## PARTICIPATION IN RUGBY UNION 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:

> Rugby Union

## 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 parent responses, while the ERASS and ABS adults' data reflects participant responses
- Reflects participation outside of school hours only, while the ERASS and ABS adults' data also included measures of total participation
- Reflects organised participation only, 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 some of the rugby union data was associated with high RSEs and should therefore be interpreted with caution. Labels for data points have not been included on charts where they may be 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:

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

[^0]
## Summary of Trends

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

Between 2003 and 2012 there was a significant increase 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 significant decrease 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 20032006 surv ey multi-variate analysis.pdf

## Summary of General Trends in Children's Rugby Union Participation

## Organised rugby union participation

Between 2003 and 2012:

- The ABS estimation of the number of children annually participating in organised rugby union varied around 35,000 (in 2003) and 59,000 (in 2012).
- The ABS estimation of the percentage of Australian children annually participating in organised rugby union varied between $1.3 \%$ (in 2003) and $2.1 \%$ (in 2006 and 2012).

The 2012 annual participation rate for children's organised rugby union was statistically significantly higher than the 2003 annual participation rate.

Comparison of regular v. non-regular organised rugby union participation In 2006 the regular participation rate for children's organised rugby union was statistically significantly higher than the non-regular participation rate. In 2003, 2009 and 2012 there was no significant difference between the regular and non-regular participation rates.

## Demographic analysis of organised rugby union participation

Across all four time periods, the annual and regular participation rates for organised rugby union were estimated to be higher for 9-11 and 12-14 year olds than for 5-8 year olds.
The age demographic for regular participants in organised rugby union was slightly older than the age demographic for annual participants.

## Organised* Participation in Rugby Union

* 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


## Current Participation Status (2012)

## Interpretive Notes

- 2.1\% of the Australian children's population participated in organised rugby union at least once in 2012.
- While a small majority of participating children were regular organised rugby union participants ( $52.7 \%$ ), in 2012 the regular participation rate was not statistically significantly different from the non-regular participation rate.
- The proportion of 9-11 year olds and 12-14 year olds participating annually in organised rugby union was greater than the proportion of 5-8 year olds participating annually*.

Annual Participation**
Frequency
Age


[^1]
## 2003-2012 Participation by Frequency



-Regular Proportion of Participants by Frequency

- Non-regular



## Interpretive Notes

Between 2003 and 2012, the ABS estimation of the number of children annually participating in organised rugby union varied around 35,000 (in 2003) and 59,000 (in 2012).

Between 2003 and 2012, the ABS estimation of the percentage of Australian children annually participating in organised rugby union varied between $1.3 \%$ (in 2003) and 2.1\% (in 2006 and 2012).

The 2012 annual participation rate for children's organised rugby union was statistically significantly higher than the 2003 annual participation rate.
In 2006 the regular participation rate for children's organised rugby union was statistically significantly higher than the non-regular participation rate. In 2003, 2009 and 2012 there was no significant difference between the regular and non-regular participation rates.
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.

## Annual* Participation Demographic Analysis

* For annual participation, age was the only demographic with sufficient data for analysis.


## Annual Participation by Age




# Regular* Participation Demographic Analysis 

* For regular participation, age was the only demographic with sufficient data for analysis.


## Regular Participation by Age





## Interpretive Notes

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

- The regular organised rugby union participation rate for 5-8 year olds was consistently lower than the regular participation rate for 9 11 and 12-14 year olds.
- The age demographic for regular participants in organised rugby union was slightly older than the age demographic for annual participants in organised rugby union.

The age category estimates for regular participation 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

| $2012$ <br> Ranking | SPORT | $2003$ <br> Ranking | 12 |
| :---: | :---: | :---: | :---: |
| 1 | Swimming | 1 | － |
| 2 | Football | 2 | － |
| 3 | Australian Football | 6 | 勺 3 |
| 4 | Netball | 3 | $\checkmark 1$ |
| 5 | Basketball | 5 | － |
| 6 | Tennis | 4 | $\boxed{5}$ |
| 7 | Gymnastics | 9 | 勺2 |
| 8 | Cricket | 7 | $\square 1$ |
| 9 | Rugby League | 10 | 勺1 |
| 10 | Track and Field Athletics | 8 | 凸2 |
| 11 | Rugby Union | 14 | 勺3 |


| $\begin{gathered} 2012 \\ \text { Ranking } \end{gathered}$ | SPORT | $\begin{gathered} 2003 \\ \text { Ranking } \end{gathered}$ | 个 |
| :---: | :---: | :---: | :---: |
| 12 | Touch Football | 13 | 仑1 |
| 13 | Hockey | 11 | $\sqrt{2}$ |
| 14 | Softball | 12 | $\sqrt{3}$ |
| 15 | Surf Lifesaving | 16 | v 1 |
| 16 | Horse activities | 15 | $\sqrt{1}$ |
| 17 | Golf | 17 | － |
| 18 | Baseball | 18 | － |
| 19 | Volleyball | 19 |  |
| 20 | Surf sports | 21 | v1 |
| 21 | Cycling | 20 | $\checkmark 1$ |

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.


[^0]:    *http://www.abs.gov.au/AUSSTATS/abs@.nsf/Latestproducts/4901.0Technical\%20Note1Apr\%202012?opendocument\&tabname=Notes\&prod no=4901.0\&issue=Apr\%202012\&num=\&view=

[^1]:    *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

