GOVERNMENT

## AusPlay NSW:

# Participation in organised sport and physical activity amongst children aged 0-14 years 

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Acknowledgements

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## Introduction

Regular participation in physical activity has many physical and mental health benefits for children. Physical benefits can include increased bone mineral density and weight maintenance and mental health benefits include increased self-esteem and emotional regulation. Whilst there is strong evidence of the physical and mental health benefits of regular physical activity, sport and active recreation, only 77\% of children in New South Wales are sufficiently active (i.e., participate in at least 60 minutes every day).

Sport is one way that children can participate in physical activity, which involves physical exertion, skill and/or hand-eye coordination as the focus of the activity, with elements of competition and rules set formally through organisations; and may be participated in either individually or as a team. The Australian government have recognised the importance of sport and active recreation with the development of a National Sports Plan (Sport 2030). Sport 2030 aims to build a more active Australia, with more people of all ages engaged in sport and physical activity throughout every stage of their life.

AusPlay is a large-scale national population tracking survey that provides robust and reliable data on sport and physical activity participation trends over time. Examining these trends over time will enhance understanding of participation across a variety of demographic groups and support policy makers across the sport and physical activity sector to make evidence-based decisions that will increase participation in sport and physical activity.

## Aim and Purpose

The overall objective of this report is to enhance understanding of children's (0-14 years) participation in structured sport and active recreation in NSW.

The report focuses on three questions:

1. How active are NSW children in 2019 and has this changed over time?
2. How much do NSW families spend on sport and active recreation in 2019 and has this changed over time?
3. What factors differentiate sport and active recreation participants from non-participants?

## Methods

Ausplay data were obtained from January 2016 to December 2019. Computer assisted telephone interviews were conducted with parents/guardians of children. Between 2016 and 2018, an overlapping dual frame design was used to ensure a random sample of landline and mobile phone users. In 2019, a single frame design was implemented due to the large number of people in Australia who only own mobile phones. For both the dual and single frame, one random child aged between 0 and 14 years is selected using the last birthday method.

Descriptive statistics, including unweighted frequencies and weighted percentages, were calculated by age, sex, household income, socioeconomic status (SES), parent's education, country of birth and language spoken at home. SES was determined using postcode of residence and was classified using the Australian Bureau of Statistics' Index of Relative Socio-Economic Disadvantage (SIEFA). There are four SEIFA quartiles, with quartile 1 representing the most disadvantaged area and 4 representing the least disadvantaged area. Descriptive statistics were calculated separately for non-participant and participant children (i.e., children who participated in at least 1 session of organised sport or physical activity in the last 12 months).

Weighted population estimates and standard errors were calculated accounting for the complex survey design and stratification. Population annual, weekly, and three times a week participation rates (with $95 \%$ confidence intervals) were reported by age, sex and SES.

The weighted mean and median duration of the last session and the weekly duration of organised sport or physical activity was calculated by age, sex and SES for all children who had participated at least once in the last year. The weighted total annual cost of participation for each child and the proportion of total expenditure that was covered by two $\$ 100$ redemption vouchers that subsidised sport and active recreation participation was calculated. For those non-participant children, the most commonly reported barriers to participation were examined by age, sex and SES.

## Results

## Descriptive statistics

Through the AusPlay survey, parents/guardians reported data on 3,855 children in NSW, of which 2,999 (78\%) children participated in at least one organised sport or physical activity outside of school hours in the past 12 months (participants), compared with 856 ( $22 \%$ ) parents reported that their child did not (non-participants).

Table 1 Demographics of NSW respondents from October 2015 to December 2019.

|  | All children$N=3,855$ |  | Participants$N=2,999$ |  | Non-participants$N=856$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | n | \% | n | \% | n | \% |
| Sex |  |  |  |  |  |  |
| Boys | 2,066 | 51 | 1,597 | 53 | 469 | 55 |
| Girls | 1,789 | 49 | 1,402 | 47 | 387 | 45 |
| Age |  |  |  |  |  |  |
| 0-4 years old | 912 | 32 | 416 | 16 | 496 | 62 |
| 5-8 years old | 1,017 | 30 | 897 | 31 | 120 | 13 |
| 9-11 years old | 884 | 20 | 791 | 26 | 93 | 10 |
| 12-14 years old | 1,042 | 19 | 895 | 28 | 147 | 15 |
| Household income |  |  |  |  |  |  |
| <85,000 | 582 | 18 | 367 | 13 | 215 | 25 |
| 85,000-149,999 | 858 | 22 | 661 | 22 | 197 | 25 |
| 150,000+ | 1,172 | 28 | 1,026 | 34 | 146 | 16 |
| Refused/Don't know | 1,243 | 32 | 945 | 32 | 298 | 35 |
| SEIFA IRSD Quartiles |  |  |  |  |  |  |
| $1^{\text {st }}$ - Most Disadvantaged | 619 | 18 | 417 | 14 | 202 | 23 |
| 2nd | 894 | 25 | 685 | 23 | 209 | 26 |


|  | All children$N=3,855$ |  | Participants$N=2,999$ |  | Non-participants$N=856$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | n | \% | n | \% | n | \% |
| 3rd | 775 | 20 | 596 | 20 | 179 | 21 |
| $4^{\text {th }}$ - least Disadvantaged | 1,504 | 36 | 1,254 | 41 | 250 | 28 |
| Missing | 63 | 2 | 47 | 2 | 16 | 2 |
| Education of parent |  |  |  |  |  |  |
| Did not complete secondary school | 291 | 9 | 186 | 6 | 105 | 12 |
| Highest level of secondary school | 400 | 11 | 310 | 10 | 90 | 10 |
| Diploma, certificate or trade | 1,095 | 29 | 835 | 28 | 260 | 31 |
| University degree or higher | 2,035 | 50 | 1,641 | 54 | 394 | 45 |
| Refused/Missing/Other | 34 | 1 | 27 | 1 | 7 | 1 |
| Country of Birth |  |  |  |  |  |  |
| Australia | 2,674 | 71 | 2,116 | 71 | 558 | 66 |
| Other | 1,130 | 28 | 846 | 28 | 284 | 32 |
| Missing | 51 | 1 | 37 | 1 | 14 | 1 |
| Language spoken at home |  |  |  |  |  |  |
| English (only) | 2,922 | 77 | 2,356 | 78 | 566 | 66 |
| Language other than English (LOTE) | 913 | 23 | 632 | 21 | 281 | 33 |
| Missing | 20 | 0 | 11 | 0 | 9 | 1 |

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## 1. How active are NSW children?

## Estimated population participation rates

In 2019, almost 8 out of 10 (77\%) NSW children took part in one or more organised sport or physical activities over the past 12 months.


Between 2016 and 2019, the proportion of children who took part in one or more organised sport or physical activities at least once over the past 12 months significantly increased from $68 \%$ to $77 \%$. The proportion of children who took part in one or more organised sport or physical activities at least once a week and three times a week also increased, but not significantly (Figure 1.1).


Figure 1.1 Sport participation over time

In 2019, the proportion of children who participated in organised sport or physical activity at least once a year was lowest in 0-4 years (49\%), and significantly higher for 5-8 (91\%), 9-11 (91\%), and 12-14 (88\%) years. The proportion of children who participated in organised sport or physical activities at least three times a week was lowest in 0-4 years (5\%), signifyingly higher for 5-8 years (23\%) and significantly higher for 9-11 (42\%) and 12-14 years (42\%) (Figure 1.2).


Figure 1.2 Sport participation across age groups in 2019

In 2019, the proportion of children who participated in organised sport or physical activity at least once a week was significantly lower in the most disadvantaged group (SEIFA quartile 1: 54\%) compared with the least disadvantaged group (SEIFA quartile 4: 68\%). The proportion of children who participated in organised sport or physical activity at least once a year and three times a week was non-significantly lower in the most disadvantaged group compared with the least disadvantaged group (Figure 1.3).


Figure 1.3 Sport participation across socioeconomic groups in 2019

In 2019, the proportion of children who participate in organised sport or physical activity at least once a year, once a week and three times a week was higher (non-significantly) in children who only speak English at home compared with children who speak other languages at home (Figure 1.4).


Figure 1.4 Sport participation across language spoken at home in 2019

In 2019, the proportion of children who participated in organised sport or physical activity at least once a year, once a week and three times a week was very similar in children who were born in Australia compared with children who were not born in Australia (Figure 1.5).


Figure 1.5 Sport participation across country of birth in 2019

Five most commonly reported activities by sex in $2019{ }^{1}$

## Top 5 activities for girls



## Top 5 activities for boys



Top 5 most popular activities by age group


Top 5 most popular activities by socio-economic status quartiles


Top 5 most popular activities by culture and language


## Duration of last session

The duration of the last session was reported for all activities participated in by each child in the last 12 months. To obtain realistic estimates of the average duration of a typical session of organised activity, unusually high values ( $>7$ hours) were omitted for the following analyses. This meant that the following analyses are based on 2,456 children. Where a child participated in more than one activity, the average session duration for that child was first calculated.

In 2019, the mean duration of one session of organised sport or physical activity for all children is 65 minutes and the median is 57 minutes and this has not significantly changed since 2016 (Figure 1.6). Session duration is similar for girls and boys; median session durations for boys and girls was 58 minutes. Similarly, the duration of the last session was the same regardless of relative socioeconomic disadvantage, with the median duration ranging between 55 and 57 minutes for all quartiles. Session duration only appears to change with age.


Figure 1.6 Duration of last session by time

In 2019, the duration of one session of organised sport or physical activity for all children significantly increased with age. The median session time for $0-4$ years was 38 minutes, compared with 74 minutes for 12-14 years (Figure 1.7).


Figure 1.7 Duration of last session by age group

## Weekly duration

For all child participants who completed the duration question ( $N=2,456$ ), an average duration of weekly activity was calculated (for details see Appendix). Comparisons of these estimates for age, sex and socioeconomic status are displayed as medians below. In 2019, the median weekly duration of all organised sessions of sport and physical activity outside of school for children was 104 minutes. When participating, girls were engaged for less time than boys.


Boys


In 2019, weekly duration of all organised sessions of sport and physical activity outside of school increased with age. The median weekly time for 0-4 years was 40 minutes, compared with 187 minutes for 12-14 years (Figure 1.8).


Figure 1.8 Weekly duration of last session by age group

Weekly duration in organised sport and physical activities is lower in children living in the most disadvantaged areas (SEIFA quartiles 1 and 2) compared with children living in the least disadvantaged areas (SEIFA quartiles 3 and 4). However, differences are not significant (Figure 1.9).


Figure 1.9 Weekly duration across socioeconomic groups

## Proportion of children meeting Physical Activity guidelines through Sport

In 2019, 10\% of NSW children get, on average, 60 minutes of physical activity per day through organised sport and physical activity. This has not significantly changed between 2016 and 2019 (Figure 1.10).


Figure 1.10 Percentage of children meeting physical activity recommendations through sport by time

The proportion of children meeting guidelines significantly increases with age (Figure 1.11). However, it is important to note that the proportion of children meeting guidelines is very low across all age groups.


Figure 1.11 Percentage of children meeting physical activity recommendations through sport by age
2. How much do NSW families spend on one child's ${ }^{2}$ sport and physical activity?

## Total annual cost of participation

In 2019, 95\% of parents with participant children report paying for their child's participation in sport or physical activity in the last 12 months. In 2019, the median annual cost of all organised sport or PA is $\$ 649$, and significantly higher than all previous years (Figure 2.1).


Figure 2.1 Total cost of structured sport and physical activity, by year

Girls' participation in organised sport and physical activity is consistently more expensive than boys.


## Boy

## Median annual <br> cost: \$538

In 2019, the cost of organized sport and physical activity is higher for 5-14 years, but there are no significant differences between age groups (Figure 2.2).


Figure 2.2 Total cost of structured sport and physical activity, by age group

People living in the most disadvantaged areas (SEIFA quartiles 1 and 2) spend less money on organised sports and physical activity than those living in least disadvantaged areas (SEIFA quartiles 3 and 4). However, differences were not significant (Figure 2.3).


Figure 2.3 Total cost of structured sport and physical activity, by socio-economic status

Proportion of expenditure covered by two \$100 Active Kids vouchers in 2019

In 2019, the median proportion of annual expenditure for all children's sport and physical activity that two universal $\$ 100$ Active Kids voucher covered is $31 \%$. boys spend less, the voucher will make a higher contribution to total expenditure.


## Boys



In 2019, the median proportion of annual expenditure for all children's sport and physical activity that two universal $\$ 100$ Active Kids voucher covered is highest for $0-4$ year olds as their expenditure is lowest. For children aged 5-14 years the two vouchers cover almost one third of annual expenditure for sport and physical activity (Figure 2.4).


Figure 2.4 Proportion of total cost of expenditure on children's sport and physical activity, by age group

Individuals living in the most disadvantaged areas (SEIFA quartiles 1 and 2) will experience a bigger impact of the voucher, as this will represent $40 \%$ of their sport-related costs for each participating child in 2019 (Figure 2.5). This highlights the need to strategically prioritise targeted sport and physical activity participation in the disadvantaged communities.


Figure 2.5 Medial annual cost (\$AU) of participation by socio-economic status, with proportion covered by two \$100 vouchers

## 3. What factors influence participation of non-participants?

## Barriers to participation

When survey respondents (2019) reported not participating in any organised sport or physical activity outside of school hours in the last 12 months they were classed as 'Non-participants' ( $\mathrm{n}=626$ ). The top 5 reasons for not participating were that the child:

- Was the wrong age, either too old/too young $-62 \%$
- Not enough time -9\%
- Already does enough physical activity -8\%
- Doesn't like physical activity - 6\%
- Can't afford it - 3\%

More than half (57\%) of the non-participants were 0-4 years, hence a large proportion of parents perceived their child is too young for structured participation. This reinforces the need to strategically target structured opportunities at all ages, especially 0-4 years. The proportion of children who reported not liking physical activity increased with age (0-4 years: 0\%, 5-8 years: 7\%, 9-11 years: 17\%, 12-14 years: 29\%). Not liking physical activity was the top barrier for 12-14 years.

Top 5 barriers to participation for 12-14 years


Figure 3.1 Top 5 barriers to participation for non-participants for 12-14 years
The top 5 barriers for boys and girl non-participants are displayed below. Not having enough time was ranked higher in girls (ranked 2; 9\%) compared with boys (ranked 4; 6\%). Please note that respondents could give multiple responses.

Top 5 barriers to participation for girls


Top 5 barriers to participation for boys


Figure 3.2 Top 5 barriers to participation for non-participants, by sex
Future sport
Of those children who did not participate in any organised sport or physical activity in the past 12 months, $66 \%$ (Boys $64 \%$; Girls $69 \%$ ) would consider participating in the next 12 months. The number of non-participants considering changing their behaviour to participate in sport generally decreased with age, to only $43 \%$ of non-participating 12-14-year olds considering playing sport in the next 12 months.


Figure 3.3 Non-participants considering participation in the next 12 months, by age
Those children who were interested in participating in an organised sport or physical activity in the next 12 months, whether they were currently participating or not, were most interested in trying Swimming, football/soccer and gymnastics in the next 12 months.

## Relevance for policy and practice

This report provides insights into participation rates and trends in organised sport and physical activity of children in NSW between January 2016 and December 2019. Although in 2019, 77\% of children participated in sport and recreation in the last 12 months, only $61 \%$ participated once a week and $25 \%$ participated three times per week.

A positive finding of this report was that between 2016 and 2019, the proportion of children who took part in one or more organised sport or physical activities in the past 12 months significantly increased from $68 \%$ to $77 \%$. The proportion of children who took part in organised sport or physical activities at least once a week and three times a week also increased, but not significantly. However, currently only $25 \%$ of children participate in sport regularly, presenting substantial room for improvement.

Recommendation: While there has been some success, further work is needed to promote organised sport and physical activity participation amongst all children living in NSW.

In 2019, there is still a significant disparity in participation between children in the most disadvantaged areas and the least disadvantaged areas.

Recommendation: State-wide participation strategies that focus on equitable and accessible participation to that reduce the gap between the least and most socioeconomically disadvantaged areas are needed.

In 2019, the median annual cost of all organised sport or physical activity was $\$ 649$, which was significantly higher than the three previous years. This is likely due to the Active Kids voucher program that provided all children in NSW with two $\$ 100$ vouchers in 2019. These vouchers covered $25 \%$ of all sport and recreation costs for children in the least disadvantaged area and $40 \%$ for children in the most disadvantaged areas.

Recommendation: The Active Kids voucher program is covering a high proportion of the annual cost of sport and active recreation for children living in the most disadvantaged areas. However, these children still have lower participation levels and specific targeting should be considered in the future.

The majority (90\%) of parents of 0-4 year olds perceived their child was too young for structured sport and physical activity participation.

Recommendation: Parents need to be made aware of opportunities for their younger children.

Almost 1 in 3 (29\%) non-participant children aged 12-14 reported not liking physical activity as the main barrier to participation.

Recommendation: Further in-depth work is needed to understand why children do not like physical activity and sport and how the sport sector can provide opportunities that they could enjoy. For these children, the social side of sport could be more important, and so sports need to provide participation opportunities focused on social as well as competitive involvement.


[^0]:    Unweighted numbers are provided with weighted percentages.

