## How to Read the Young People's Survey In-depth Report

The Young People's Survey In-depth Report provides comprehensive results from the 2011 Young People's Survey. The initial report - Sport and Recreation in the Lives of Young New Zealanders -provided an overview of the key results. The additional reporting in the In-depth Report includes:

- presenting results for all questions in the student (parent/caregiver) survey forms
- presenting results for a broader range of demographic/other student characteristics (eg. by students attending low-, medium- and high-decile schools)
- providing confidence intervals for all results presented and reporting statistically significant differences.


## More on Demographic/Other Student Characteristics

The results in this report are presented in a series of tables and are analysed by a range of demographic and other student characteristics (NB: the characteristics included in the tables varies from table to table). The characteristics are:

- Age Group - many findings in this report are presented for three age groups: 5 to 10-year-olds, 11 to 14-year-olds and 15 to 18-year-olds. This groups together young people who are mostly at primary school, intermediate/junior secondary school and senior secondary school, and recognises that the opportunities for sport and recreation and Physical Education (PE) vary as young people progress through school. Other sections present information for different age groupings as appropriate, ie. when only younger or older students were asked about certain topics.
- Year-level (ie. survey form completed) - the Young People's Survey used four age-appropriate survey forms. Most students completed the form that was consistent with their year-level. However, some of the classes selected for the survey had students of mixed ages (referred to as composite or vertical classes/forms). These circumstances resulted in some 11 to 14-year-olds, and particularly 11-year-olds, completing a survey form designed for younger children. This form had fewer questions and fewer activities in the activity lists in the forms. For some questions, therefore, to get the correct percentages and averages, responses have been analysed by the four survey forms completed. The Years 1 to 2 survey form was mostly completed on behalf of 5 to 6 -year-olds, the Years 3 to 6 form was mostly completed by 7 to 10 -year-olds, the Years 7 to 10 form was mostly completed by 11 to 14-year-olds, and the Years 11 to 13 form was mostly completed by 15 to 18-year-olds. Further information is provided in Reader Note 3.
- Ethnic Group (multiple response) - the report shows results for boys and girls of different ethnic backgrounds. Young people could record all the ethnic groups that they identify with and so may have given more than one answer to the question about their ethnicity. Consequently, the results for each ethnic group may only be compared with total responses; for example, the responses of Māori boys can be compared with the responses of all boys but not with the responses of Pacific boys. Information is presented for the four main ethnic groups (New Zealand Europeans, Māori, Pacific peoples and Asian peoples), as well as for those of "Other ethnicity" (for example, Middle Eastern, Latin American or African). As very few young people (247) identified with "other ethnicities", results for "Other ethnicity" should be used with caution.
- Ethnic Group (two-way comparison) - the report also shows results by ethnic background using a two-way comparison. As with the multiple response ethnic groups above, young people may have recorded more than one ethnic group. This analysis compares the discrete sub-groups of boys/girls of a specific ethnicity with other boys/girls. For example, the responses of Māori boys can be compared with the responses of non-Māori boys. Information is presented for Māori, Pacific peoples and Asian peoples.
- Socio-Economic Background - school decile is determined by the Ministry of Education. A school's decile reflects the socio-economic background of students at that school. There are 10 deciles, with approximately $10 \%$ of schools in each decile. Decile-one schools have the highest proportion of students from low socio-economic backgrounds. Decile-ten schools have the highest proportion of students from high socio-economic backgrounds. In this report, deciles have been grouped into low (1-3), medium (4-7) and high (8-10). More information on school deciles is here: School Decile Ratings.
- Like Playing Sport - students (or their parents/caregivers) were asked to say whether they/their child "don't like playing sport", "like playing sport a little" or "like playing sport a lot".
- Club Membership - students (or their parents/caregivers) were asked if they/their child had belonged to a sports club outside of school this year.
- Sports Team Membership - students (or their parents/caregivers) were asked if they/their child had belonged to a sports team at school this year.


## More on Confidence Intervals

Results from sample surveys like the Young People's Survey are subject to variation that arises from using a randomly drawn sample, rather than surveying the total population of interest (ie, all students 5 to 18 years).

The extent of this variation falls within known ranges and is expressed as the confidence interval. Confidence intervals for the Young People's Survey have been calculated for the $95 \%$ level; this means that we expect $95 \%$ of the survey estimates (means and percentages) to include the population parameter or true value.

Confidence intervals are calculated for each survey estimate and are used when comparing results in this report. The method used for calculating confidence intervals takes into account that the survey has a complex sample design, rather than using a simple random sample. For confidence intervals lower than zero or greater than 100, and for counts less than 30, a non-symmetric confidence interval method was used (Jeffreys prior method ${ }^{1}$ ). The Methodology Report provides further information about the approach used to calculate confidence intervals for the Young People's Survey.

The section below explains how to use the confidence intervals.

## More on the Tables

The results from the survey are presented in a series of tables. Some of these are data tables and others are tables summarising significant differences for results for different groups of students eg. boys and girls.

- Data tables - the data table on the following page shows the results and confidence intervals for participation with sports clubs by boys and girls of different ages. The left-hand figure in the ' $95 \%$ Cls' column is the lower confidence interval and the right-hand figure is the upper confidence interval at the $95 \%$ level.

As an example, $62.1 \%$ of 5 to 10 -year-old boys said they belong to a sports club, and this estimate is in the range of $59.03 \%$ to $65.07 \%$. Differences between sub-groups are statistically significant when the confidence intervals for different sub-groups do not overlap. For example, the confidence intervals do not overlap for 5 to 10-year-old boys ( $59.03 \%-65.07 \%$ ) and 15 to 18 -year-old boys ( $48.40 \%-54.47 \%$ ) - this result is significantly higher for 5 to 10-year-old boys ( $62.1 \%$ ) than for 15 to 18 -year-old boys (51.4\%).

[^0]Example: Participation with sports clubs (outside of school) this year

|  |  |  | n | Yes | 95\% Cls | Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age group | Boys | 5-10 years | 1941 | 62.1 | 59.03-65.07 | 107,000 |
|  |  | 11-14 years | 2021 | 65.7 | 63.29-68.05 | 78,000 |
|  |  | 15-18 years | 1040 | 51.4 | 48.40-54.47 | 43,000 |
|  | Girls | 5-10 years | 1527 | 44.7 | 41.92-47.40 | 75,000 |
|  |  | 11-14 years | 1727 | 56.1 | 53.60-58.64 | 64,000 |
|  |  | 15-18 years | 1106 | 46.6 | 44.12-49.05 | 38,000 |

Other information included in the tables in the report:
$\mathbf{n}$ - the unweighted (ie. actual) number of young people in the sub-group to give this response
$\%$ - the weighted (ie. adjusted) percentage of young people in the sub-group to give this response
95\% Cls - results are presented as percentages and averages
Number - where appropriate, an estimate of the number of participants is included (see Appendix 1 (A.4) for more information about these estimates)

Ranking - where shown, responses are ranked within sub-groups. For example, participation rates in different activities are ranked for 5 to 10-year-old boys.

- Summary tables - in sections 2,3 and 5 , summary tables have been used to summarise significant differences between sub-groups. This approach has been taken due to the large amount of data in these tables and the large number of significant differences present. These summary tables show visual patterns in the data and compare results for:
- boys and girls of the same age
- boys/girls of different ages
- all boys/girls with boys/girls of different ethnicities
- boys/girls of different socio-economic backgrounds.

Each summary table has a key, similar to the example below.

- A green upward arrow shows that the result is significantly higher than for other sub-groups, eg. the result for 5 to 10-year-old boys is significantly higher than for 5 to 10-year-old girls.
- A red downward arrow shows that the result is significantly lower than for other sub-groups, eg. the result for 5 to 10-year-old boys is significantly lower than for 5 to 10-year-old girls.
- If there is no symbol, this means that there is no significant difference between the subgroups, eg. there is no significant difference between 5 to 10-year-old boys and girls.
- A '0' means that the sport/activity was not mentioned by one or more of the sub-groups.
- Different sized arrows (eg. $\uparrow \uparrow \uparrow$ ) are used when there are three comparison sub-groups. The key in the summary tables explains the meaning of the different arrows.

|  | Sport and <br> active things <br> done this year |  |
| :--- | :---: | :---: |
|  | $\mathbf{5 - 1 0}$ years |  |
|  | Boys | Girls |
|  |  |  |
| Adventure racing* |  |  |
| Athletics, track and field |  |  |
| Badminton* | $\Delta$ | $\nabla$ |
| Basketball, Mini-ball (includes shooting hoops) |  |  |
| Bodyboarding |  |  |
| Canoeing, kayaking* | $\Delta$ | $\nabla$ |
| Cricket |  |  |
| Cycling, biking (not mountain biking) | $\nabla$ | $\Delta$ |
| Dance (e.g. ballet, b-boy, b-girl) | $\Delta$ | $\nabla$ |
| Fishing | $\Delta$ | $\nabla$ |
| Football, soccer, futsal |  |  |
| Golf* |  |  |


| Key |
| :---: | :---: |
| Significantly higher than for <br> boys/girls of the same age |
| No <br> Sognificantly lower than for <br> boys/girls of the same age |
| No significant difference <br> between boys/girls of the same <br> age |
| Not mentioned by one or more <br> of the groups |
| 5 to 10-year-old boys are significantly more <br> likely than girls of the same age to have <br> done basketball this year |

## Other Notes

Readers should note that parents/caregivers' responses are not reported separately but with those of students to provide results for all boys and girls aged 5 to 18 years.

A small number of students did not answer questions or gave invalid answers (eg. ticking two boxes when only one answer was required). As the number of responses in these categories was very small, these responses have been excluded from the figures shown in the tables in this report. The exception to this is the results in the tables in Section 5 - sports/activities young people want to try or do more of. Students were asked to write in their answers to the question about sports/activities they wanted to try or do more of. The percentage of students who did not answer this question (around 10\%) was higher than for the tick-box questions. The level of non-response, therefore, is shown in the relevant tables.

Readers should also take into account the Reader Notes on the following pages when reading the report.

## Reader Notes

## Note 1: Grouping of Activities in the Report

For ease of reading, activities have been grouped by the authors in some sections in this report.
"Team-based sports" are those activities that when played as a sport are played in teams. In contrast, "Other sports" may be done either individually or with a team. "Other recreation activities" tend towards active recreation rather than sport; although some may be in both categories, they have been grouped as recreation activities, as they have high recreational participation, eg. mountain biking is a competitive sport, but young people are more likely to take part in this activity in a recreational context.

## Team-based Sports:

Basketball

## Cricket

Football, soccer, futsal
Hockey
Netball
Rugby
Rugby league
Softball, T-Ball
Touch
Volleyball, Kiwi Volley
Water polo, Flippa Ball

## Other Sports:

Athletics, track and field
Badminton
Bowls (outdoor), bowling
Combat sports (eg. boxing, wrestling)
Golf
Gymnastics, trampoline, aerobics
Motor sports
Martial arts (eg. karate, judo)
Rowing
Squash
Swimming
Table tennis
Tennis
Tri(athlon), duathlon
Other ball sports/games

| Other Recreation Activities: |  |
| :--- | :--- |
| Adventure racing | Pacific activities (eg. kilikiti) |
| Adventure sports/extreme sports/activities | Roller blading, other wheel sports |
| Bodyboarding (not surfing) | Running, jogging, cross country |
| Canoeing, kayaking | Sailing, yachting |
| Cycling, biking (not mountain biking) | Skateboarding |
| Dance (eg. ballet, b-boy, b-girl) | Skiing |
| Fishing | Snowboarding |
| Gym/fitness/exercise/training activities | Surfing (not bodyboarding) |
| Horse riding/equestrian activities | Tramping, bush walks |
| Hunting and shooting | Walking for fitness |
| Indoor climbing | Other bike activities |
| Māori activities (eg. kapa haka) | Other ice/snow sports |
| Mountain biking | Other sports/activities |
| Orienteering | Other water sports (eg. water skiing) |

## Note 2: Activities Done "this year"

A key question in the survey was the type and frequency of activities done "this year" (note: as the survey was conducted in August/September, this was not a full calendar year but it provided a recall period that included summer and winter sports/activities). Information was collected in two ways. The first was by asking students how often this year they had done various sports and activities listed in the survey form. The types of sports and activities were customised to the age of the students and, as a result, a different list was used in the forms completed by older and younger students (Years 1 to $2 /$ Years 3 to 6 forms and Years 7 to 10/Years 11 to 13 forms).

A consequence of students of the same age completing different survey forms is that some students of the same age answering the activity questions (Questions 5 and 6 - note: question numbers are those used in the Years 7 to 10 survey form) were responding to different lists, as shown in the table below. Caution must be exercised, therefore, when analysing participation in sport and recreation activities by these students. Reader Note 4 provides more information about calculating participation rates.

Students were also asked whether they had done any other sports or active things this year. Students wrote these other sports/activities on the survey form and ticked the relevant box to show how often they had done them. Ipsos allocated these answers to over 150 activity codes. The activity codes used went to the finest level of detail to allow flexibility in future surveys, should participation in these activities grow over time.

| Asked on all forms |  |
| :--- | :--- |
| Athletics, track and field | Pacific activities |
| Basketball | Rugby |
| Bodyboarding | Running, jogging, cross country |
| Cricket | Sailing, yachting |
| Cycling, biking | Skateboarding |
| Dance | Skiing |
| Fishing | Snow-boarding |
| Football, soccer, futsal | Softball, T-ball |
| Games (eg. four square, tag) | Swimming |
| Gymnastics, trampoline, aerobics | Table tennis |
| Hockey | Tennis |
| Māori activities | Tramping, bush walks |
| Martial arts | Volleyball, Kiwi Volley |
| Netball | Water polo, Flippa Ball |


| Asked on Years 7-10 and Years 11-13 forms only |  |
| :--- | :--- |
| Adventure racing | Rowing |
| Badminton | Rugby league |
| Canoeing, kayaking | Surfing |
| Golf | Touch |
| Indoor climbing | Triathlon, duathlon |
| Mountain biking | Walking for fitness |
| Orienteering |  |

Readers should also note that:

- "Other" sports/activities young people wrote down could be reclassified as a listed activity. For example, discus, high jump and hurdles were all coded as athletics.
- Some activities were mentioned by a very small number of young people, and these were grouped into "other" categories, rather than being coded separately. For example, "other snow sports/activities" includes snow sports (unspecified), snow team, snow planet, snow activities, slalom, snow scootering/biking, and snowmobile.
- Further grouping of sports/activities mentioned by small numbers of students was carried out before the responses were analysed (giving 55 sports/activities - see Appendix 5 (A.25)). Young people also wrote down some activities that were not judged to be physically active (for example, computer games) or there was uncertainty about them being sports or "active things" and these were not included in the analysis.
- The grouped activity codes "outdoor pursuit courses/programmes" and "sports tournaments/events", and the individual codes included in these, were not considered to be sport or recreation activities and so were not included in the list of sports/activities that students participate in but were included in the list of sports/activities that they were interested in trying/doing more of.


## Note 3: Analysis by Age Group and Survey Form

The Young People's Survey used four age-appropriate survey forms: for Years 1 to 2, Years 3 to 6, Years 7 to 10 and Years 11 to 13. Most students completed the form that was consistent with their year-level and so young people of the same age.
However, some of the classes selected for the survey had students of mixed ages (referred to as composite or vertical classes/forms). Students in these mixed-age classes completed the survey form appropriate to the youngest students in the class so that all students could take part in the survey (this mostly meant completing the Years 3 to 6 survey form). As the younger students were taken through the survey form by the survey staff, it was not practical to use more than one survey form when surveying these mixed-age classes.

These circumstances resulted in some 11 to 14 -year-old students, and particularly 11 -year-olds, completing the survey form designed for younger children (ie. the Years 3 to 6 form, rather than the Years 7 to 10 form) which had fewer questions, and some different questions.

This means that not all 11 to 14 -year-olds answered the same questions. In particular, some of these students answered questions only about the 28 activities listed in the Years 3 to 6 survey form and not the 41 activities in the Years 7 to 10 survey form.

For some questions, therefore, to get the correct numbers for calculating percentages and averages, we have analysed the responses by the four survey forms completed, rather than by the three age groups used in other sections of the report (ie. 5 to 10 -year-olds, 11 to 14 -year-olds and 15 to 18 -year-olds).

For most students, the survey form completed is a good indication of their age, ie. Years 1 to 2 survey forms were mostly completed for 5 to 6 -year-olds, Years 3 to 6 forms were mostly completed by 7 to 10 -year-olds, Years 7 to 10 forms were mostly completed by 11 to 14 -year-olds, and Years 11 to 13 forms were mostly completed by 15 to 18 -year-olds.

This note primarily applies to the results presented in Section 2 of the report, which includes the frequency with which activities are undertaken and the number of activities.

Throughout the report many results for questions that were only asked in some survey forms include the responses of all young people who answered that question (see Appendix 1). Five groupings are reported on (see below). The ages of the students who completed the survey forms are also shown:

- only the Years 1 to 2 form - 5 to 7 years old (but mostly 5 to 6 -year-olds)
- both the Years 1 to 2 and $\mathbf{3}$ to 6 forms - 5 to 12 years old (but mostly 5 to 10-year-olds)
- all four survey forms - 5 to 18 years old
- only the Years 7 to 10 form - 10 to 15 years old (but mostly 11 to 14-year-olds)
- both the Years $\mathbf{7}$ to 10 and 11 to 13 forms - 10 to 18 years old (but mostly 11 to 18-year-olds).


## Note 4: Calculating Participation in Sports/Activities

A further consequence of the circumstances described in Reader Notes 2 and 3 is that care must be taken to use the appropriate base number when calculating percentages to show participation rates for sports/activities.

Older students (mostly 11 to 14-year-olds) who completed the Years 3 to 6 survey form responded to a list of 28, not 41, activities. As these students were not asked about the 13 sports/activities in the Years 7 to 10 survey form, their responses need to be recorded as "not asked", not as "not answered". (Note: students could list these 13 activities in response to the question about "other sports and active things" they did "this year". As the number of responses was typically very small (or often zero), for consistency these responses have been excluded from the figures in this report.)

When participation in these 13 sports/activities is analysed by age, the base number used to calculate percentages for 11 to 14 -year-olds needs to exclude the "not asked" category. This gives the correct proportion of students in this age group participating in these activities. This proportion is then applied to the total number of students in this age group on the Ministry of Education student roll to estimate the number of 11 to 14-year-old students participating in these activities.

An asterisk is used in the tables in Section 2 to show the 13 activities that were in the Years 7 to 10 survey form but not in the Years 3 to 6 survey form.

## Note 5: Activities Children and Young People Would Like to Try or Do More Of

Students were asked to write down the sports and active things they would really like to try or do more of. Their answers were allocated an activity code using the list that was used for Questions 5 and 6, although some additional sports/activities were mentioned by students when answering this question, giving a total of around 200 activity codes. As with the activities done this year, sports/activities mentioned by a small number of students were grouped before the responses were analysed ( 50 sport/activity codes were used when analysing this question). The grouped activity codes "outdoor pursuit courses/programmes" and "sports tournaments/events", and the individual codes included in these, were included in the list of sports/activities students were interested in trying/doing more of, as this question was designed to gauge interest in different types of sports/activities.

## Other Points to Note About the Presentation of Results

Percentages are rounded to one decimal point. In some cases this rounding results in figures that should sum to 100 percent summing to just under or over one hundred. Lower and upper confidence intervals are shown at two decimal points.

Estimates of the number of participants are rounded to the nearest thousand.


[^0]:    ${ }^{1}$ Brown L, Cai T, DasGupta, A. Interval Estimating for a Binomial Proportion. Statistical Science. 2001;16(2):101-117.

