

PARTICIPATION IN CYCLING BY AUSTRALIAN CHILDREN 2003 – 2012

Report prepared by the Australian Sports Commission



Participation Data for Australian Children 5-14 Year Olds

This report presents data from the *Children's Participation in Cultural* & *Leisure Activities Survey (CPCLAS)* which was administered by the Australian Bureau of Statistics (ABS) in 2003, 2006, 2009 and 2012.

The *CPCLAS* collected information about participation in *organised sport outside* of school hours for Australian 5-14 year olds as recalled by their parents.

More details on the *CPCLAS* can be found via ABS cat. no. 4901.0 or the following link:

http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/4901.0Main+Features1Apr %202012?OpenDocument

This report has been prepared by the Australian Sports Commission (ASC) and includes some data that has not been presented in previous ABS *CPCLAS* publications. The ASC purchased custom data for select sports through the ABS Sports Unit.

The Children's Participation in Cultural & Leisure Activities Survey

The Children's Participation in Cultural & Leisure Activities Survey asked parents:

Which sports has [Child name] played or trained for outside of school hours since this time last year?

In each year the survey was administered, a number of parents responded:



^{*} In this report the definition of cycling also includes BMX and mountain bike riding, but excludes triathlon.

Explanatory notes for interpreting the Children's Participation Data

Data from the *CPCLAS* should not be directly compared with results from other sport participation surveys, such as the *Exercise Recreation And Sport Survey (ERASS)* or the *ABS adult sport participation surveys*, without considering the difference in methodology, scope and years.

It should be noted that the **CPCLAS** data:

- Is based upon a different data collection process to the ERASS adults' data
- Is not collected in the same years as the ERASS and ABS adults' data
- Reflects <u>parent responses</u>, while the ERASS and ABS adults' data reflects participant responses
- Reflects participation <u>outside of school hours</u> only, while the ERASS and ABS adults' data also included measures of total participation
- Reflects <u>organised participation only</u>, while information on non-organised participation data was also collected for the ERASS and ABS adults
- Reports different participation frequency categories to the ERASS adults data (e.g. Regular participation for the children's data is defined as 27 times or more a year, while for the adults data is defined as 26 times or more a year)

How to interpret the Children's Participation Data

Some of the data in this report has not been publically released by the ABS. The ASC sourced custom data tables from the ABS containing information relevant for sports. Please note that the ASC did not have access to the raw data. As the ABS reported the total survey sample size (sample size in 2003 = 8,900; sample size in 2006 = 8,682; sample size in 2009 = 5,825; sample size in 2012 = 7,300), it was possible to compare the proportion of Australian children participating in a sport across the four time periods with significance testing. The ABS, however, did not report the sample sizes for the demographic (e.g. age or gender) categories, so it was not possible to conduct significance tests on demographic subgroups. As such, the interpretation of data relating to the demographic subgroups in this report is indicative only.

The ABS does not publically release data with high Relative Standard Errors (RSEs). It is important to note that most of the cycling data was associated with high (25% - 50%) RSEs and therefore should be interpreted with caution. In this report labels for data points have not been included on charts with estimates associated with high RSEs. For further information* related to RSEs associated with the data please refer to ABS cat. no. 4901.0.

Please note that scales may differ between charts.

Australian children's population (5–14 year olds) by year from ABS population estimates:

 2003: 2,647,500
 2006: 2,664,700

 2009: 2,722,500
 2012: 2,786,100

Participation frequency definitions:

- Annual defined as participating in a given sport at least once a year
- Regular defined as participating in a given sport at least 27 times a year
- Non-regular defined as participating in a given sport at least once but less than 27 times a year

*http://www.abs.gov.au/AUSSTATS/abs@.nsf/Latestproducts/4901.0Technical%20Note1Apr%202012?opendocument&tabname=Notes&prodnocument

Summary of Trends

Summary of General Trends in Children's Participation Among 21 Selected Sports

Between 2003 and 2012 there was a <u>significant increase</u> in children's organised participation in the following sports:

- *Gymnastics* and *rugby union* had a significant increase in annual, regular and non-regular participation rates.
- Rugby union had a significant increase in annual and non-regular participation rates.
- Touch football and football had a significant increase in the non-regular participation rate.

Between 2003 and 2012 there was a <u>significant decrease</u> in children's organised participation in the following sports:

- Hockey had a significant decrease in annual, regular and non-regular participation rates.
- Netball, tennis and softball had a significant decrease in annual and regular participation rates.
- Athletics had a significant decrease in the annual participation rate.
- Cricket, touch football and golf had a significant decrease in the regular participation rate.

For information on general trends in children's organised participation across sports please refer to the following ABS reports:

- 1. http://www.ausport.gov.au/ data/assets/pdf file/0011/276914/ABS Childrens participation in organised 2003 2006.pdf
- 2. http://www.ausport.gov.au/ data/assets/pdf file/0009/197829/childrens participation in organised sport 2003 2006 surv ey multi-variate analysis.pdf

Summary of General Trends in Children's Cycling Participation

Organised cycling participation

Between 2003 and 2012:

- The ABS estimation of the number of children annually participating in organised cycling varied around 7,900 (in 2003) and 9,200 (in 2009).
- The ABS estimation of the proportion of Australian children annually participating in organised cycling varied around 0.30% (in 2003, 2006 and 2009) and 0.31% (in 2012).

Across the four time periods, there was no statistically significant change in annual participation rate for children's organised cycling.

Comparison of regular v. non-regular organised cycling participation

In 2003 and 2009 the regular organised cycling participation rate was statistically significantly higher than the non-regular participation rate. In 2006 and 2012 differences between the regular and non-regular organised cycling participation rates were not significantly different.

Demographic analysis of organised cycling participation

Both the age and gender estimates for organised children's cycling participation reported high Relative Standard Errors (RSEs) (in the range of 25%-50%). Therefore, fluctuations across the four time periods for the different age and gender categories should be interpreted with caution.

In all four time periods, more boys than girls were estimated to participate annually in organised cycling.

Organised* Participation in Cycling^

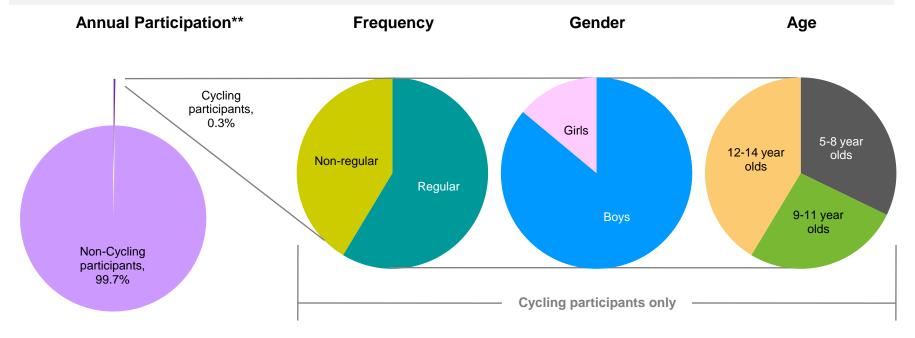
^{*} The CPCLAS refers to "organised sport" as a sport which is played or trained for outside of school hours and is organised by a school, club or association

[^] Includes cycling, BMX and mountain bike riding. Excludes triathlon.

Current Participation Status (2012)

Interpretive Notes

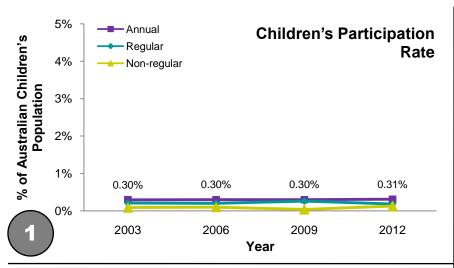
- 0.3% of the Australian children's population participated in organised cycling at least once in 2012.
- In 2012 the organised children's cycling population was estimated to be made up of more regular than non-regular participants, although this difference was not found to be statistically significant.
- The majority of annual organised cycling participants were estimated to be boys*.
- In 2012 the organised children's cycling population was made up of a similar proportion from each age category*.

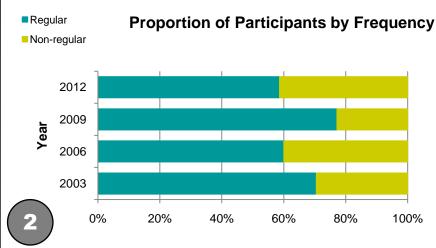


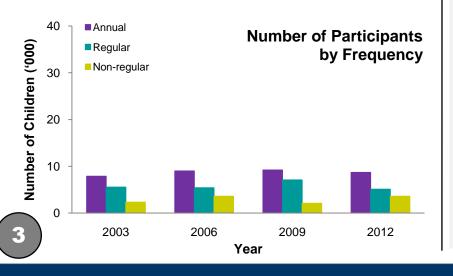
^{*}As the ABS did not report the survey sample sizes for the demographic (e.g. age or gender) categories it was not possible to conduct a significance test on the demographic subgroups **Based on the 2012 ABS population estimate for Australian 5-14 year olds

A one sample Difference in Proportions T-Test at 95% confidence level was used to compare regular and non-regular participation rates

2003 – 2012 Participation by Frequency







Interpretive Notes

Between 2003 and 2012, the ABS estimation of number of children participating annually in organised cycling varied around 7,900 (in 2003) and 9,200 (in 2009).

Between 2003 and 2012, the ABS estimation of the percentage of Australian children annually participating in organised cycling varied between 0.30% (in 2003, 2006 and 2009) and 0.31% (in 2012).

Across the four time periods, there was no statistically significant change in annual participation rate for children's organised cycling.

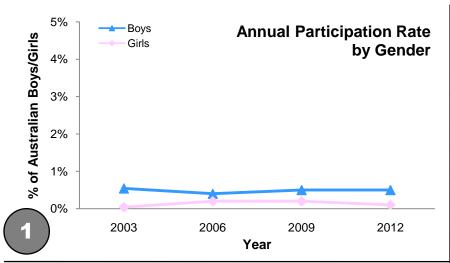
In 2003 and 2009 the regular organised cycling participation rate was statistically significantly higher than the non-regular participation rate. In 2006 and 2012 differences between the regular and non-regular organised cycling participation rates were not significantly different.

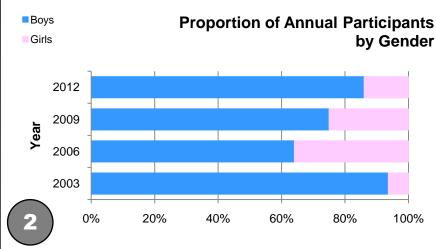
Note: A two sample Difference in Proportions T-Test at 95% confidence level was used to compare the percentage of Australian 5-14 year olds participating across the four time periods. A one sample Difference in Proportions T-Test at 95% confidence level was used to compare regular and non-regular participation rates.

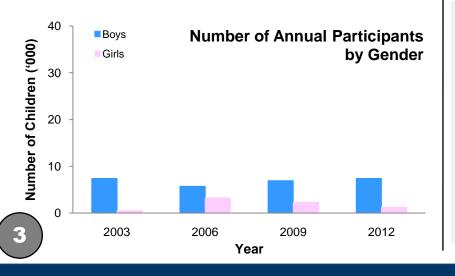
Demographic Analysis*

^{*} Demographic analysis by gender and age is only available for annual participation due to high RSEs/small sample sizes for regular and non-regular participation. Limited data is available for regular and non-regular participation as a result of ABS confidentialisation processes.

Participation by Gender







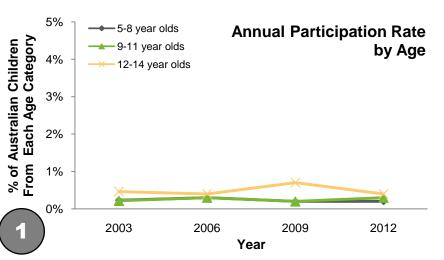
Interpretive Notes

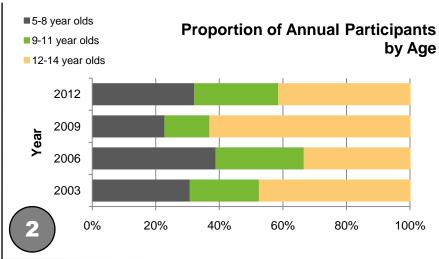
The gender estimates were associated with high RSEs (in the range of 25%-50%). Therefore, fluctuations across the four time periods for the different gender categories should be interpreted with caution.

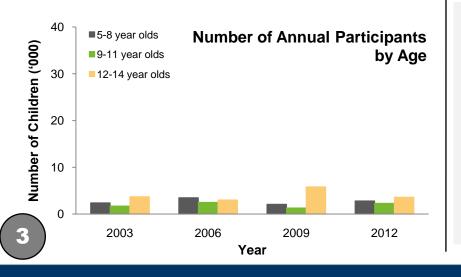
The data presented on this slide appears to indicate the following:

• For all four time periods, more boys than girls participated in organised cycling at least once a year.

Participation by Age







Interpretive Notes

The age category estimates were associated with high RSEs (in the range of 25%-50%). Therefore, fluctuations across the four time periods and comparisons of the different age categories should be interpreted with caution.

Sport Comparison

Ranking of Selected Sports According to Annual Participation

| 2012 Ranking | SPORT | 2003 Ranking | 1 |
|-----------------|---------------------------|-----------------|----------------|
| 1 | Swimming | 1 | - |
| 2 | Football | 2 | - |
| 3 | Australian Football | 6 | ☆ 3 |
| 4 | Netball | 3 | • 1 |
| 5 | Basketball | 5 | - |
| 6 | Tennis | 4 | 4 2 |
| 7 | Gymnastics | 9 | 1 2 |
| 8 | Cricket | 7 | 4 1 |
| 9 | Rugby League | 10 | <u></u> 1 |
| 10 | Track and Field Athletics | 8 | 4 2 |
| 11 | Rugby Union | 14 | ☆ 3 |

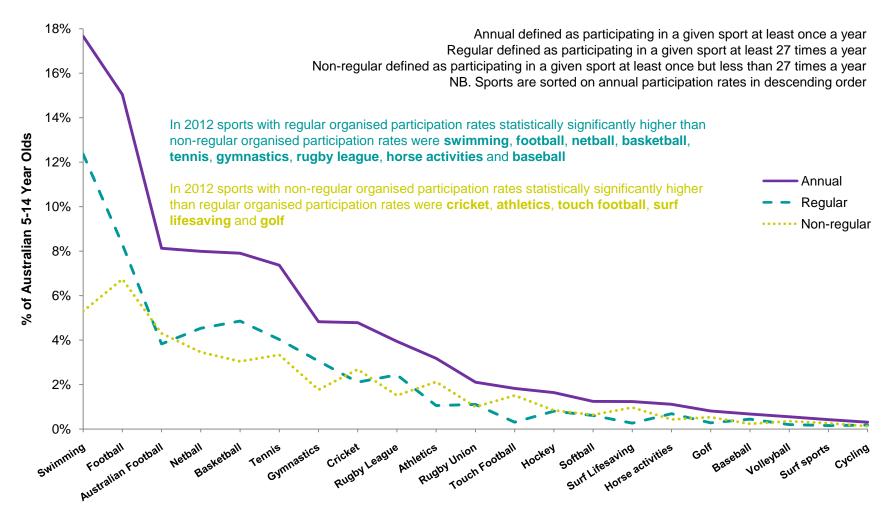
| 2012 Ranking | SPORT | 2003 Ranking | 1 |
|-----------------|------------------|-----------------|----------------|
| 12 | Touch Football | 13 | 1 |
| 13 | Hockey | 11 | ₽ 2 |
| 14 | Softball | 12 | 4 2 |
| 15 | Surf Lifesaving | 16 | 1 |
| 16 | Horse activities | 15 | 4 1 |
| 17 | Golf | 17 | - |
| 18 | Baseball | 18 | - |
| 19 | Volleyball | 19 | - |
| 20 | Surf sports | 21 | <u>1</u> 1 |
| 21 | Cycling | 20 | 4 1 |

The Table represents a ranking of 21 selected sports

Table sorted on 2012 rankings

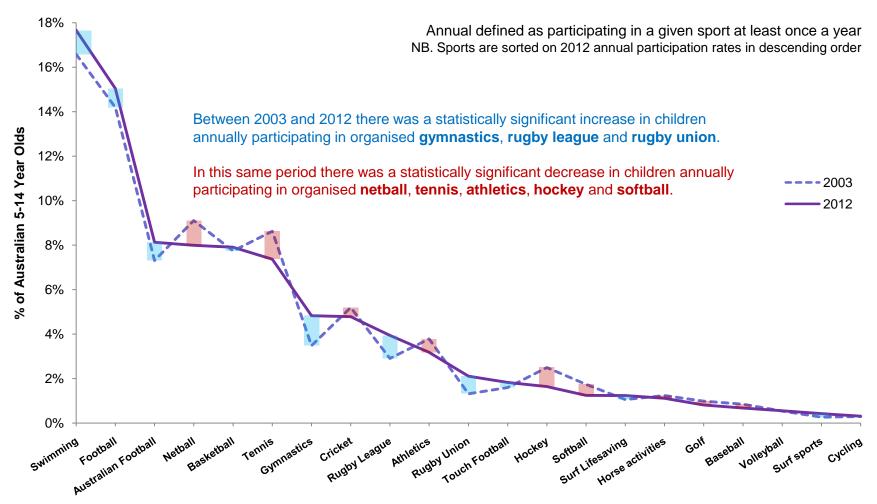
#1 ranking = sport with the highest participation among the 21 selected sports

2012 Annual v. Regular v. Non-regular Participation Rates for Selected Sports



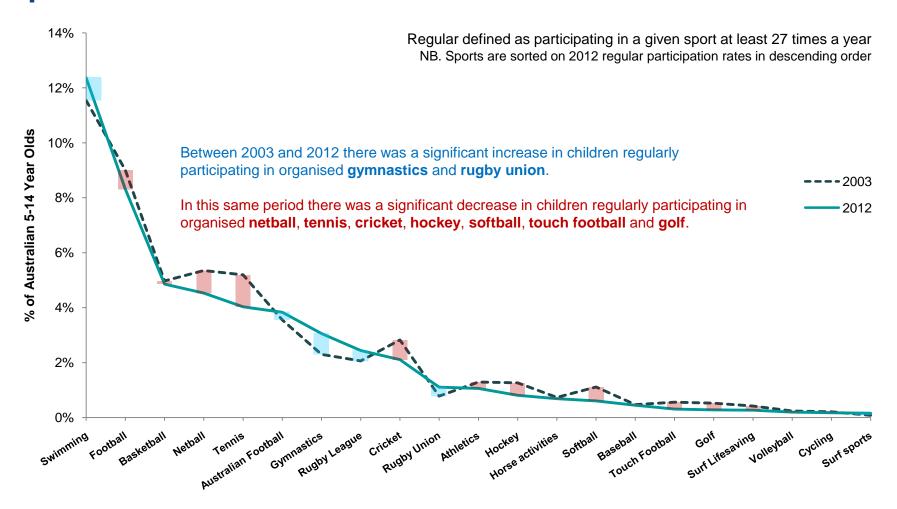
Note: A one sample Difference in Proportions T-Test at 95% confidence level was used to compare regular and non-regular participation rates.

2003 v. 2012 Annual Participation Rates for Selected Sports



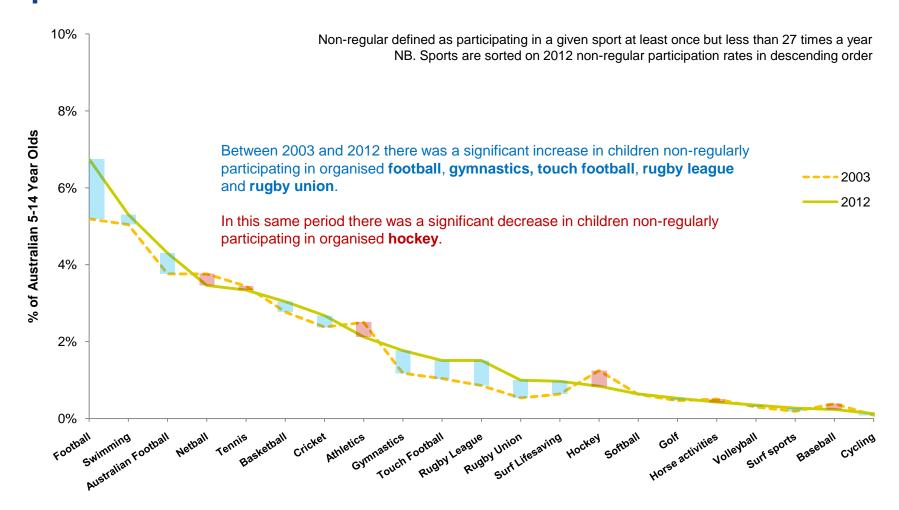
Note: A two sample Difference in Proportions T-Tests at 95% confidence level was used to compare the percentage of Australian 5-14 year olds participating in 2003 and 2012.

2003 v. 2012 Regular Participation Rates for Selected Sports



Note: A two sample Difference in Proportions T-Tests at 95% confidence level was used to compare the percentage of Australian 5-14 year olds participating in 2003 and 2012.

2003 v. 2012 Non-regular Participation Rates for Selected Sports



Note: A two sample Difference in Proportions T-Tests at 95% confidence level was used to compare the percentage of Australian 5-14 year olds participating in 2003 and 2012.