



Australian Government
Australian Sports Commission

AusPlay Focus

Children's Participation in Organised Physical Activity Outside of School Hours

April, 2018

ausport.gov.au

Child participation data

The AusPlay Survey (AusPlay) is a national telephone survey funded and led by the Australian Sports Commission.

AusPlay commenced in late 2015 and is the largest and most comprehensive survey of its kind ever conducted in Australia. Each year, 20,000 people aged 15 or over complete this survey. Apart from providing information about their own participation, parents/guardians of children under the age of 15 are asked about the physical activities undertaken by one of their children.¹

These physical activities may be sport or non-sport related, but to be within the scope of AusPlay they must be:

Organised
Formally arranged by a club, association, school or other type of organisation.

Outside school hours
Outside school hours on weekdays or any time on the weekend or during school holidays.

Information is not collected on children's school activities or casual play outside of school as many parents are not able to provide this information accurately. It is also important to appreciate that AusPlay data is collected throughout the year and relates to participation over the preceding 12 months. While this approach assists in removing seasonality from the participation data, it means that:

Participation reported over 2016 may relate to activities undertaken in 2015, and

Participation reported over 2017 may relate to activities undertaken in 2016.

Consequently, the annual AusPlay participation statistics can be viewed as 2-year rolling averages. Aggregating the AusPlay data over the 2017 and 2016 calendar years in this way ensures there is adequate sample to conduct meaningful and robust comparisons of child participation rates across various population groups of interest.

In 2016, 3,824 parents/guardians who participated in AusPlay provided information about their child's participation in organised physical activities outside school hours over the preceding 12 months.

In 2017, 3,209 parents/guardians who participated in AusPlay provided information about their child's participation in organised physical activities outside school hours over the preceding 12 months.

¹ AusPlay collects data from one randomly selected parent and one randomly selected child in the same household.

A focus on children's participation

Parents who participate in AusPlay are asked about up to 10 organised out of school physical activities that their child participated in over the past 12 months.

They are asked a range of questions, including:



AusPlay data has been weighted based on population demographics to produce unbiased 2016 and 2017 estimates of the number and proportion of children participating in various types of physical activities over the past 12 months.

How active are Australian children?

The overall child participation rate² rose in 2017 compared with 2016.

In 2017, 3.5 million children (74%) participated at least once in some form of organised sport or physical activity outside of school hours over the past 12 months, compared with 3.2 million children (70%) in 2016. This 4 percentage point (pp) increase in the overall annual participation rate is statistically significant.³

In terms of child participation frequency, the following chart shows that in 2017:



Child participation frequency (2017 vs 2016)



² Throughout this report the overall child participation rate is defined as the percentage of children participating in one or more organised physical activity outside school hours over the past 12 months.

³ Assessed at 5% significance level.

The top 20 organised physical activities for Australian children.

The following table lists the top 20 organised out-of-school physical activities for all Australian children in 2017.

TOP 20 ACTIVITIES (2017)*

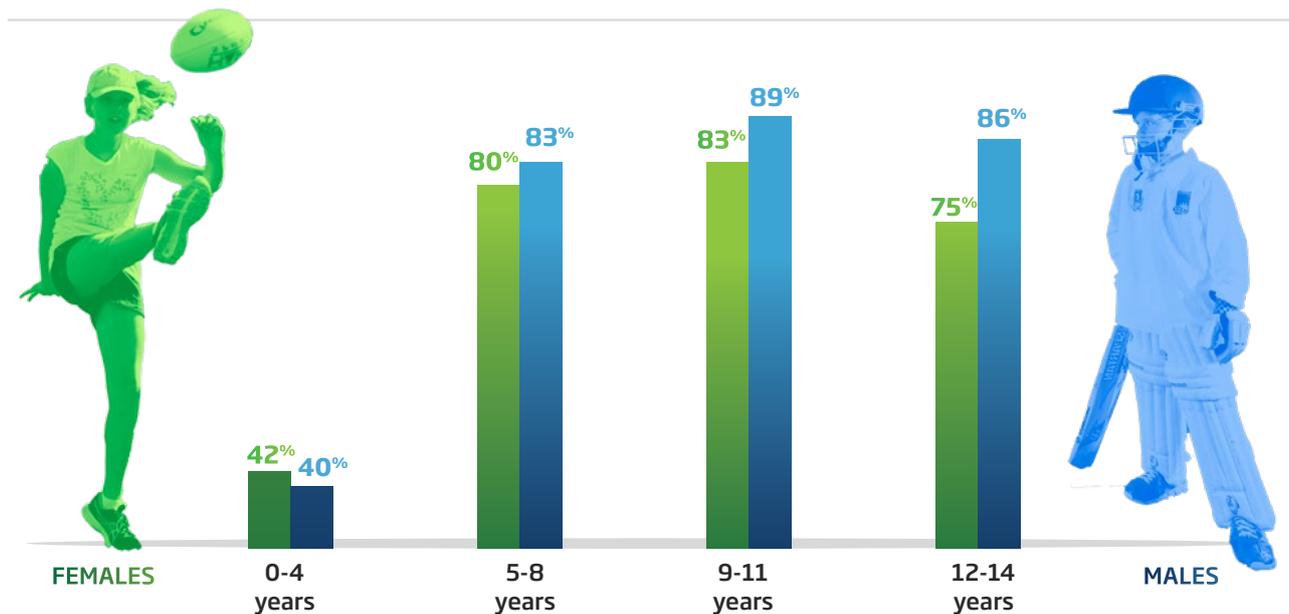
	1. Swimming	31.8%		11. Rugby league	3.1%
	2. Football/soccer	14.1%		12. Karate	2.8%
	3. Australian football	8.8%		13. Dance Sport	2.8%
	4. Dancing (recreational)	8.0%		14. Touch football	2.6%
	5. Gymnastics	7.6%		15. Hockey	2.4%
	6. Basketball	7.3%		16. Fitness/Gym	1.8%
	7. Netball	6.6%		17. Martial arts	1.7%
	8. Tennis	6.0%		18. Rugby union	1.7%
	9. Athletics, track & field	5.5%		19. Surf lifesaving	1.4%
	10. Cricket	5.4%		20. Taekwondo	1.4%

*At least once per year

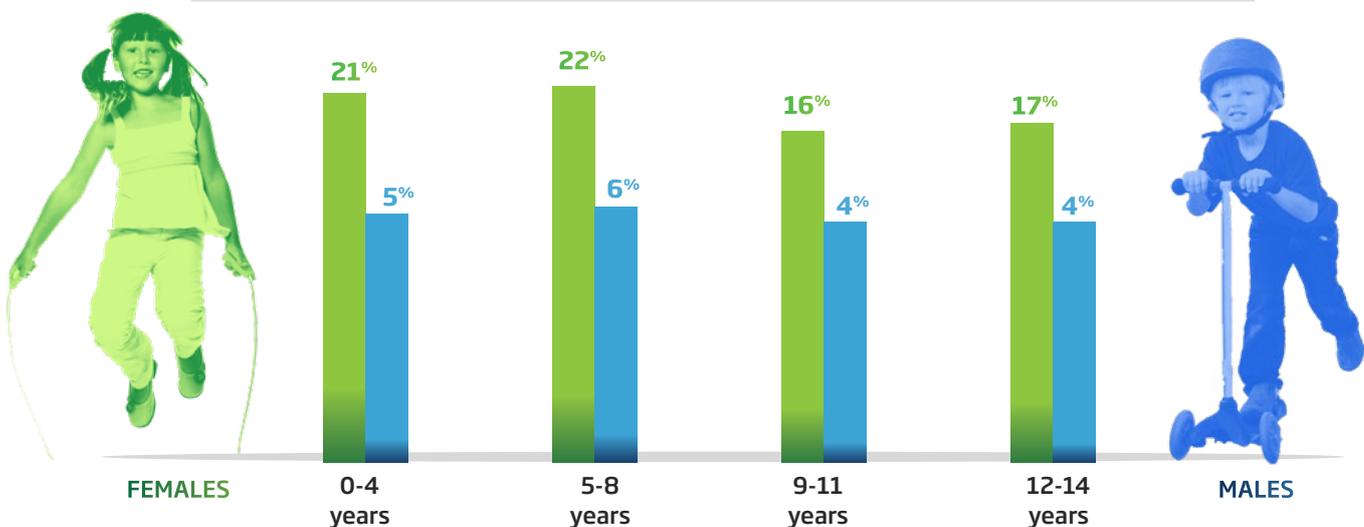
How does gender affect the type of physical activities children participate in?

While sports account for the majority of organised out-of-school physical activity undertaken by both boys and girls, non-sport-related activities account for a much larger proportion of organised out-of-school activity undertaken by girls than boys.⁴

Child participation in sport-related physical activity (sport)*



Child participation in non-sport-related physical activity (2017) by age and gender*



⁴ Children may participate in both sport and non-sport related activities.

*At least once per year

How does gender affect the type of physical activities children participate in?

The following figures show the top ten organised out-of-school physical activities for boys and girls in 2017. **Swimming was the highest participation activity for both boys and girls.**

TOP 10 ACTIVITIES FOR GIRLS*

	Swimming	33.9%
	Dancing (recreational)	14.7%
	Netball	13.3%
	Gymnastics	12.1%
	Football	5.9%
	Basketball	5.9%
	Dance Sport	5.2%
	Athletics, track & field	4.9%
	Tennis	4.8%
	Hockey	3.2%

TOP 10 ACTIVITIES FOR BOYS*

	Swimming	29.8%
	Football	21.9%
	Australian football	14.6%
	Cricket	10.0%
	Basketball	8.6%
	Tennis	7.1%
	Athletics, track & field	6.0%
	Rugby league	5.7%
	Gymnastics	3.4%
	Rugby union	3.2%

*At least once per year

Different activities for different life stages

The following table lists the top five organised out-of-school physical activities, by age group and gender.

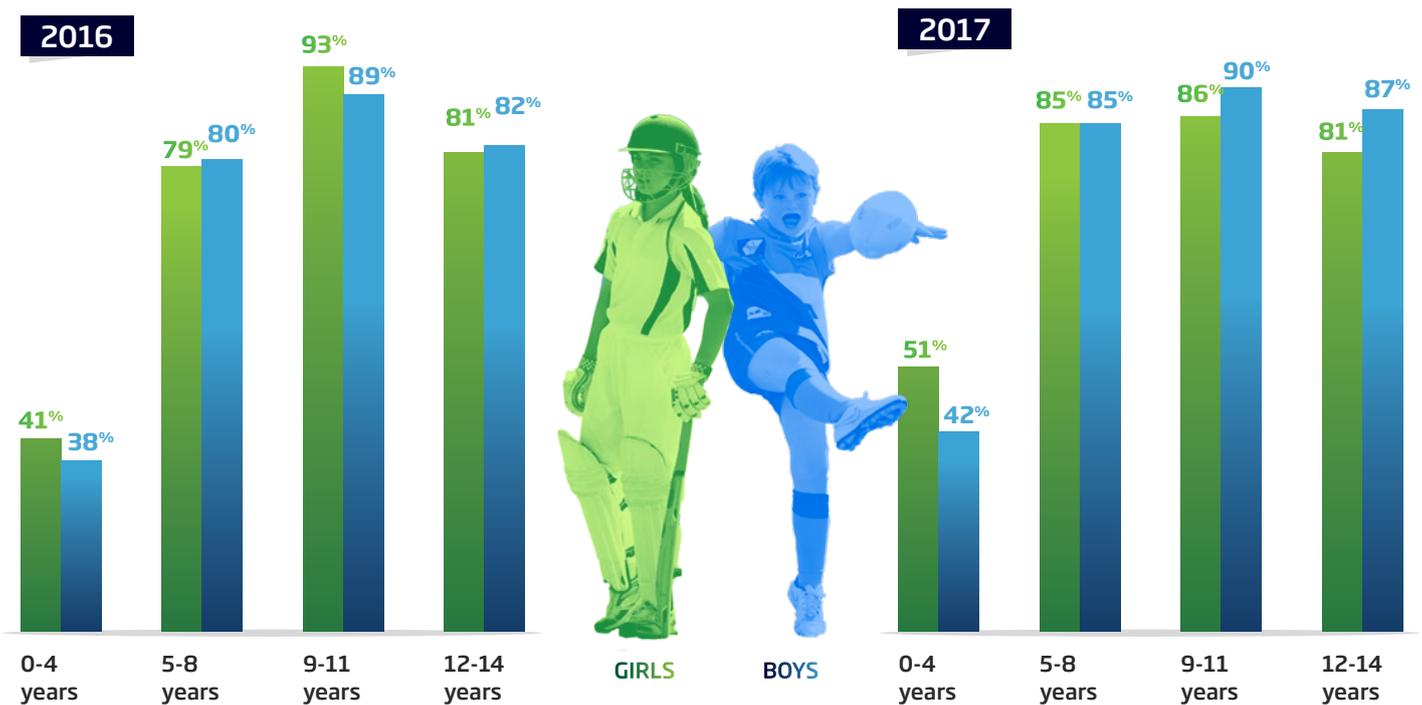
AGE GROUP	GIRLS		BOYS		
0-4 years	 Swimming	35.8%	 Swimming	31.6%	Learning to swim is the most common organised out-of-school physical activity for very young children, although a significant proportion of 0-4 year old girls participate in recreational dancing and/or gymnastics.
	 Dancing (recreational)	15.5%	 Football/soccer	6.6%	
	 Gymnastics	6.2%	 Gymnastics	4.1%	
	 Dance sport	2.4%	 Athletics, track & field	1.9%	
	 Yoga	1.4%	 Fitness/Gym	1.4%	
5-8 years	 Swimming	48.6%	 Swimming	38.6%	Swimming remains the most common organised physical activity for 5-8 year olds. While girls continue to participate in gymnastics and dancing, 10% of girls aged 5 to 8 years play netball. Similarly, boys aged 5-8 years are starting to participate in more team sports.
	 Gymnastics	22.8%	 Football/soccer	26.6%	
	 Dancing (recreational)	18.0%	 Australian football	21.5%	
	 Netball	10.3%	 Cricket	10.5%	
	 Dance sport	8.8%	 Rugby league	7.1%	
9-11 years	 Swimming	31.7%	 Football/soccer	29.8%	Children aged 9-11 years have the highest sport participation rates. Team sports (particularly football for boys and netball for girls) are increasingly important.
	 Netball	23.9%	 Swimming	29.7%	
	 Gymnastics	11.8%	 Cricket	15.9%	
	 Dancing (recreational)	11.7%	 Australian football	15.4%	
	 Basketball	10.1%	 Basketball	15.1%	
12-14 years	 Netball	30.6%	 Football/soccer	27.4%	Most children aged 12-14 years are in high school. Swimming is much less popular in this age group and does not feature in the top 5 activities for boys this age. Football is the most popular sport amongst boys, while netball is the most popular sport amongst girls.
	 Basketball	12.4%	 Australian football	22.1%	
	 Dancing (recreational)	11.8%	 Basketball	18.0%	
	 Swimming	11.7%	 Cricket	17.4%	
	 Football/soccer	9.1%	 Tennis	11.5%	

How does age affect the overall participation level?

Age is a key determinant of child participation in organised physical activity, with participation peaking in the 9 to 11 age group before declining in the 12 to 14 age group.

While the differences between age-based participation rates across boys and girls was not statistically significant in 2016, the difference between participation rates of 12 to 14 year old boys (87%) and girls (81%) in 2017 is statistically significant.⁵ Analysis of the reasons for non-participation found that a dislike of physical activity was cited for almost one half of girls (compared to less than one quarter of boys) aged 12 to 14.

Child participation by age and gender*



*At least once per year

The reasons for non-participation vary across age groups

The main barrier to young children's participation in organised out-of-school hours sport or physical activity is their parents' perception that they are too young to start playing

A dislike of physical activity and/or not making physical activity a priority were cited by parents as the main barriers for older children

⁵ Assessed at 5% significance level.

How does age affect the overall participation level?

Top five barriers to children organised participation outside of school hours by age in 2017



Wrong age (too old/young)



Doesn't like physical activity



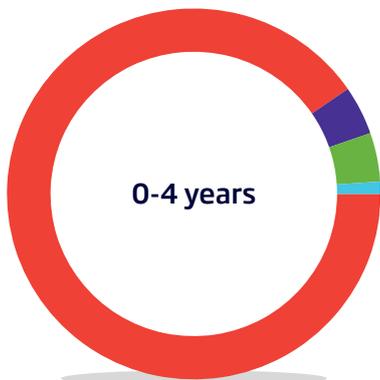
Already does enough physical activity



Not enough time/ too many other commitments



Not a priority



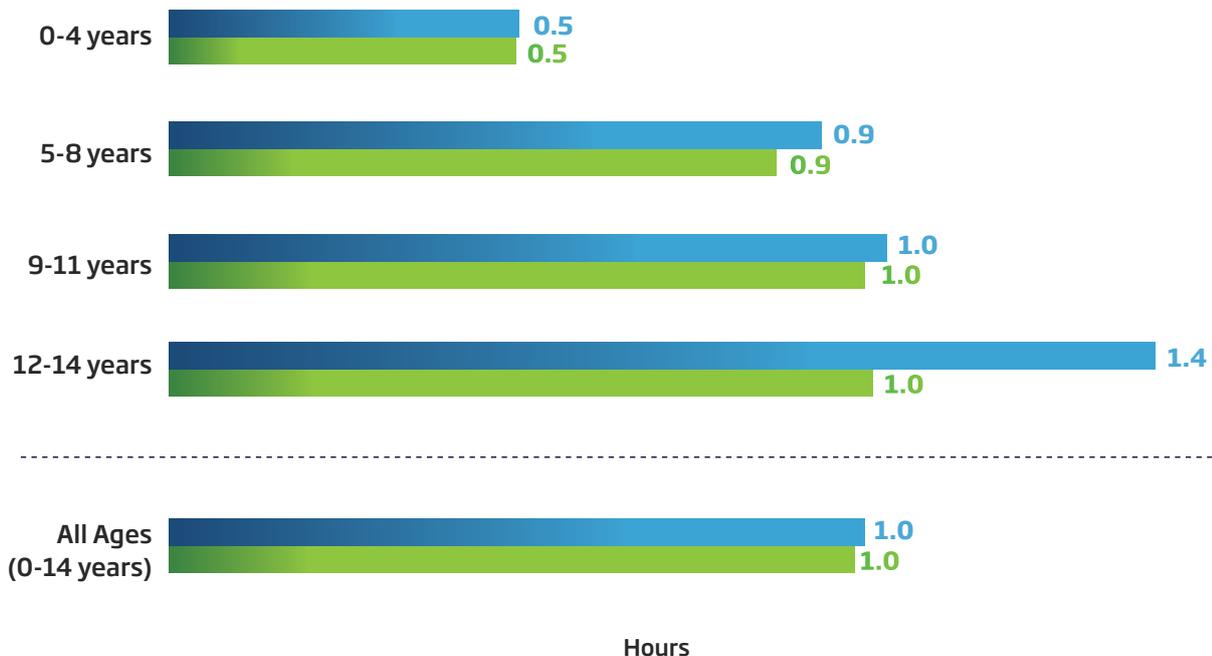
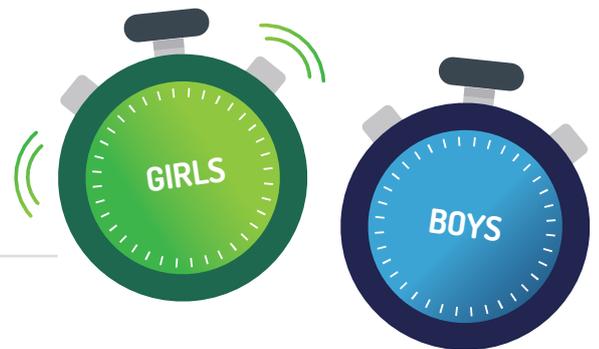
How long is the typical session of organised physical activity?

For each organised physical activity type that children have participated in over the past 12 months, parents are asked how long (in minutes) the most recent session lasted for.

As shown below, the median duration of a session of organised physical activity increases with age - younger children participate in shorter session than older children. While there are some differences in median session durations for girls and boys within some age groups, the overall median duration for boys and girls both round to 1.0 hour per session.

Median duration (in hours) of last session by gender (2017)

All organised physical activity



How active are Australian children?

A Snapshot

For each age group and for boys and girls overall, the following chart plots:

The participation rate - the proportion of children who have participated in organised physical activity outside of school hours over the past 12 months, and

The average participation frequency - for those children who do participate, the average number of times per week they participate in organised physical activity outside of school hours

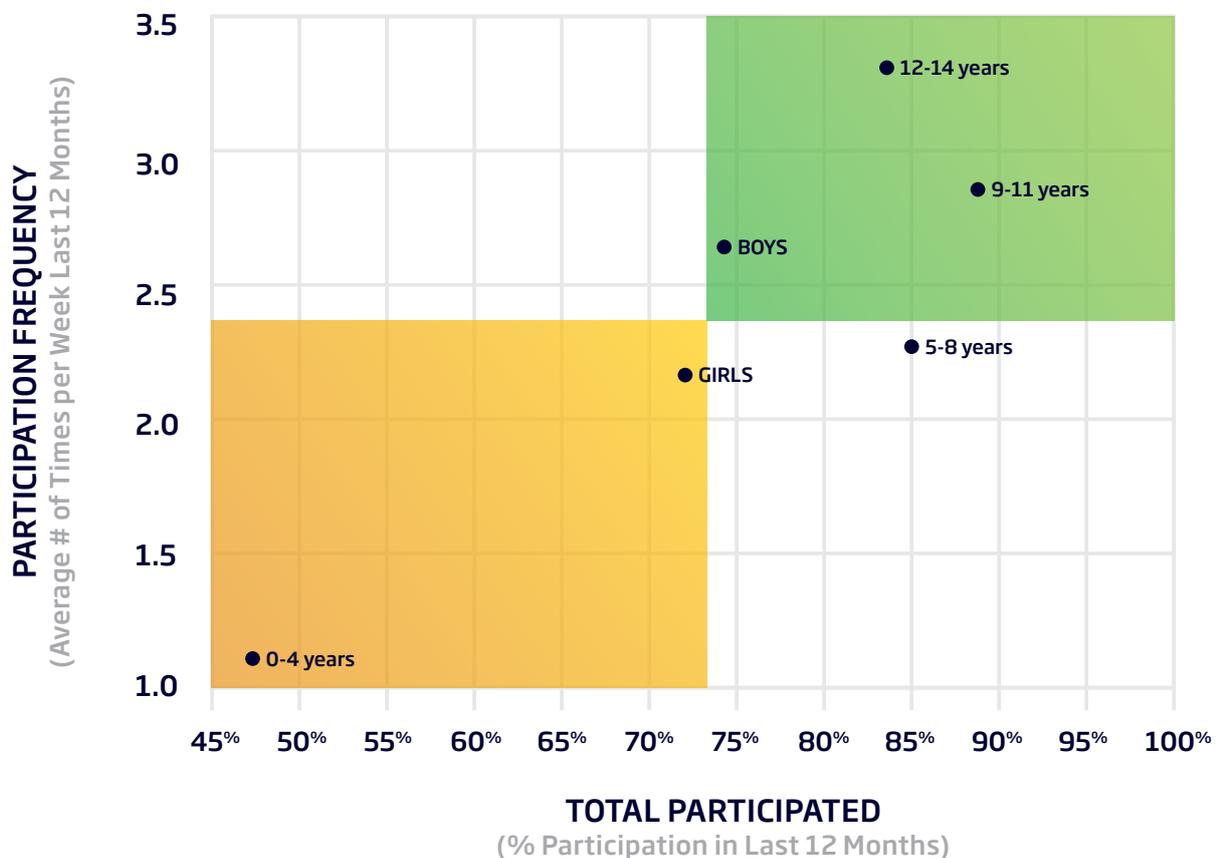
IT SHOWS THAT...

While the child participation rate peaks in the 9 to 11 age group before declining slightly in the 12 to 14 age group, the average participation frequency rises with age

On average, boys participate more frequently (2.7 times per week) than girls (2.2 times per week).

Participation and frequency (2017)

Age and gender



What demographic factors influence children's participation in organised out-of-school physical activity?

Regression analysis⁶ of the AusPlay data finds that, after controlling for child age:

Children are more likely to participate in organised physical activity outside school hours if:

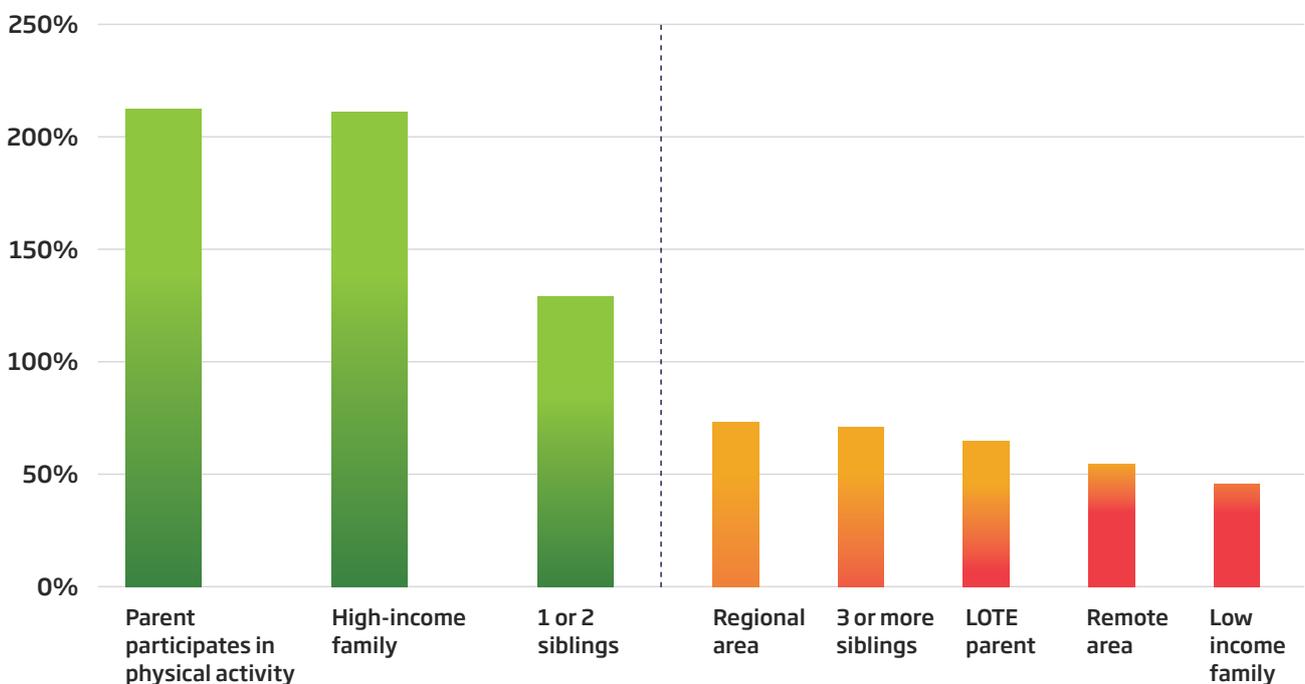
- A parent participates in sports or physical activity
- They come from a high-income family
- They have 1 or 2 siblings

Children are less likely to participate in organised physical activity outside school hours if:

- They come from a low-income family
- They live in a remote area
- A parent speaks a Language Other Than English (LOTE) at home
- They have 3 or more siblings
- They live in a regional area.

Factors impacting on child participation in organised physical activity

Increase* in odds of child participation in organised physical activity**
Decrease*



* Relative to children with no siblings, living in metro areas, with non-LOTE middle-income parents who do not participate in physical activity

** Child participating in 1 or more organised physical activities outside school hours over the past 12 months

⁶ Binomial logistic regression of the 2016 and 2017 AusPlay data was used to identify factors that have a statistically significant independent impact on the probability that a child will participate in at least one organised physical activity outside school

What demographic factors influence children's participation in organised out-of-school physical activity?

The impact of these factors can be seen by comparing the child participation rate across different cohorts of the population:

Parents' activities and behaviours strongly influence the way children develop. The 2017 AusPlay results confirm a high correlation between the engagement of parents in physical activity and that of their child.

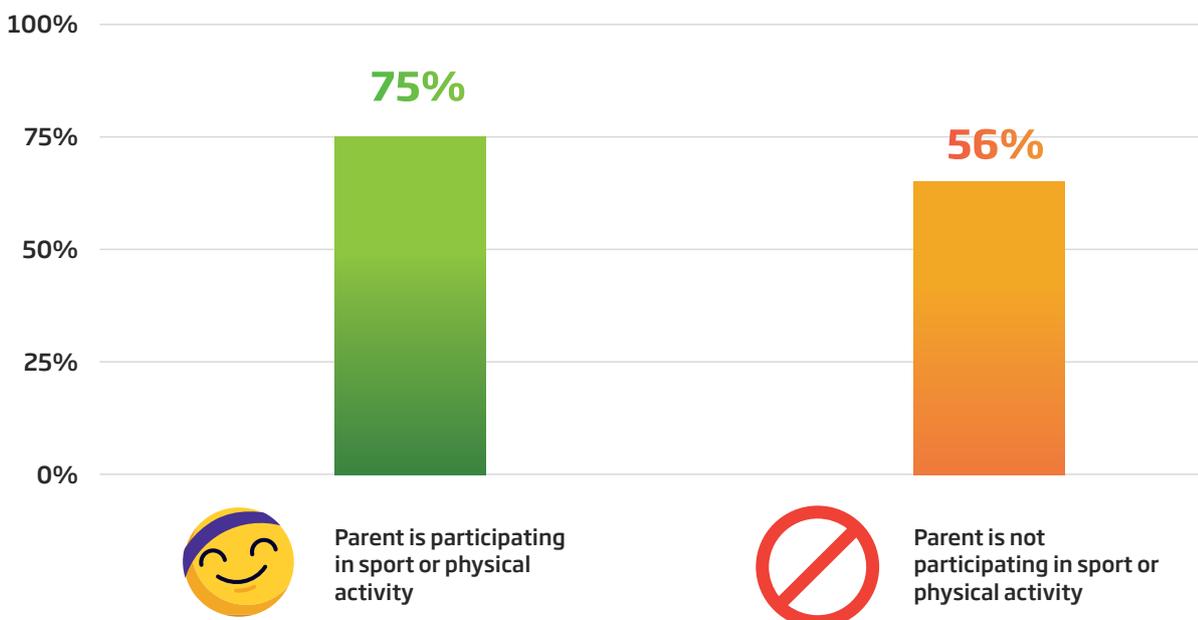
75%

of children who have at least one active parent participate in organised physical activity outside of school compared to just

56%

of children with at least one inactive parent.⁷

Child participation in organised physical activity



⁷ AusPlay collects data from only one randomly selected parent and only one randomly selected child in the same household. This report therefore does not consider the influence of both parents on child participation

What demographic factors influence children's participation in organised out-of-school physical activity?

Organised sport and physical activity typically involves a financial cost.⁸

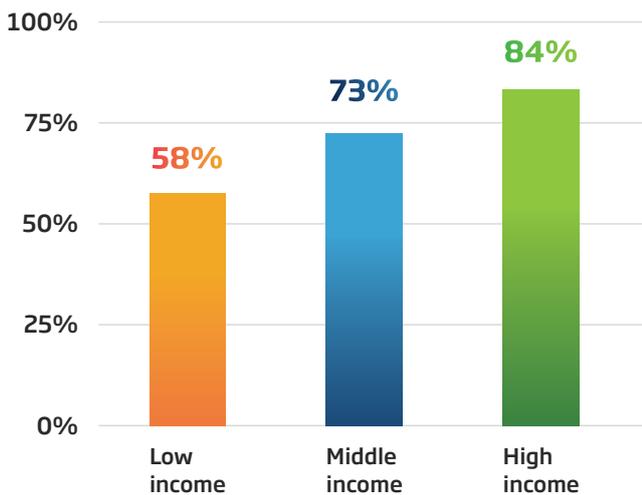
AusPlay confirms that these costs can present a barrier to participation for children from low income families.⁹ **58%** of children from low income families participate in organised physical activity outside of school compared to **73%** of children from middle income families¹⁰ and **84%** of children from high income families.¹¹

Compared with children living in metropolitan areas, children in regional and remote areas of Australia typically have access to a more limited range of organised sports and physical activities.

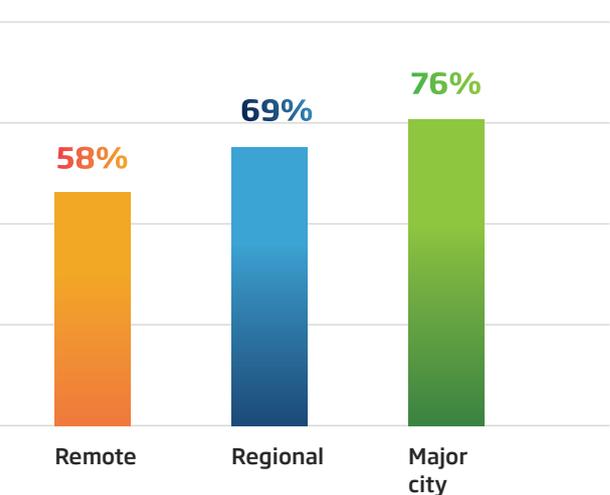
It can also be more difficult for parents to transport children to activities in regional and remote areas given the distances involved.

58% of children from remote areas participate in organised physical activity outside of school, compared to **69%** of children in regional areas and **76%** of children living in major cities of Australia

Child participation in organised physical activity, Family Income Level



Child participation in organised physical activity, Place of Residence



⁸ In 2017, AusPlay found 89% of organised physical activities involved a cost to parents.

⁹ Low income families are defined as those with gross (before tax) household income of less than \$55,000 per annum.

¹⁰ Middle income families are defined as those with gross (before tax) household income between \$55,000 and \$174,999 per annum.

¹¹ High income families are those with gross (before tax) household income of \$175,000 or more per annum.

What demographic factors influence children's participation in organised out-of-school physical activity?

68% of children with a parent who speaks a language other than English (LOTE) at home parents participate in organised physical activity outside school, compared to **75%** of children with a non-LOTE parent.

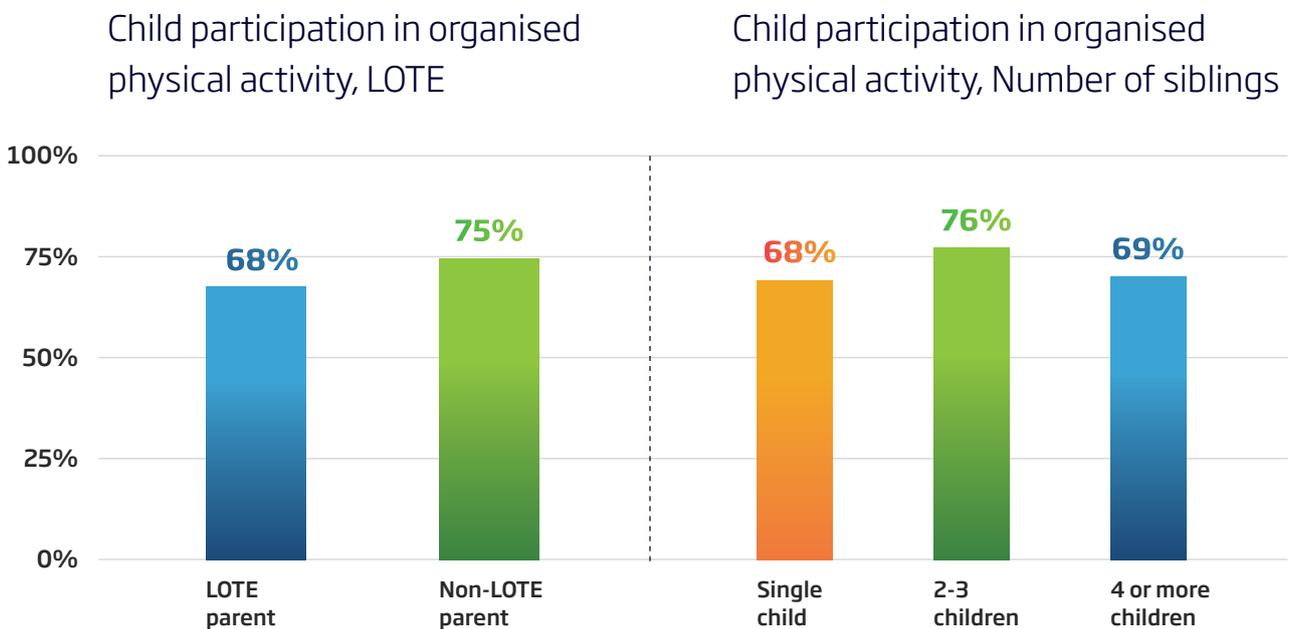
Compared to non-LOTE parents, LOTE parents were more likely to cite other commitments/lack of time as a reason for their child's non-participation.

The number of children in a family can also influence the level of participation in organised physical activity outside school.

68% of children from single child families participate in organised physical activity outside of school

76% of children with 1 or 2 siblings (i.e. 2 - 3 child families) participate in organised physical activity outside of school, while

69% of children with 3 or more than siblings (i.e. 4+ children families) participate in organised physical activity outside of school.



This tendency for individual child participation to rise and then fall with family size may reflect a number of factors. Beyond the financial cost, it can be logistically difficult for parents of large families to organise and support the activities of four or more children.

Child participation rate and frequency by population group

The following chart shows the child participation rate and participation frequency across a number of population groups

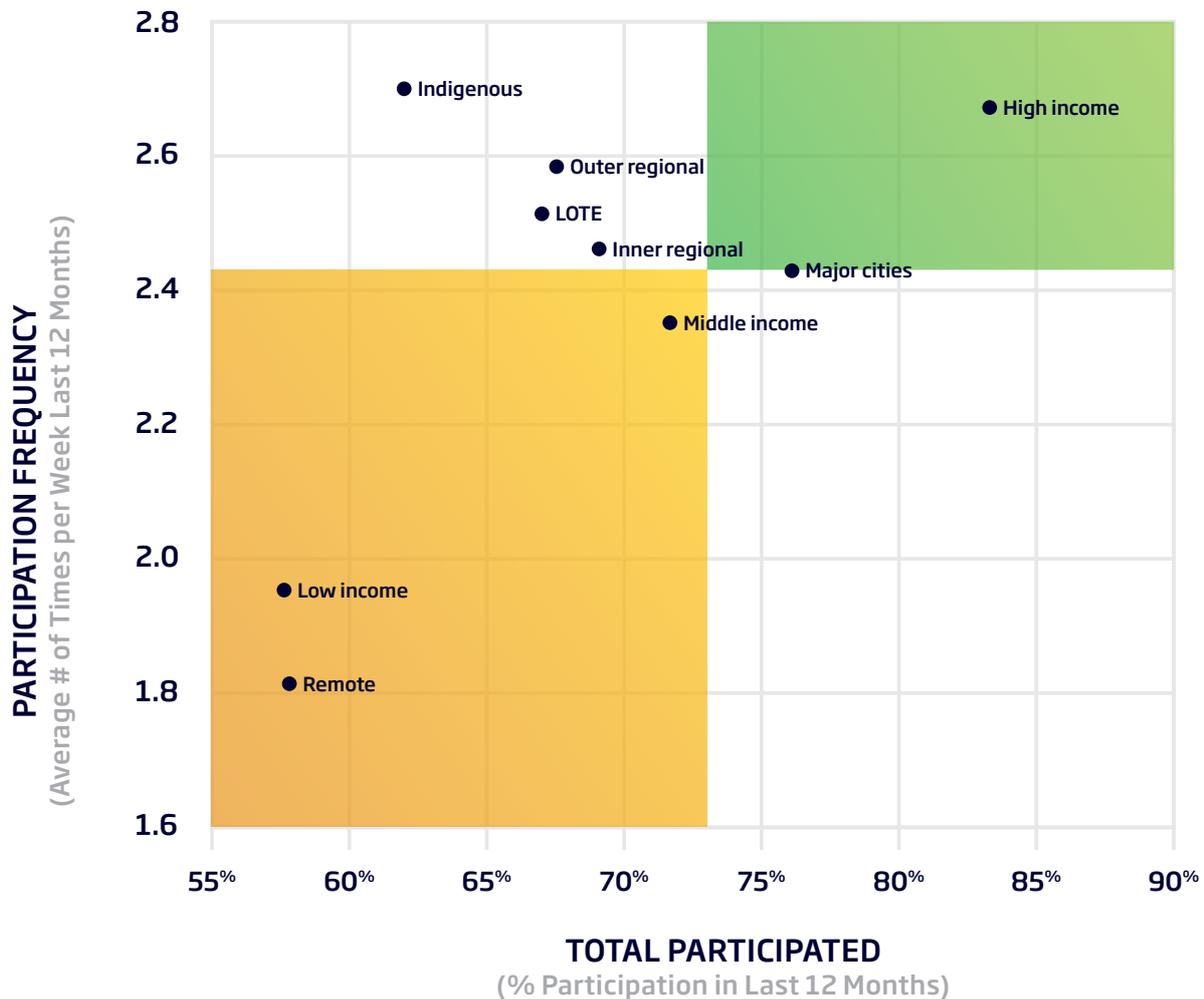
Children from low income families and children living in remote areas have significantly below-average participation rates and frequencies

In contrast, children from high income families have significantly above-average participation rates and frequencies.

Children with Indigenous or LOTE parents and children living in regional areas have below-average participation rates, but above-average participation frequencies

Participation and frequency (2017)

Population group



How much money is spent on children's organised physical activities outside school hours?

AusPlay asks parents how much they paid in total for their child to participate in organised out-of-school hours physical activities over the past 12 months.

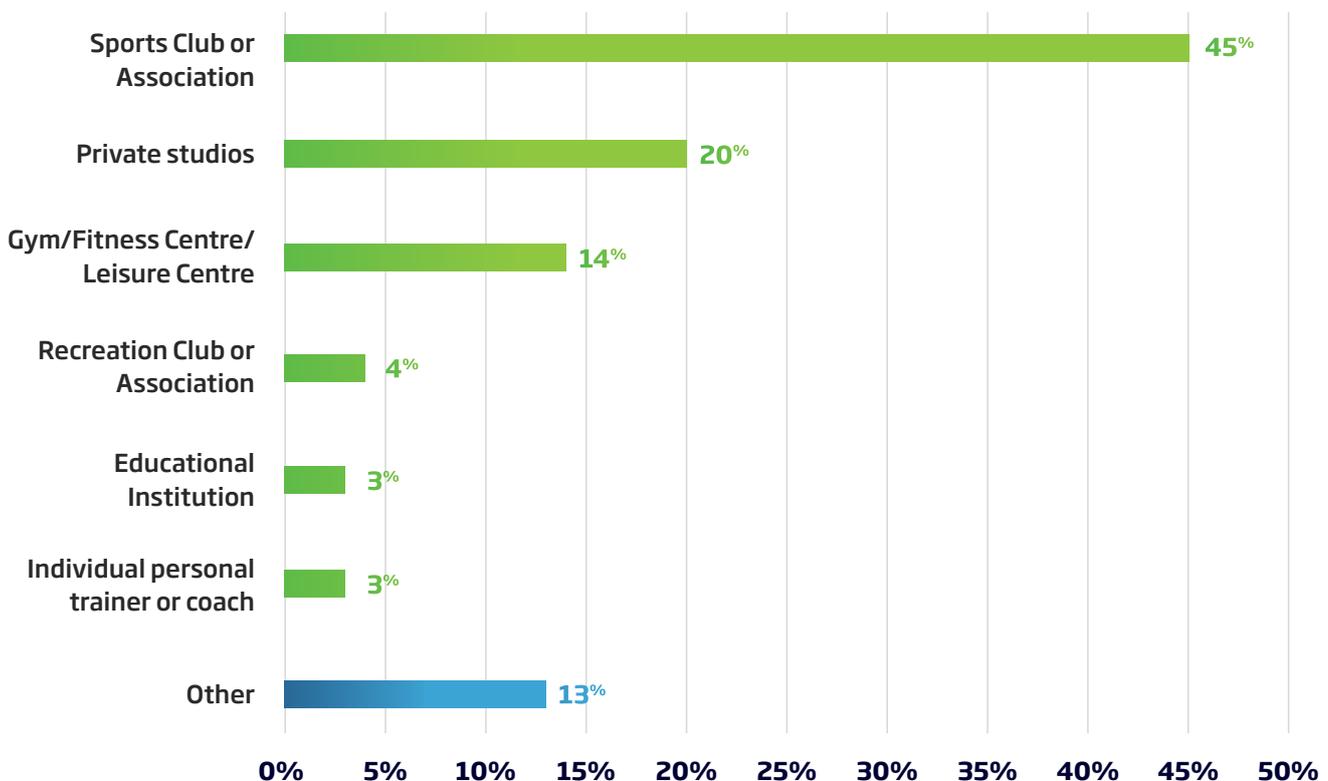
It is estimated that approximately **\$2.1 billion¹²** per annum was spent on children's participation in all types of organised outside of school hours physical activity. Of this:

An estimated \$1.0 billion (49%) was spent on boys participation

An estimated \$1.1 billion (51%) was spent on girls participation

The following figure shows the distribution of this expenditure over the different types of organisations that provide organised physical activities for Australian children.

Expenditure by organisation



¹² This estimate includes amounts paid for participation in activities, but excludes costs of uniforms and equipment

International comparisons

Researchers from around the world are agreed on the important role physical activity plays in children and youth's health, cognitive functioning, engagement, motivation, psychological well-being and social inclusion.¹³

Participation in organised sport and physical activity, goes even further to encompass psychosocial benefits such as increased self-esteem, well-being, and social skills, including teamwork and negotiation.¹⁴

In 2016, the Global Matrix 2.0 – developed by the **Active Healthy Kids Global Alliance** – organised concurrent preparation of report cards on the physical activity of children and youth in **38 countries from six continents, representing 60% of the world's population**, using common indicators and a standardised grading framework.¹⁵



The Alliance found that the average grade across the globe for **overall physical activity** was a **D** (meaning, succeeding with less than half (20-39%) of children and youth), similar to Australia.



For **organised sport participation**, the global average was a **C** (succeeding with about half (40-59%) of children and youth). Australia was seen to be doing better than average, as one of only nine countries to have a **grade of B or higher**.

¹³ Bangsbo, Krstrup, Duda Hillman, Andersen, Weiss, Williams, Lintunen, Green, Hansen, Naylor, Ericsson, Nielsen, Froberg, Bugge, Lundbye-Jensen, Schipperijn, Dagkad, Agergaard, von Seelen, Ostergaard, Skovgaard, Busch, and Elbe (2016). The Copenhagen Consensus Conference 2016: Children, youth and physical activity in schools and during leisure time. *British Journal of Sports Medicine*. Retrieved from BJSM Online First. Published online on 27 June 2016.

¹⁴ Vella, Schranz, Davernc, Hardy, Hills, Morgan, Plotnikoff, and Tomkinson (2016). The contribution of organised sports to physical activity in Australia: Results and directions from the Active Healthy Kids Australia 2014 Report Card on physical activity for children and young people. *Journal of Science and Medicine in Sport*, 19(5):407-12

¹⁵ Tremblay, Barnes, González, Katzmarzyk, Onywera, Reilly, Tomkinson, and the Global Matrix 2.0 Research Team (2016). Global Matrix 2.0: Report Card Grades on the Physical Activity of Children and Youth Comparing 38 Countries. *Journal of Physical Activity and Health*, 13 (11) Suppl 2: S343 -S366.

International comparisons

Australia is a leading nation in youth sports participation, compared to other developed and developing countries with reported participation rates of 20-59%.¹⁶

“this grade represents a national strength and highlights the potential of organised sports to facilitate healthy growth, development, and wellbeing of Australian children and young people.”¹⁶

Globally, boys are more physically active than girls. This is true both for organised sport participation and physical activity generally.^{17,18,19} International research shows that participation in physical activity declines during adolescence, especially for girls. The Global Matrix does not include a girls’ participation dimension, making it difficult to say for certain where Australia stands in relation to this global phenomenon of gender inequity.



Recent results from AusPlay relating to organised participation suggest, however, that the gender gap in Australia is narrower than global averages.



¹⁶ Vella et. al. (2016).

¹⁷ Dumith, Gigante, Domingues, Kohl. (2011). Physical activity change during adolescence: a systematic review and a pooled analysis. *International Journal of Epidemiology*, 40(3): 685-98.

¹⁸ Hallal, Anderson, Bull, Guthold, Haskell and Ekelund (2012). Global physical activity levels: surveillance progress, pitfalls, and prospects. *The Lancet*, 380: 247-57.

¹⁹ World Health Organisation Europe (2009). Percentage of physically active children and adolescents. Fact Sheet 2.4. Code: RPG2_Hous_Ex1

In summary

Overall child participation in organised out-of-school sport and physical activity rose from 70% in 2016 to 74% in 2017 - driven by a strong rise in children's sport participation (up from 66% in 2016 to 70% in 2017).

Participation in organised sport and physical activity in Australia compares favourably to participation rates in other countries.

The increase in children's sport participation between 2016 and 2017 is statistically significant²⁰, evident across a broad range of sports and is a positive development given the numerous health and social benefits associated with children's sports participation. This is aligned with global research which shows that children's participation is either static or improving in many countries.

Analysis of the AusPlay data also shows that challenges remain in increasing access to, and participation in, sports amongst some cohorts of the Australian population:



Cost remains a barrier to participation for many children from low income families



Children with a parent who speak a Language Other Than English (LOTE) at home have below-average participation rates - with LOTE parents more likely to cite other commitments/lack of time as a reason for their child's non-participation



Children living in regional and remote areas and Indigenous Australians have below-average participation rates



There was a decline in participation of girls aged 9 to 11, with a dislike of physical activity increasingly cited as a reason for non-participation as girls age.

²⁰ The increase in overall participation rate was statistically significant at a 5% significance level

In summary

Achieving sustained improvements in children’s participation in sports (and physical activity generally) will require strategies that address the barriers to participation.

While over two-thirds of Australian children participate in organised out-of-school sport, **fewer than 20%** meet daily physical activity recommendations.²¹

While sport provides many health and psycho-social benefits to children, it is important to consider the other important components of physical activity for children:

Active transportation

Physical education at school

Active play

AusPlay will track, on a continuous basis throughout the year, the participation of boys and girls in organised sport and physical activity in Australia.

The Australian Sports Commission is exploring how other components of physical activity - including active transport, active play and participation in physical activity at school - can be integrated into AusPlay

²¹ Active Healthy Kids Australia (2016). Physical literacy: do our kids have all the tools? 2016 Report Card on physical activity for children and young people.



Australian Government

Australian Sports Commission

Any further questions about AusPlay
(or queries for additional customised reporting/
further analysis of the dataset) can be directed
to Sport Market Insights at the ASC via:
AusPlay@ausport.gov.au