Sport Participation Retention 2015 – 2018

Aggregation of nine sports

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Retention of players in Club-Based Sport

This report provides a comparison of player retention for the years 2015 to 2018. A player is defined as a registered member of a club or program affiliated with the relevant State Sporting Association in Victoria, who is aged between 4 and 100 years and resides in Victoria. The player data was analysed according to age and sex within Victoria, and compared to the retention of the combination of nine major sports: **Australian Football League, Basketball, Cricket, Football (Soccer), Gymnastics, Hockey, Netball, Swimming, and Tennis**. Two of the participating sports (Bowls and Golf) were unable to provide 2018 data, and another (Sailing) contained errors that made matching year to year impossible. As a result, the total number of sports included is nine.

The number of registered players with complete and valid data ranged from 751,012 in 2015 to 846,595 in 2018. Those whose age, gender or postcode was missing or invalid were excluded from the analysis, and adjustments to counts were made in postcodes that were partly allocated to an LGA outside Victoria (see the note on data accuracy on page 12 of this report). Table 1 shows the number of excluded players for the years 2015 to 2018.

This report presents various measures of retention between 2015 and 2018. The total number of years that were played, an individual's retention over the four year period, the pattern of their participation over this time, and a break-down of retention year to year. Players were tracked over the 2015-2018 time-period using their unique player ID. In sports where the unique player ID contained inconsistencies in different years, players were tracked using a combination of date of birth, gender & postcode.

Summary

- The majority of age groups had a retention rate (2015-2018) of around 30%.
- Males generally had a higher retention rate than females.
- There was a large percentage of players who departed and did not return to the sport within the four years (this ranged from 54-82%).

Table 1: Numbers[1,2] of registered players, 2015-2018, Victoria

Year	Players	% excluded*	Players with complete data[3]
2018	931,333	9.1	846,595
2017	949,547	9.5	859,137
2016	919,311	9.7	829,788
2015	846,963	11.3	751,012

[1] Aggregated over nine sports
[2]Players without details of gender, postcode or date-of birth were excluded
[3]Complete player numbers do not take into account the 'border effect' (see data accuracy note on page 12)

- The numbers of registered players remained relatively stable over the four years (2015-2018). The percentage of data with no valid date of birth, gender or postcode also remained constant for 2016-2018 after an improvement from the 2015 data (Table 1).

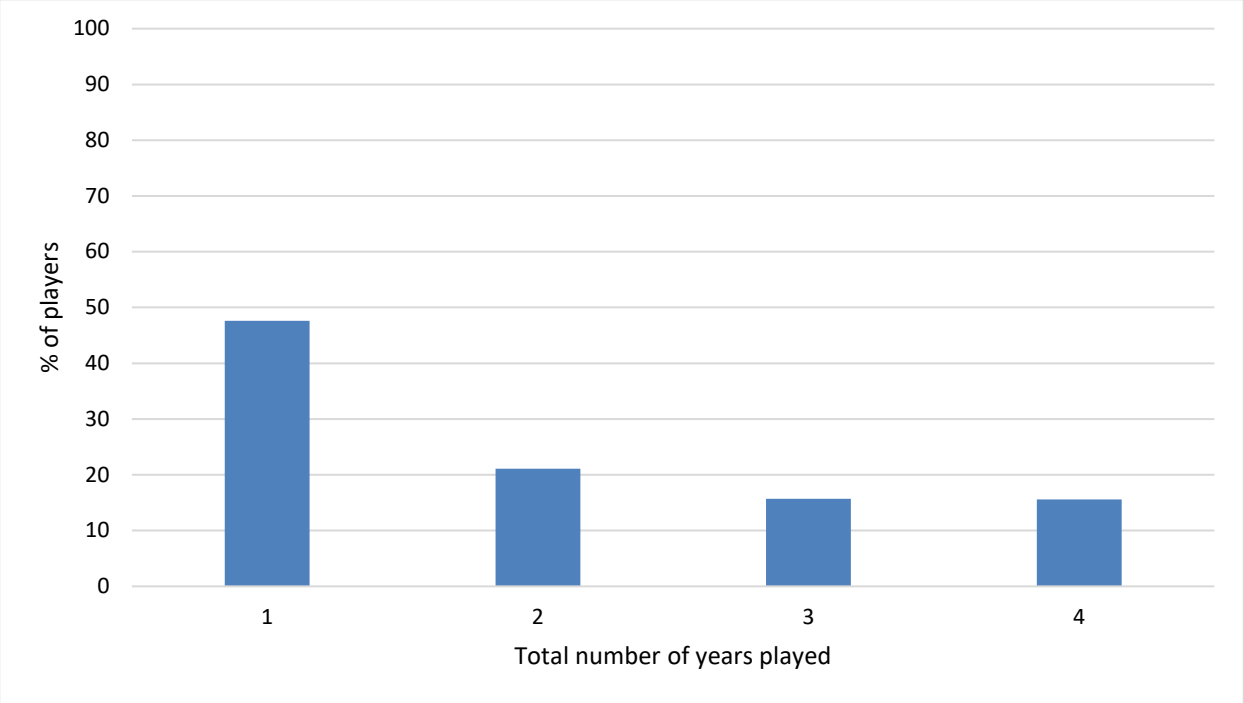


Figure 1. Total number of years played 2015-2018, Victoria: by age

- Figure 1 shows the total number of years played between 2015 and 2018 for Victoria. This includes players regardless of which year they started playing the sport.

- Not surprisingly, the combined nine sports had a higher percentage of players who played only one year at any point in the 2015-2018 time period (47.6%). Those playing a total of two years were under half of this value (21.1%), while those playing three and four years were similar (15.7% and 15.6% respectively).

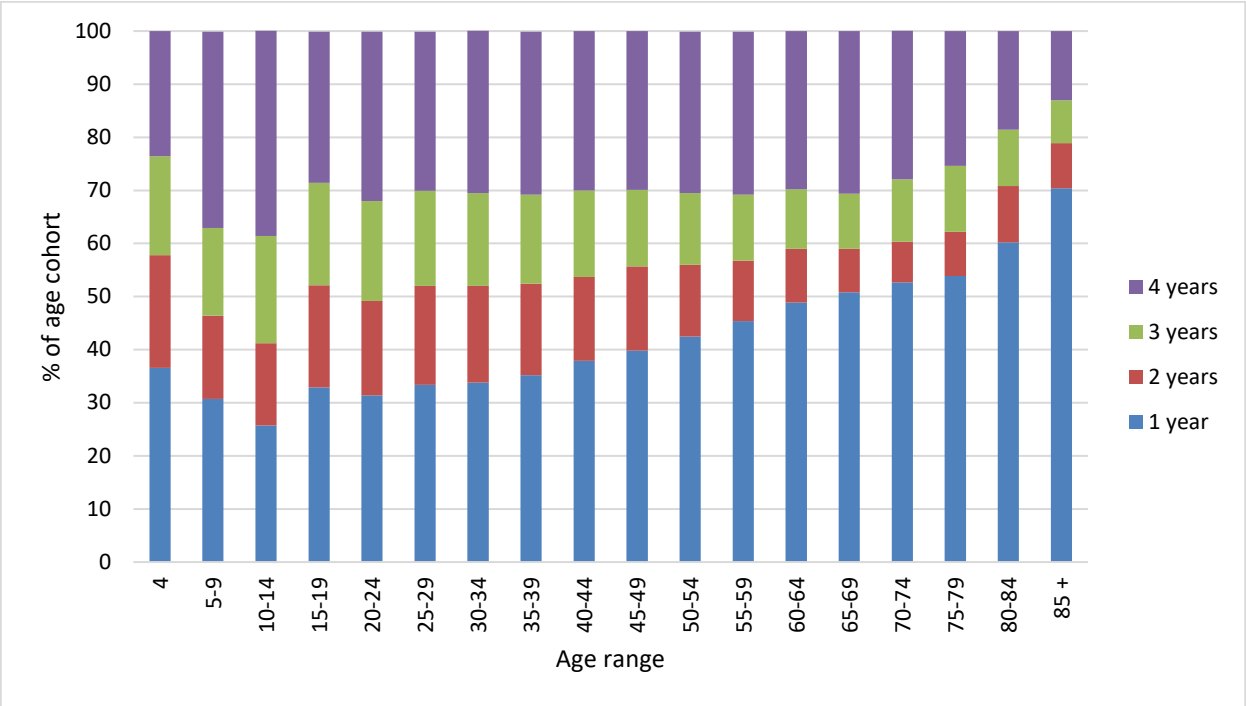


Figure 2. Total years played 2015-2018, nine sports: Victoria: by age

- Figure 2 shows the total number of years played between 2015 and 2018 for the nine sports combined, by age. Players must be present in 2015 to be included in this analysis.

- The combined nine sports had the highest percentage of players from the 2015 cohort involved for all four years in the 5-9 (37.0%) and 10-14 (38.7%) age groups. The 10-14 age group also had the lowest percentage of single year players (25.7%) (i.e. those only playing in 2015).

- Less than a quarter of participants (23.6%) aged 4 in 2015 played continually for four years.

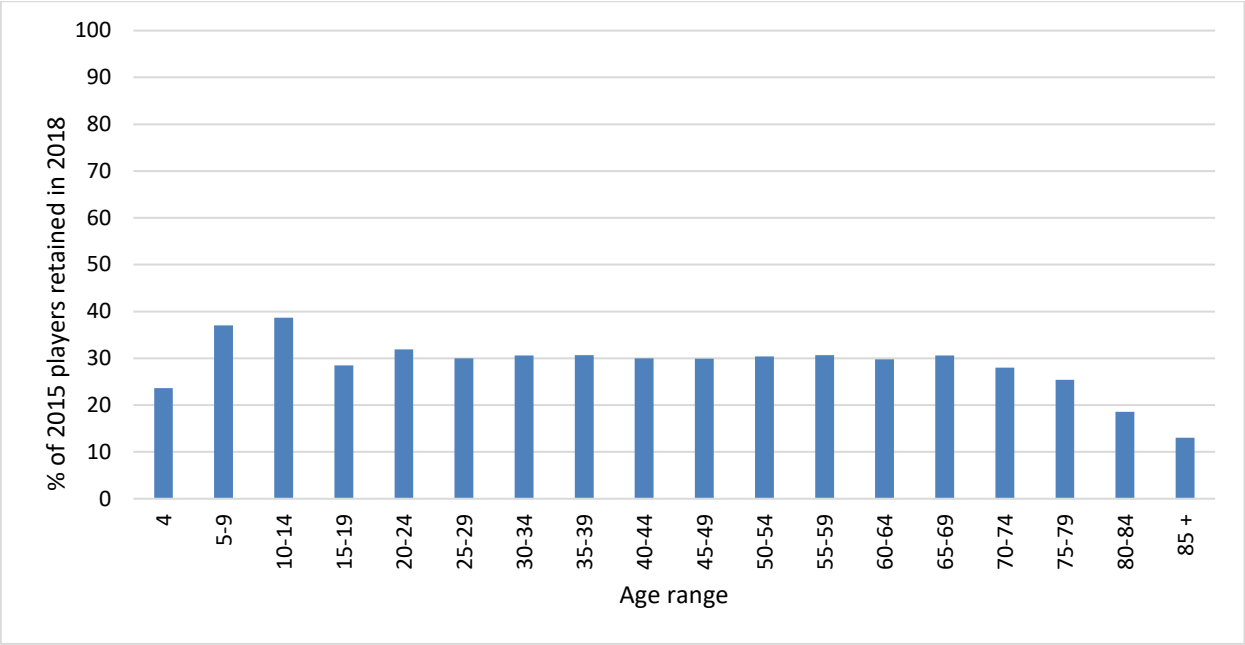


Figure 3. Player retention, 2015 - 2018, Victoria: by age

Table 2. Player retention, 2015 - 2018, Victoria: by sport and age

		Age range																	
		4	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40-44**	**45-49**	**50-54**	**55-59**	**60-64**	**65-69**	**70-74**	**75-79**	**80-84**	**85+**
Nine sports combined	n	3,708	72,463	82,161	29,509	18,835	12,398	8,963	6,559	5,863	4,578	3,050	1,741	1,036	773	420	185	51	35
	%	23.6	37	38.7	28.5	31.9	30	30.6	30.7	30	29.9	30.4	30.7	29.8	30.6	28	25.4	18.6	13

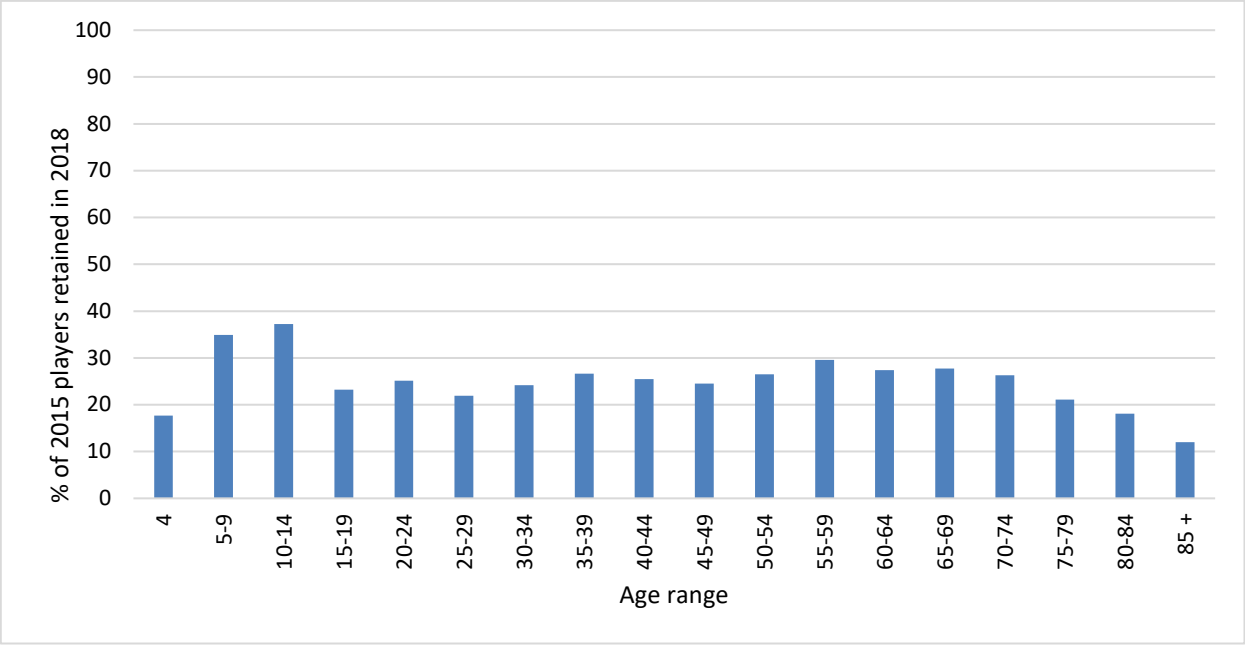


Figure 4. Female retention, 2015 - 2018, Victoria: by age

Table 3. Female retention, 2015 - 2018, Victoria: by sport and age

		Age range																	
		4	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40-44**	**45-49**	**50-54**	**55-59**	**60-64**	**65-69**	**70-74**	**75-79**	**80-84**	**85+**
Nine sports combined	n	889	24,259	30,286	8,305	4,203	2,444	1,985	1,909	1,830	1,298	947	647	390	276	176	66	23	25
	%	17.7	34.9	37.2	23.2	25.1	21.9	24.2	26.6	25.5	24.5	26.5	29.6	27.4	27.7	26.3	21.1	18.1	12

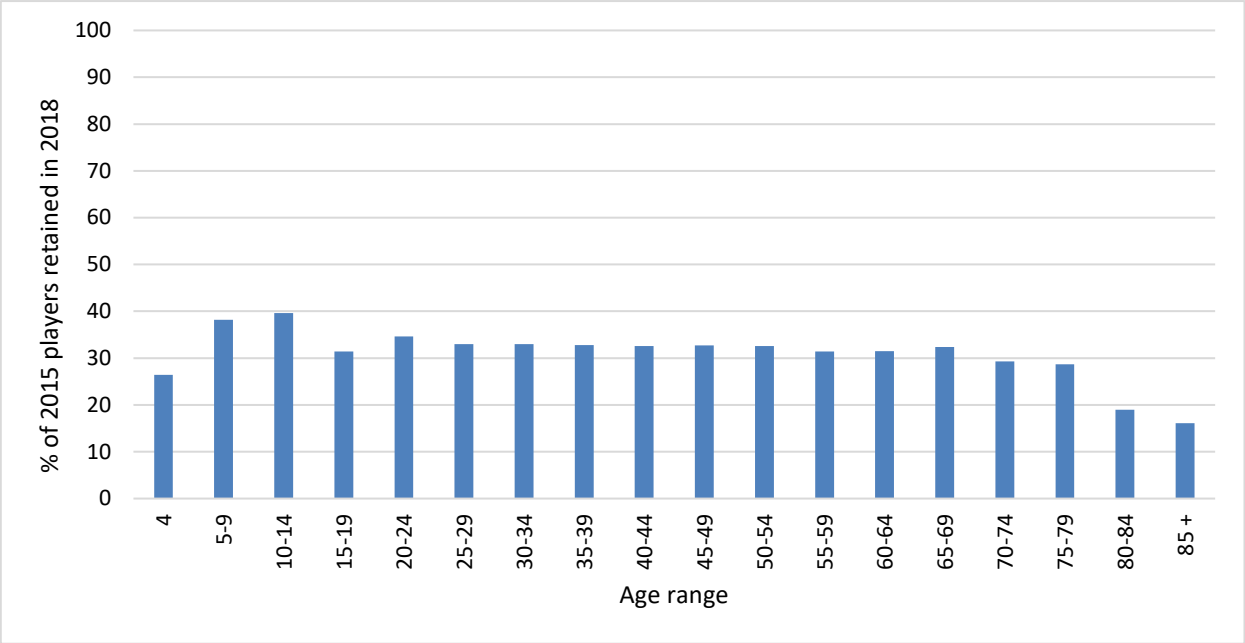


Figure 5. Male retention, 2015 - 2018, Victoria: by age

Table 4. Male retention, 2015 - 2018, Victoria: by sport and age

		Age range																	
		4	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35-39**	**40-44**	**45-49**	**50-54**	**55-59**	**60-64**	**65-69**	**70-74**	**75-79**	**80-84**	**85+**
Nine sports combined	n	2,819	48,204	51,875	21,204	14,632	9,954	6,978	4,650	4,033	3,280	2,103	1,094	646	497	244	119	28	10
	%	26.4	38.2	39.6	31.4	34.6	33	33	32.8	32.6	32.7	32.6	31.4	31.5	32.4	29.3	28.7	19	16.1

- Figure 3 shows the rate of retention across 2015 to 2018 by age. Players must be present in 2015 and play continuously until 2018 to be included in analysis.
- Figure 4 shows the rate of retention of females across 2015 to 2018 by age. Players must be present in 2015 and play continuously until 2018 to be included in analysis.
- Figure 5 shows the rate of retention of males across 2015 to 2018 by age. Players must be present in 2015 and play continuously until 2018 to be included in analysis.
- It should be noted that the higher retention in the older age ranges is related to the overall lower player numbers in these age groups.
- The majority of age groups had a retention rate of around 30% (Figure 3, Table 2).
- The combined nine sports had had a higher percentage of players starting in 2015 and retained until 2018 for the 5-9 (37.0%) and 10-14 (38.7%) age ranges (Figure 3, Table 2).
- The combined nine sports had had a higher percentage of female players starting in 2015 and retained until 2018 for the 5-9 (34.9%) and 10-14 (37.2%) age ranges (Figure 4, Table 3).
- The combined nine sports had had a higher percentage of male players starting in 2015 and retained until 2018 for the 5-9 (38.2%) and 10-14 (39.6%) age ranges (Figure 5, Table 4).
- The male retention rate was generally higher than the female retention rate (Figure 4 and 5).

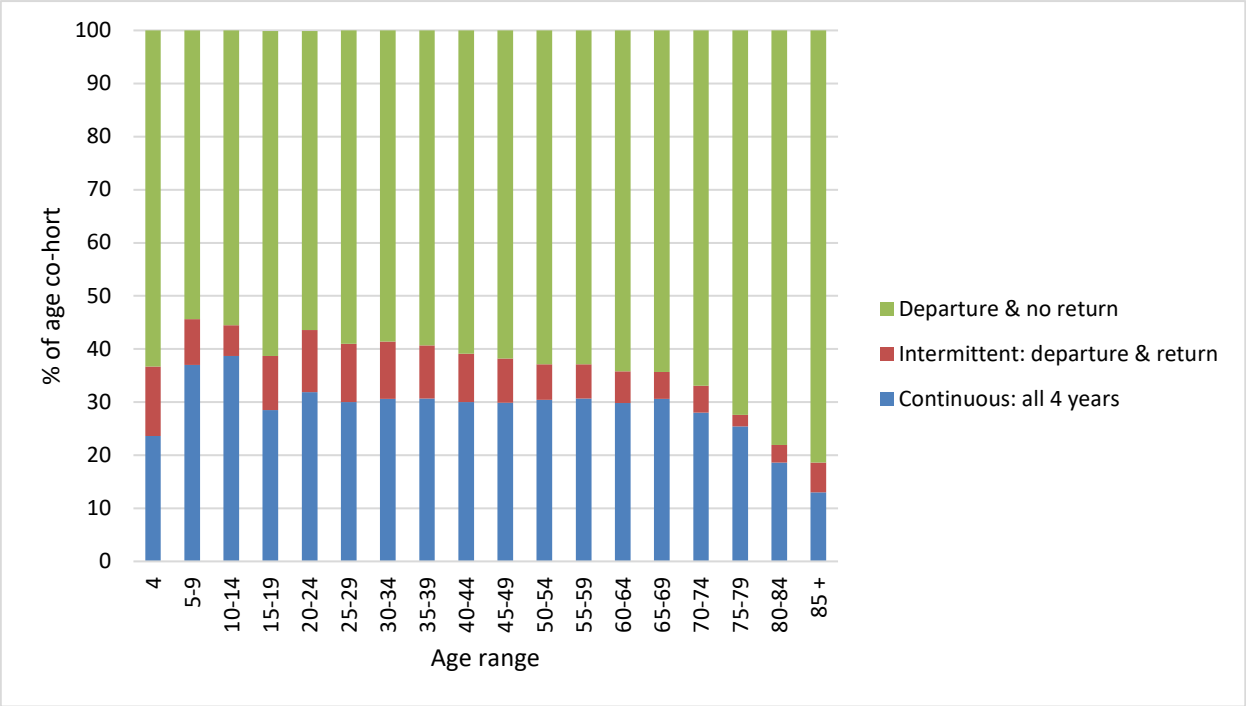


Figure 6. Patterns of retention, nine sports, 2015 - 2018, Victoria: by age

- Figure 6 shows patterns of retention 2015 to 2018 (ie the full four years) for the nine sports combined, by age. Players must be present in 2015 to be included in this analysis.

- The combined nine sports had the highest percentage of players involved in all four years for the 5-14 age range. The highest percentage of players who departed and did not return were from the 80-plus age range, while those with an intermittent playing pattern were more likely to be aged four years (13.1%), followed by those aged 20-24, 25-29 and 30-34 (11.7%, 11.0%, 10.8% respectively).

- Generally, the continuous retention rate was around 30%, and slightly lower for those aged 4 and slightly higher for those aged 5-14 years.

- Generally, there was a large percentage of players who departed and did not return to the sport within the four years (this ranged from 54-82%).

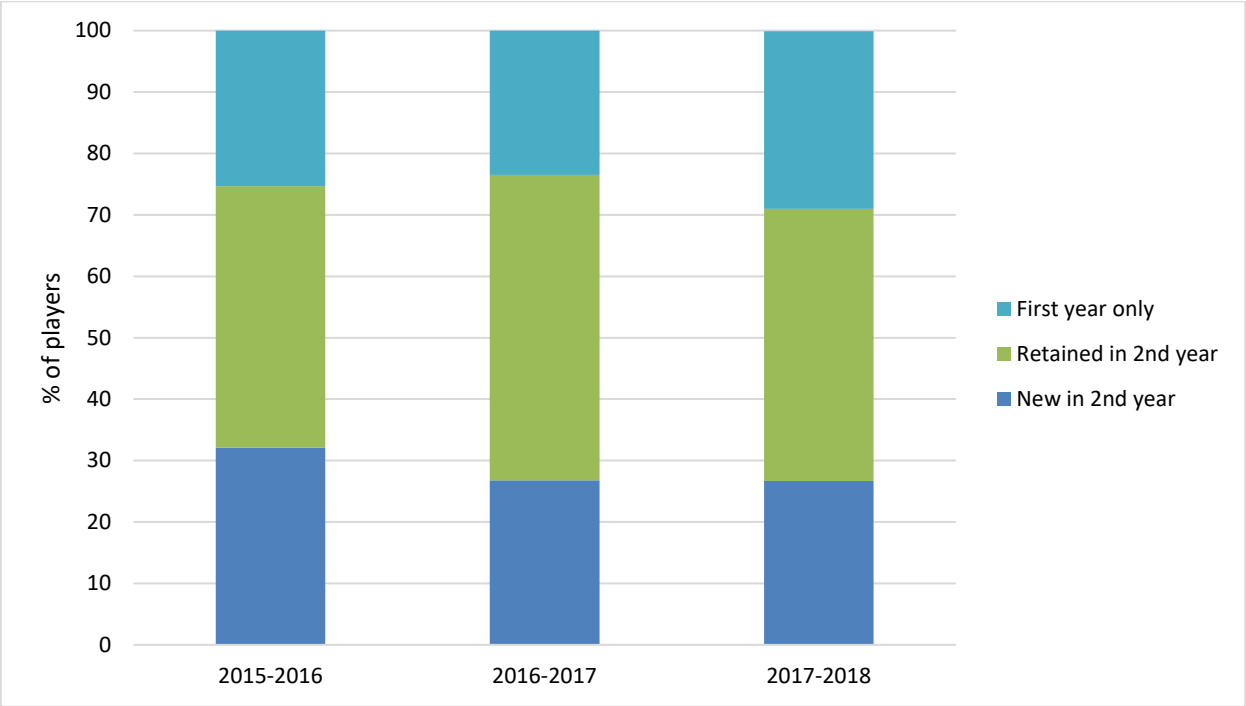


Figure 7. Retention, 2015 - 2018, Victoria: nine sports by year pair

- Figure 7 shows new and retained players in year-pairs (two years combined) from 2015 to 2018 (i.e. 2015 to 2016, 2016 to 2017, 2017 to 2018) for the nine sports combined. Analysis is based on players being present in either of the two years.

- The combined nine sports had higher percentages of players retained in the second year of all year pairs. The years 2016-2017 had a slightly higher percentage of players present in both years (49.7%) when compared to 2015-2016 and 2017-2018. More players only played the first year for the 2017-2018 pair (28.9%), while 2015-2016 had a higher percent who were new in the second year (32.1%).

- Generally, the pattern was consistent across the four years.

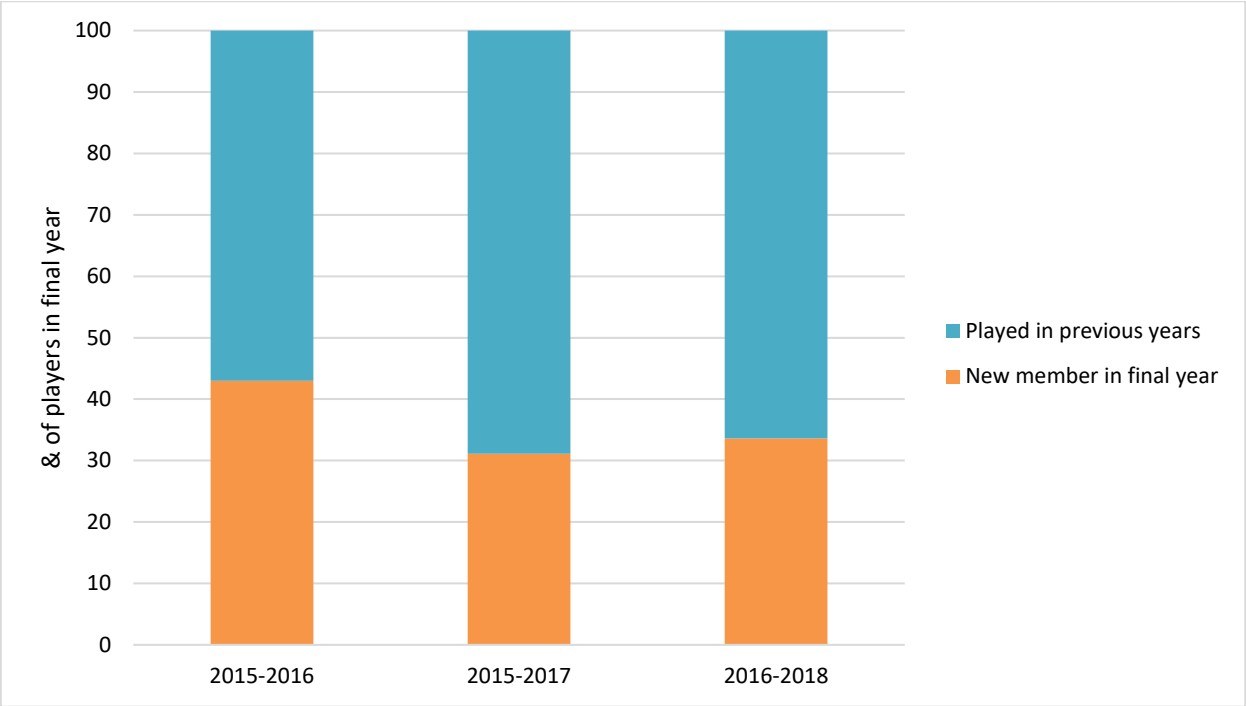


Figure 8. Retention, 2015 - 2018, Victoria: Nine sports combined by year group

- Figure 8 shows new and retained players in three-year groups from 2015 to 2018 (i.e. 2015 to 2016, 2015 to 2017, 2016 to 2018) for the nine sports combined. Analysis is based on players being present in the final year and determining if the player was present previously. Note: 2015 to 2016 shows only two years, as previous data is not available.

- The combined nine sports had higher percentages of players who were still playing after a number of years and this was the case for the three year groupings. The percentage of those who had played in previous years was highest in the 2015-2017 time-frame (68.9%). Those who were new players in the final year was highest in the 2015-2016 time-frame (43.0%).

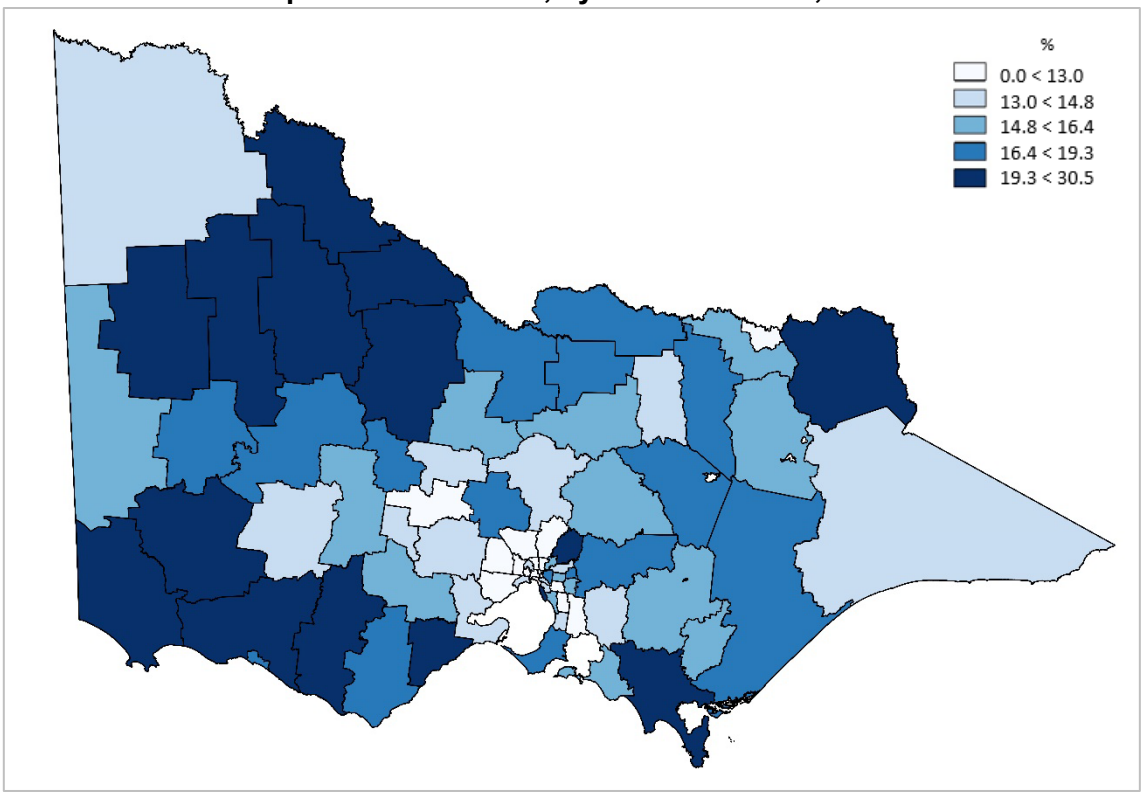
Table 5: Continuous involvement, 2015 to 2018, Victoria: by Local Government Area

LGA name	Retention Nine sports		LGA name	Retention Nine sports		LGA name	Retention Nine sports	
	Rate[1]	Rank[2]		Rate[1]	Rank[2]		Rate[1]	Rank[2]
Metropolitan – growth[3]			Nillumbik (S)	39.37	3	Hepburn (S)	33.31	25
Cardinia (S)	28.44	7	Port Phillip (C)	24.96	24	Hindmarsh (S)	35.92	13
Casey (C)	33.72	2	Stonnington (C)	31.24	20	Horsham (RC)	38.32	5
Hume (C)	36.46	1	Whitehorse (C)	37.79	5	Indigo (S)	28.67	39
Melton (S)	30.85	6	Yarra (C)	32.44	18	Latrobe (C)	32.39	30
Mitchell (S)	31.54	5	Yarra Ranges (S)	39.23	4	Loddon (S)	37.08	10
Whittlesea (C)	33.61	3	**Regional – growth[3]**			Macedon Ranges (S)	34.94	19
Wyndham (C)	32.32	4	Ballarat (C)	32.99	6	Mansfield (S)	30.81	34
Metropolitan – other[3]			Bass Coast (S)	33.21	5	Mildura (RC)	32.85	29
Banyule (C)	36.10	8	Baw Baw (S)	34.69	2	Moira (S)	29.47	36
Bayside (C)	32.39	17	Greater Bendigo (C)	33.97	3	Mount Alexander (S)	34.50	21
Boroondara (C)	35.13	9	Greater Geelong (C)	33.26	4	Moyne (S)	29.07	37
Brimbank (C)	29.16	22	Moorabool (S)	35.60	1	Murrindindi (S)	33.70	23
Darebin (C)	33.87	14	Surf Coast (S)	31.95	7	Northern Grampians (S)	36.63	11
Frankston (C)	34.12	13	**Regional – other[3]**			Pyrenees (S)	39.05	3
Glen Eira (C)	35.00	10	Alpine (S)	29.75	35	Queenscliffe (B)	36.04	12
Greater Dandenong (C)	28.24	23	Ararat (RC)	35.01	18	South Gippsland (S)	35.05	16.5
Hobsons Bay (C)	35.05	11	Benalla (RC)	33.16	27	Southern Grampians (S)	33.30	26
Kingston (C)	37.15	6	Buloke (S)	35.81	14	Strathbogie (S)	31.53	31
Knox (C)	41.42	1	Campaspe (S)	33.81	22	Swan Hill (RC)	35.05	16.5
Manningham (C)	36.28	7	Central Goldfields (S)	38.71	4	Towong (S)	29.09	38
Maribyrnong (C)	31.58	19	Colac-Otway (S)	37.81	8	Wangaratta (RC)	37.29	9
Maroondah (C)	39.66	2	Corangamite (S)	39.55	2	Warrnambool (C)	31.02	33
Melbourne (C)	23.77	25	East Gippsland (S)	33.14	28	Wellington (S)	34.71	20
Monash (C)	33.01	15	Gannawarra (S)	44.56	1	West Wimmera (S)	33.73	24
Moonee Valley (C)	34.43	12	Glenelg (S)	37.96	6	Wodonga (RC)	26.36	40
Moreland (C)	30.63	21	Golden Plains (S)	35.46	15	Yarriambiack (S)	38.00	7
Mornington Peninsula (S)	32.74	16	Greater Shepparton (C)	31.09	32			

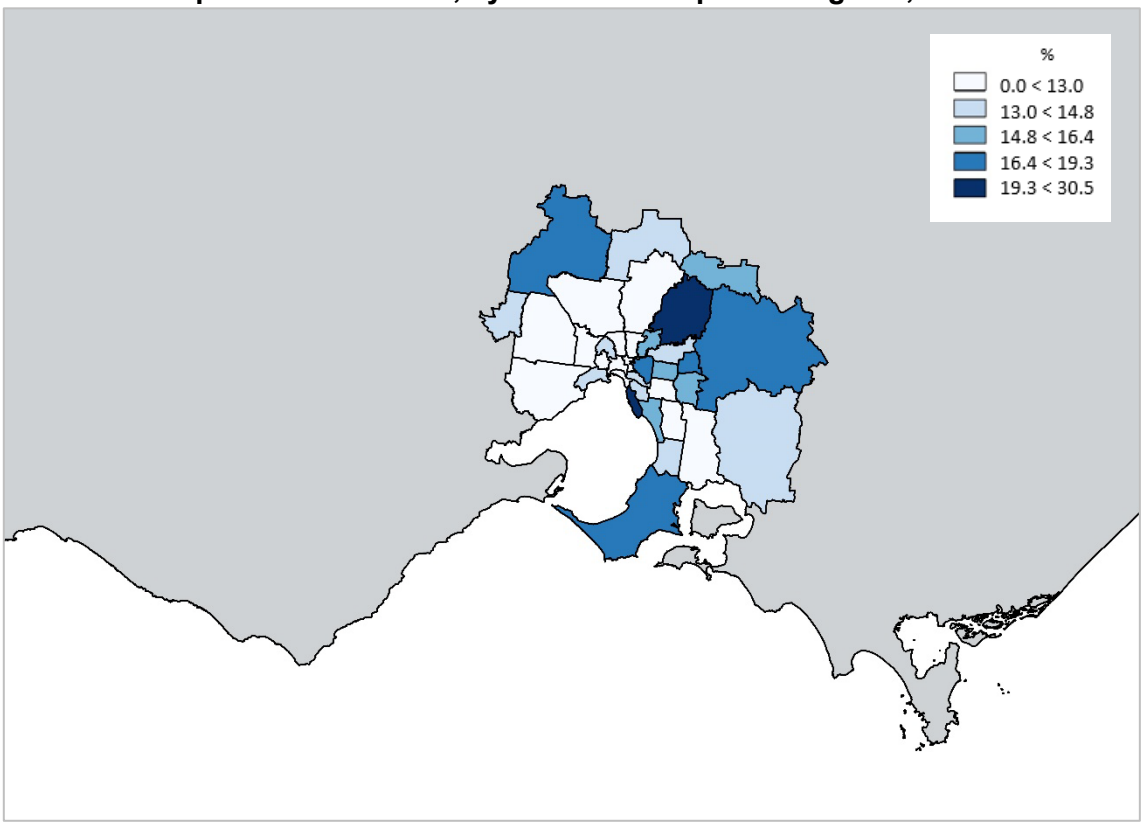
[1] Percentage of players retained from 2015 through to 2018
[2] In descending order of participation rate within each region
[3] Victorian regions defined on page 11 of this report.

- There was considerable variation in retention rates (those playing the four years 2015-2018) across Victorian LGAs, and between LGAs within the four designated regions (Table 5). The lowest retention was 23.77% in the City of Melbourne, in Metropolitan – Other. The highest retention for was 44.56% in Gannawarra Shire, in Regional – Other.

Map 1: Retention rate, by LGA in Victoria, 2018



Map 2: Retention rate, by LGA in Metropolitan regions, 2018



- Map 1 provides a display of retention of players 2015-2018 by LGA in Victoria. There was generally higher retention in western areas of Victoria. Map 2 provides a display of retention by LGA within metropolitan Melbourne for 2018. There was generally higher retention in the outer eastern metropolitan LGAs.

Definition of the four Sport Participation Research Project (SPRP) regions

For the purpose of regional breakdowns included in standard reports prepared under the Sport Participation Research Project (SPRP), four regions have been defined by the SPRP research team in consultation with Sport and Recreation Victoria and VicHealth. Each region consists of a group of local government areas (LGAs), listed here in alphabetical order. B =Borough, C = City, RC = Rural City, S = Shire.

There are two driving principles behind the designation of these four regions:

- The patterns of sport participation in metropolitan and non-metropolitan areas are known to differ substantially.
- Within both metropolitan and non-metropolitan areas, projected growth in population is very uneven.

The Metropolitan - Growth region consists of the seven LGAs containing the four growth corridors designated by the Metropolitan Planning Authority. Six of the seven are within the current Melbourne Metropolitan Area designated by the State Government. The seventh, Mitchell Shire, is currently designated Non-metropolitan.

The Regional - Growth region consists of the LGAs containing the three largest regional centres, Geelong, Ballarat and Bendigo, together with four LGAs which are expected, according to State Government population projections, to experience high population growth during the period up to 2021. Each of these four LGAs is on the outer periphery of one or more of Melbourne, Geelong and Ballarat.

The Metropolitan – Other region consists of the remaining 25 LGAs within the designated Melbourne Metropolitan Area.

The Regional – Other region consists of the remaining 40 LGAs outside the designated Melbourne Metropolitan Area.

Metropolitan – Growth (7)
Cardinia (S)
Casey (C)
Hume (C)
Melton (C)
Mitchell (S)
Whittlesea (C)
Wyndham (C)

Metropolitan – Other (25)
Banyule (C)
Bayside (C)
Boroondara (C)
Brimbank (C)
Darebin (C)
Frankston (C)
Glen Eira (C)
Greater Dandenong (C)
Hobsons Bay (C)
Kingston (C)
Knox (C)
Manningham (C)
Maribyrnong (C)
Maroondah (C)
Melbourne (C)
Monash (C)
Moonee Valley (C)
Moreland (C)
Mornington Peninsula (S)
Nillumbik (S)
Port Phillip (C)
Stonnington (C)
Whitehorse (C)
Yarra (C)
Yarra Ranges (S)

Regional – Growth (7)
Ballarat (C)
Bass Coast (S)
Baw Baw (S)
Greater Bendigo (C)
Greater Geelong (C)
Moorabool (S)
Surf Coast (S)

Regional – Other (40)
Alpine (S)
Ararat (RC)
Benalla (RC)
Buloke (S)
Campaspe (S)
Central Goldfields (S)
Colac-Otway (S)
Corangamite (S)
East Gippsland (S)
Gannawarra (S)
Glenelg (S)
Golden Plains (S)
Greater Shepparton (C)
Hepburn (S)
Hindmarsh (S)
Horsham (RC)
Indigo (S)
Latrobe (C)
Loddon (S)
Macedon Ranges (S)
Mansfield (S)
Mildura (RC)
Moira (S)
Mount Alexander (S)
Moyne (S)
Murrindindi (S)
Northern Grampians (S)
Pyrenees (S)
Queenscliffe (B)
South Gippsland (S)
Southern Grampians (S)
Strathbogie (S)
Swan Hill (RC)
Towong (S)
Wangaratta (RC)
Warrnambool (C)
Wellington (S)
West Wimmera (S)
Wodonga (RC)
Yarriambiack (S)

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Data accuracy

This report is based on 2015-2018 player registration data provided by nine sports in Victoria. Data screening checks led to some anomalies being identified in the player registration data, and to the extent that it was possible these were resolved after consultation with the separate sports. Counts of players in local government areas (LGAs) are estimates based on the fractional allocation of residential postcodes to LGAs using correspondence tables published by the Australian Bureau of Statistics. Some postcode areas cross state borders, requiring mathematical 'border effect' adjustments. The results in this report are based on the datasets as they stand at the date of publication.

For this report, the postcode to LGA correspondences are updated by the Australian Bureau of Statistics, and in this report we use the most recent correspondences available for the point in time best aligned to each participant data year.

In summary, we have used the most accurate and up-to-date data available at the time of development and publication of this report.