318)
Waikato × Quintile 5	1.518 (0.484, 4.764)
Bay Of Plenty × Quintile 2	1.246 (0.352, 4.405)
Bay Of Plenty × Quintile 3	2.138 (0.577, 7.928)
Bay Of Plenty × Quintile 4	2.069 (0.568, 7.533)
Bay Of Plenty × Quintile 5	1.844 (0.520, 6.538)
Gisborne / Hawke's Bay × Quintile 2	1.279 (0.285, 5.735)
Gisborne / Hawke's Bay × Quintile 3	1.723 (0.346, 8.581)
Gisborne / Hawke's Bay × Quintile 4	1.694 (0.362, 7.919)
Gisborne / Hawke's Bay × Quintile 5	2.156 (0.508, 9.148)
Taranaki / Manawatū-Whanganui × Quintile 2	1.911 (0.484, 7.552)
Taranaki / Manawatū-Whanganui × Quintile 3	3.701 (0.923, 14.837)
Taranaki / Manawatū-Whanganui × Quintile 4	2.969 (0.760, 11.606)
Taranaki / Manawatū-Whanganui × Quintile 5	2.951 (0.796, 10.944)
Wellington × Quintile 2	1.131 (0.363, 3.524)
Wellington × Quintile 3	1.039 (0.290, 3.725)
Wellington × Quintile 4	2.080 (0.632, 6.848)
Wellington × Quintile 5 – Highest Deprivation	4.879 (1.644, 14.485)
Tasman / Nelson / Marlborough / West Coast × Quintile 2	1.337 (0.319, 5.610)
Tasman / Nelson / Marlborough / West Coast × Quintile 3	2.589 (0.611, 10.966)
Tasman / Nelson / Marlborough / West Coast × Quintile 4	2.657 (0.633, 11.151)
Tasman / Nelson / Marlborough / West Coast × Quintile 5	4.255 (1.016, 17.819)
Canterbury × Quintile 2	1.065 (0.354, 3.205)
Canterbury × Quintile 3	1.882 (0.583, 6.078)
Canterbury × Quintile 4	1.670 (0.525, 5.307)
Canterbury × Quintile 5	2.702 (0.884, 8.263)
Otago / Southland × Quintile 2	0.860 (0.249, 2.964)
Otago / Southland × Quintile 3	1.829 (0.506, 6.614)
Otago / Southland × Quintile 4	1.568 (0.434, 5.658)
Otago / Southland × Quintile 5	0.537 (0.094, 3.079)

Parameter	Odds Ratio (95% Confidence Interval)
Deprivation Quintile × Occupation	
Quintile 1 – Lowest Deprivation × Not Stated	<i>Reference</i>
Quintile 2 × Managers	0.463 (0.173, 1.238)
Quintile 2 × Professionals	1.771 (0.855, 3.668)
Quintile 2 × Technicians & Trades Workers	1.738 (0.724, 4.173)
Quintile 2 × Community & Personal Service Workers	1.173 (0.317, 4.344)
Quintile 2 × Clerical & Administrative Workers	0.922 (0.364, 2.334)
Quintile 2 × Sales Workers	1.951 (0.510, 7.459)
Quintile 2 × Machinery Operators & Drivers	2.474 (0.401, 15.253)
Quintile 2 × Labourers	4.447 (0.454, 43.547)
Quintile 2 × Students	1.129 (0.387, 3.298)
Quintile 2 × Retirees	2.051 (0.969, 4.341)
Quintile 2 × Others Not In Labour Force	1.613 (0.662, 3.929)
Quintile 3 × Managers	1.157 (0.524, 2.557)
Quintile 3 × Professionals	1.733 (0.867, 3.463)
Quintile 3 × Technicians & Trades Workers	0.633 (0.239, 1.680)
Quintile 3 × Community & Personal Service Workers	0.544 (0.124, 2.379)
Quintile 3 × Clerical & Administrative Workers	0.644 (0.252, 1.644)
Quintile 3 × Sales Workers	1.930 (0.533, 6.988)
Quintile 3 × Machinery Operators & Drivers	2.525 (0.456, 13.999)
Quintile 3 × Labourers	4.432 (0.492, 39.940)
Quintile 3 × Students	1.086 (0.391, 3.017)
Quintile 3 × Retirees	1.470 (0.708, 3.049)
Quintile 3 × Others Not In Labour Force	1.098 (0.454, 2.657)
Quintile 4 × Managers	0.818 (0.340, 1.971)
Quintile 4 × Professionals	1.396 (0.683, 2.854)
Quintile 4 × Technicians & Trades Workers	0.477 (0.171, 1.332)
Quintile 4 × Community & Personal Service Workers	1.010 (0.295, 3.465)
Quintile 4 × Clerical & Administrative Workers	0.617 (0.239, 1.597)
Quintile 4 × Sales Workers	1.858 (0.517, 6.677)
Quintile 4 × Machinery Operators & Drivers	0.664 (0.086, 5.137)
Quintile 4 × Labourers	3.482 (0.388, 31.214)
Quintile 4 × Students	1.158 (0.428, 3.129)
Quintile 4 × Retirees	2.033 (1.014, 4.075)
Quintile 4 × Others Not In Labour Force	1.054 (0.446, 2.488)

<b>Parameter</b>	<b>Odds Ratio (95% Confidence Interval)</b>
Quintile 5 × Managers	1.755 (0.731, 4.209)
Quintile 5 × Professionals	3.374 (1.708, 6.668)
Quintile 5 × Technicians & Trades Workers	1.184 (0.480, 2.920)
Quintile 5 × Community & Personal Service Workers	2.591 (0.891, 7.533)
Quintile 5 × Clerical & Administrative Workers	1.245 (0.532, 2.913)
Quintile 5 × Sales Workers	1.852 (0.499, 6.875)
Quintile 5 × Machinery Operators & Drivers	2.295 (0.440, 11.968)
Quintile 5 × Labourers	4.636 (0.545, 39.438)
Quintile 5 × Students	1.513 (0.596, 3.843)
Quintile 5 × Retirees	2.609 (1.296, 5.251)
Quintile 5 × Others Not In Labour Force	1.232 (0.542, 2.803)

## Survey documents



The University of Auckland  
Private Bag 92019  
Auckland, New Zealand  
  
Level 3, 49 Symonds Street  
Auckland, New Zealand  
Telephone (09) 373 7599 Ext 83711

### UNIVERSITY OF AUCKLAND HUMAN PARTICIPANTS ETHICS COMMITTEE (UAHPEC)

24/02/2023

Dr Komathi Kolandai  
Politics and International Relations

#### **Re: Application for Ethics Approval (Our Ref. UAHPEC25526): Approved with Comment**

The Committee considered the application for ethics approval for your study entitled “**2023 Social Attitudes Survey Aotearoa New Zealand: Family and Changing Gender Roles**”.

We are pleased to inform you that ethics approval has been granted for a period of three years.

The expiry date for this approval is **24/02/2026**

**Completion of the project:** In order that up-to-date records are maintained, you must notify the Committee once your project is completed.

**Amendments to the approved project:** Should you need to make any changes to the approved project, please follow the steps below:

- Send a request to the UAHPEC Administrators to unlock the application form (using the Correspondence tab in Ethics RM).
- Make all changes to the relevant sections of the application form and attach revised documents (as appropriate).
- Change the Application Type to “Amendment request” in Section 13 (“Submission and Sign off”).
- Add a summary of the changes requested in the text box.
- Submit the amendment request (PI/Supervisors only to submit the form).

If the project changes significantly, you are required to submit a new application.

**Funded projects:** If you received funding for this project, please provide this approval letter to your local Faculty Research Project Coordinator (RPC) or Research Project Manager (RPM) so that the approval can be notified via a Service Request to the Research Operations Centre (ROC) for activation of the grant.

The Chair and the members of UAHPEC would be happy to discuss general matters relating to ethics approvals. If you wish to do so, please contact the UAHPEC Ethics Administrators at [humanethics@auckland.ac.nz](mailto:humanethics@auckland.ac.nz) in the first instance.

#### **Additional information:**

- Do not forget to fill in the ‘approval wording’ on the PISs, CFs and/or advertisements, using the date of this approval and the reference number, before you use the documents or send them out to your participants.

All communications with the UAHPEC regarding this application should indicate this reference number: **UAHPEC25526**.

UAHPEC Administrators

University of Auckland Human Participants Ethics Committee

# Social Attitudes Survey Aotearoa New Zealand: Family & Changing Gender Roles 2023

Kia ora <name>

We hope that you and your whānau are safe and well.

We invite you to take part in a major national survey of New Zealanders' views about family life and changing gender roles. This survey is part of an international programme so the data from all countries, including New Zealand, will be archived for use internationally. For instance, researchers may use the data to compare trends across different countries. As the survey may be repeated in future, the present data may also be used by researchers who want to compare changes in New Zealand over time.

Your name was randomly selected from the New Zealand Electoral Roll and we used the contact details you provided to the Electoral Roll to write to you and invite you to participate in the survey. The enclosed Participant Information Sheet provides details about the survey to help you decide if you want to take part. Please read it carefully and contact us if you have any questions or want more details.

We would greatly appreciate if you could complete the attached questionnaire, which will take about 30 minutes of your time. All respondents go into a draw for one of 10 \$100 Prezzy card prizes. Once finished, please return the questionnaire to us using the enclosed postage-paid envelope. You can drop the envelope at any NZ Post store or in a post box, or you can arrange a courier pickup from your address (please see the **Return Mail Instructions** overleaf for more information).

You may instead complete this survey online through a secure University-subscribed website, which may be more convenient. Please visit:

<https://tinyurl.com/sasnz23gr>

Then enter your survey identification number (ID): <id>

**Please return only the questionnaire.** This letter and the information sheet are for you to retain.

**Participation is voluntary** and you need not respond if you don't wish to or are unable to.

Ngā mihi nui.

Yours sincerely,



Dr Komathi Kolandai  
(Research Fellow)

Phone +64 9 923 5552

Email [socialattitudes@auckland.ac.nz](mailto:socialattitudes@auckland.ac.nz)

COMPASS Research Centre

University of Auckland, Private Bag 92019, Auckland 1142



This survey was approved by the University of Auckland Human Participants Ethics Committee for 3 years on 24 February 2023, Reference Number: UAHPEC25526. For any concerns regarding ethical issues, please contact: The Chair, University of Auckland Human Participants Ethics Committee, Office of Research Strategy and Integrity, University of Auckland, Private Bag 92019, Auckland 1142. Phone +64 9 923 3711. Email: [humanethics@auckland.ac.nz](mailto:humanethics@auckland.ac.nz).

# RETURN MAIL INSTRUCTIONS

## Social Attitudes Survey Aotearoa New Zealand: Family & Changing Gender Roles 2023



To make it easier for you to return the questionnaire, we are offering the option for you to have our return envelope picked up from your front door. Please visit <https://www.nzpost.co.nz/tools/bookapickup/address>, and fill out the **Book a pickup** form to arrange this.

You can also call NZ Post, 0800 268 743, to arrange a pickup. Please have the information as detailed below ready when you make the call.

### Book a pickup

Our couriers pick up Monday – Friday (excluding public holidays). To use this form you will need a courier ticket number (found below the barcode).

If you don't have a courier ticket, [use our online sending tool to pay and print your label](#).

#### Pickup details

Sending multiple parcels at once? You only need to provide details for one (our courier will collect any parcels ready to go).

Courier ticket number\*  
Please enter all letters & numbers. Remove brackets & spaces.

Pickup address\*

#### When will your parcel be ready?

Your parcel will be collected on your local courier driver's next visit to your area. Booking before midday? We'll aim to collect same day. Rural pickups may take up to an additional three business days.

Ready for collection\*

Friday Apr 28, 2023

Pickup instructions

#### Your details

First name\* Last name\*

Company

Mobile number\*




Email address\*

☒ Send me a booking confirmation email

☐ Remember me

#### Drop off at an NZ Post store

If you don't want to wait for a Courier pick-up, you can drop off your parcel at your local NZ Post store. Parcels must have the courier ticket applied.

OVERNIGHT-A4	2KG	RET
 Non Signature	Courier Pack A4 Cust Ref: Compass_OIRET Courier Pack	COMPASS Research Centre The University of Auckland Private Bag 92019 Victoria Street West Auckland 1142 Ph: 09 923 5552
		Auckland
Generated: Expires:		From: Residential Contact:
		

#### Step 1

Please look at the **sticker** on your return envelope. The *Courier ticket number* is printed below the barcode. Enter the whole number (20 digits) but leave out the brackets and spaces.

#### Step 2

Enter the preferred address for pickup of the envelope. The system will help you with autocomplete options as you type.

#### Step 3

Enter the date you want the envelope picked up.

Please provide your details in case there is any issue with your pickup. Then just leave the envelope outside your door. If you live in a managed apartment building or rest home, you may need to drop the envelope at the reception instead.

**Thank you for completing our survey.**



Approved by the University of Auckland Human Participants Ethics Committee on 24 February 2023 for 3 years. Reference Number: UAHPEC25526.

# PARTICIPANT INFORMATION SHEET

## Social Attitudes Survey Aotearoa New Zealand: Family & Changing Gender Roles 2023



**What is the survey about?** Each year, the International Social Survey Programme (ISSP, <http://www.issp.org>) conducts surveys across a number of countries on a topic of interest. This year's topic is family and changing gender roles. The survey includes questions about women's and men's child and family care roles, work-homelife balance, childcare, eldercare, and the amount of time spent on day-to-day activities, as well as demographic questions about respondents.

**What am I being asked to do?** To complete a questionnaire that will take about 30 minutes, either using the enclosed paper version or online via Qualtrics at <https://tinyurl.com/sasnz23gr>. Most questions are 'tick box' type questions, and there are no right or wrong answers. If you don't wish to answer a question, please skip to the next one.

We have enclosed a postage-paid envelope for you to return the questionnaire to us. You can drop off this envelope at any NZ Post store, place it in a post box, or arrange for a pickup from your address (please see the Return Mail Instructions leaflet for more information). NZ Post provides an online platform for locating stores closest to your address: <https://www.nzpost.co.nz/tools/find-nz-post>.

**What do I get for responding?** You may not benefit directly, but because the topics examined in this survey are important for understanding family life across different countries you will be contributing to a critical research topic. If you complete the questionnaire either on paper or online, we will enter your survey ID number into a draw for one of ten \$100 Prezzy card prizes.

**Are there any risks I should be aware of?** No, we do not foresee any risks or harm (physical or psychological) to you that may result from taking part in this survey.

**How were my name and address retrieved?** We randomly selected your name from the New Zealand Electoral Rolls, which provided us with your contact details. The Electoral Rolls are offered to us under strict conditions for research purposes, according to Section 112 of the Electoral Act 1993. This method enables us to reach people from a wide range of backgrounds and be confident that our sample represents New Zealand adults. We will not use your details for any purposes other than to contact you regarding this research.

**Will my participation be confidential?** Yes. As university researchers, we depend on the trust and goodwill of the people of Aotearoa. We take your right to privacy very seriously. Your name will not appear in any publications from this study. To ensure confidentiality, we store peoples' contact details in a password-protected file separately from their data. The questionnaire contains only an ID number, so the researcher entering your data will not know who you are.

We will only link to your ID number to if you are a draw winner so we can send you a Prezzy card. Upon receipt, the return envelope with your name and address will be shredded to ensure your confidentiality.

**Why is my participation important?** Your voice matters because it will contribute to accurate representation of Aotearoa's perspective as a society. Researchers and students will use the final data for scholarly publications, and policymakers may use it for decision-making. Internationally, the data will represent New Zealanders' attitudes and perceptions about family life and family-related services.

**What if I can't participate or choose not to?** Participation is voluntary, and you should not feel pressured to respond.

**Can I withdraw myself after I have participated?** Yes, you may withdraw from the study without needing to provide a reason. All you need to do is contact us by email or phone to let us know your decision, before 30 September 2023.



Approved by the University of Auckland Human Participants Ethics Committee on 24 February 2023 for 3 years. Reference Number: UAHPEC25526.



**Who is conducting the survey?** This survey is funded by the University of Auckland and carried out through the Centre of Methods and Policy Application in the Social Sciences (COMPASS Research Centre, <http://www.compass.auckland.ac.nz>), in collaboration with the Public Policy Institute (PPI).

**What happens after the data have been collected?** We will analyse the data, and findings may be published on our website, in science media platforms and/or academic journals, in forms where it is not possible to identify respondents. We will archive the data for use by other researchers. Data from this year's research will be posted on the ISSP website next year. International researchers may use the data to compare trends across different countries.

The ISSP will likely repeat this survey in the future (surveys are typically repeated every 10 years). If this is the case, New Zealand researchers could compare future findings with the 2023 data to determine differences in perceptions, attitudes, and experiences. More information about the ISSP, publications, and results from earlier studies may be found at <http://www.issp.org>.

**Will I receive the study's results?** If you would like a copy of the survey findings, you may register your contact details in a separate online portal. You will find instructions on how to do this at the end of the questionnaire.

**Who should I contact if I have any questions about this research?** You may contact Dr Komathi Kolandai, Assoc. Prof. Barry Milne, Prof Jennifer Curtin (PPI), or Mr Martin von Randow by email: [socialattitudes@auckland.ac.nz](mailto:socialattitudes@auckland.ac.nz). Dr Kolandai can also be contacted by phone.

**How do I agree to participate?** We have provided all relevant information about this research in this sheet, and you can contact the researchers with any questions you may have before participating. By proceeding to complete the questionnaire either on paper or online, you are giving your consent to partake in this study.

#### **UAHPEC Chair contact details**

For any queries regarding ethical concerns, you may contact:

The Chair, University of Auckland Human Participants Ethics Committee,  
Office of Research Strategy and Integrity, University of Auckland, Private Bag 92019, Auckland 1142.  
Telephone: 09 923 3711. Email: [humanethics@auckland.ac.nz](mailto:humanethics@auckland.ac.nz).

For all other enquiries about this survey, please email [socialattitudes@auckland.ac.nz](mailto:socialattitudes@auckland.ac.nz).