Section 9 – Queensland children with lower, medium and higher levels of physical activity



Background on children with different levels of physical activity participation

As part of data analysis, all physical activity frequency variables were summed to form the total times of physical activity for each child per annum. This data was then inspected and broken down into three groups, each representing approximately one third of children (i.e., based on terciles, or as close as possible to terciles).

These 'segments' were then profiled to identify the characteristics of the low, medium and high physical activity groups. It should be noted in this context that it was not possible to identify the precise minutes of physical activity for each activity measured, as this was only calculated for the top three physical activities for each respondent.

The profiling is presented as follows:

- Demographic profile of low, medium and high physical activity segments in Queensland
- Screen time profile of low, medium and high physical activity segments in Queensland
- Physical literacy profile of low, medium and high physical activity segments in Queensland
- Profile of top physical activities of low, medium and high physical activity segments in Queensland
- Profile of physical activity barriers for low, medium and high physical activity segments in Queensland
- Distribution of low, medium and high Physical Activity segments in Queensland

The cut points for the terciles based on the frequency of physical activity of children were as follows:

- Low physical activity (bottom tercile or the lowest third) less than or equal to 572 times physical activity was undertaken per annum.
- Medium physical activity (middle tercile or the middle third) 572 to 962 times that physical activity was undertaken per annum.
- High physical activity (top tercile or the top third) 963 times or over that physical activity was undertaken per annum.

Demographic profile of low, medium and high physical activity segments in Queensland

The demographic profile of the three physical activity segments is in Table 68. There were no significant trends for children with disabilities, children of LOTE backgrounds, mobile only households and employment status.

However, while most differences were relatively small, findings showed the following significant trends.

Trends by age and gender

- There was a significantly <u>higher</u> percentage of children 5–8 years and 9–11 years in the Medium and Higher Physical Activity segment, compared to the low Physical Activity segment.
 - 5–8 year old children with Medium Physical Activity (OR=1.6, p<.001)
 - o 5-8 year old children with High Physical Activity (OR=2.1, p<.001)
 - o 9-11 year old children with Medium Physical Activity (OR=1.5, p<.01)
 - 9–11 year old children with High Physical Activity (OR=1.7, p<.001)
- There was a significantly <u>lower</u> percentage of children 15–17 years in the Medium and Higher Physical Activity segment, compared to the low Physical Activity segment.
 - 15–17 year old children with Medium Physical Activity (OR=0.5, p<.001) and High Physical Activity (OR=0.3, p<.001)
- There was a significantly <u>higher</u> percentage of boys in the Higher Physical Activity segment, compared to the low Physical Activity segment (OR=1.4,p<.01).</p>

Trends for Aboriginal and/or Torres Strait Islander children

There was a significantly <u>higher</u> percentage of Aboriginal and/or Torres Strait Islander children in the High Physical Activity segment, compared to the low Physical Activity segment (OR=2.2, p<.01).</p>

Parent/carer age

There was a significantly <u>higher</u> percentage of children with parents/carers 25–34 years in the Medium physical activity segment (OR=1.5, p<.05) and in the High Physical Activity segment (OR=2.3, p<.001), compared to the low Physical Activity segment.</p>

Parent/carer education

There was a significantly <u>lower</u> percentage of children in the High Physical Activity segment of parents/carers with a Bachelor degree or above, than the Low Physical Activity segment (OR=0.7, p<.01).</p>

Children in the household

There was a significantly <u>higher</u> average number of children in the household in the High Physical Activity segment, compared to the Low Physical Activity segment (p<.001).</p>

Table 68. Low, medium and high physical activity segments in Queensland children 5–17 years – Demographic profile

			,		p, cca a	J, 20g.	nents in Que			, , , ou			_		
Variable			n with a lo al activity				Children wi					Children of physica	with a hig al activity		
	N	%	SE	LCL	UCL	N	%	SE	LCL	UCL	N	%	SE	LCL	UCL
Age of child															
5–8yrs	441	23.6	1.5	20.7	26.7	590	32.7	1.9	29.2	36.5	679	39.3	1.9	35.7	43.1
9–11yrs	355	18.2	1.3	15.8	20.9	406	25.5	1.7	22.2	29.1	488	26.9	1.7	23.7	30.3
12-14yrs	452	24.6	1.6	21.6	27.8	375	21.3	1.4	18.6	24.3	328	20.6	1.6	17.5	24
15–17yrs	607	33.6	1.7	30.3	37.1	330	20.4	1.6	17.4	23.8	222	13.2	1.3	10.9	15.9
Gender of child															
Воу	871	47	1.8	43.5	50.5	896	51.4	2	47.6	55.2	946	55.7	1.9	51.9	59.4
Girl	984	53	1.8	49.5	56.6	805	48.6	2	44.8	52.4	771	44.3	1.9	40.6	48.1
Whether child has	a disabilit	ty													
Yes	220	13.4	1.3	11.1	16.2	143	11.1	1.5	8.5	14.4	147	10.7	1.2	8.5	13.4
No	1633	86.5	1.3	83.8	88.9	1555	88.8	1.5	85.5	91.4	1566	89.2	1.3	86.5	91.4
Prefer not to answer	2	0	0	0	0.2	3	0.1	0.1	0	0.4	4	0.2	0.1	0	0.9
Aboriginal and/or	Torres Str	ait Islander	•												
Not Aboriginal and/or Torres Strait Islander background	1782	96	0.7	94.3	97.2	1615	95.7	0.6	94.2	96.8	1557	91.7	1	89.6	93.5
Aboriginal and/or Torres Strait Islander background	64	3.7	0.7	2.5	5.5	75	3.8	0.6	2.7	5.2	145	7.5	0.9	5.9	9.6

Variable			n with a lo al activity				Children wi of physical			-		Children of physica	with a hig al activity		
	N	%	SE	LCL	UCL	N	%	SE	LCL	UCL	N	%	SE	LCL	UCL
Don't know or refused	9	0.3	0.1	0.1	0.6	11	0.5	0.2	0.2	1.1	15	0.7	0.2	0.4	1.4
Speaks a language	other tha	an English	at home					'	'				'	•	
Not LOTE	1571	86.7	1.1	84.4	88.7	1478	88	1.1	85.6	90	1499	87.9	1.2	85.3	90.1
LOTE	283	13.3	1.1	11.3	15.6	222	12	1.1	10	14.4	215	11.9	1.2	9.7	14.5
Don't know or refused	1	0	0	0	0.1	1	0	0	0	0.1	3	0.2	0.1	0	0.9
Age of parent/care	r							•					•		
18–24	4	0.2	0.1	0.1	0.6	0	0	0	0	0	2	0	0	0	0.2
25–34	154	7.2	0.8	5.8	8.9	184	10.3	1.1	8.3	12.7	241	15.2	1.4	12.6	18.1
35–44	864	52.6	1.8	49.1	56.1	894	53.2	2	49.4	57	939	55	1.9	51.2	58.8
45–54	763	36	1.7	32.8	39.3	576	33.6	1.8	30.1	37.3	488	27.5	1.7	24.2	31
55–64	41	1.9	0.5	1.2	3	31	1.3	0.3	0.8	2.1	36	1.1	0.4	0.6	2.1
65 years or older	24	1.8	0.6	0.9	3.4	10	1.3	0.9	0.3	5.4	8	0.8	0.4	0.3	2
Refused	5	0.4	0.2	0.1	1	5	0.3	0.2	0.1	1	3	0.5	0.4	0.1	2.4
Highest level of co	mpleted e	ducation		1		-		1	1		1		1	1	1
Less than Grade 10 (including only Certificate I or II)	40	2.5	0.6	1.5	4.1	28	1.8	0.4	1.1	2.8	45	2.9	-0.7	1.8	4.6
Grade 10	206	10.5	1.1	8.6	12.8	187	11.8	1.4	9.3	15	250	14.7	1.4	12.1	17.6
Grade 12	368	21.6	1.6	18.7	24.8	277	16.8	1.5	14.1	20	318	18	1.5	15.2	21.2

Variable			n with a lo				Children wit of physical					Children of physica	with a hig al activity		
	N	%	SE	LCL	UCL	N	%	SE	LCL	UCL	N	%	SE	LCL	UCL
Certificate III or IV	247	15.1	1.4	12.6	18	262	15.2	1.3	12.8	18	301	19.8	1.7	16.7	23.2
Diploma or Advanced Diploma	279	16.2	1.4	13.7	19.1	294	17.8	1.5	15.1	20.9	291	17.5	1.4	14.9	20.5
Bachelor degree or above	705	33.7	1.6	30.7	37	648	36.3	1.8	32.7	39.9	500	26.7	1.6	23.7	30.1
Don't Know	2	0.1	0.1	0	0.3	3	0.1	0.1	0	0.3	3	0.1	0.1	0	0.4
Refused	8	0.3	0.1	0.1	0.7	2	0.2	0.2	0	1.4	9	0.3	0.1	0.1	0.6
Current employmen	nt status														
Employed for more than 35 hours a week	961	49	1.8	45.5	52.5	892	49.5	1.9	45.7	53.3	828	46.2	1.9	42.4	50
Employed less than 35 hours a week	423	23.8	1.6	20.8	27.1	377	22.1	1.7	19	25.6	401	23.5	1.7	20.4	27
Self-employed	168	8.2	0.9	6.6	10.1	184	10.3	1.1	8.2	12.7	193	9	0.9	7.4	11
Unemployed, looking for full time work, more than 35 hours a week	19	0.8	0.3	0.4	1.5	24	1.7	0.5	1	3.1	20	0.9	0.3	0.5	1.6
Unemployed, looking for part time work, less than 35 hours a week	16	0.8	0.3	0.4	1.7	12	0.9	0.3	0.4	1.8	16	1.2	0.5	0.5	2.5
Not employed, and not looking for work	28	2	0.5	1.2	3.3	21	1.2	0.4	0.6	2.4	32	2.8	0.9	1.5	5.1

Variable			n with a lo al activity				Children wit of physical					Children of physica	ı with a hiç al activity	•	
	N	%	SE	LCL	UCL	N	%	SE	LCL	UCL	N	%	SE	LCL	UCL
Student	35	1.9	0.4	1.2	2.9	26	1.6	0.4	1	2.5	29	1.9	0.5	1.1	3
Pensioner or welfare recipient	25	1.5	0.5	0.8	2.8	18	1.7	0.6	0.8	3.4	20	1.3	0.4	0.7	2.4
Retired	24	2	0.6	1.1	3.6	14	1.4	1.0	0.4	5.2	9	0.6	0.3	0.2	1.8
Domestic duties	121	7.8	1.1	5.9	10.3	109	8.1	1.2	6.1	10.8	135	10.2	1.3	7.9	13
Other	26	1.8	0.5	1.1	3	21	1	0.3	0.6	1.8	28	2.3	0.6	1.3	3.9
Refused	9	0.5	0.2	0.2	1.1	3	0.4	0.2	0.1	1.3	6	0.2	0.1	0.1	0.4
Mobile only house	hold														
Not a mobile only household	1322	64.8	1.8	61.2	68.2	1184	65.3	1.8	61.6	68.8	1168	61.6	1.9	57.7	65.3
Mobile only household	533	35.2	1.8	31.8	38.8	517	34.7	1.8	31.2	38.4	549	38.4	1.9	34.7	42.3
Household structu	ire												'	•	
A couple with children at home full time	1349	72.5	1.6	69.2	75.5	1287	73.4	1.8	69.6	76.8	1255	71.2	1.7	67.7	74.4
A couple with children at home some of the time	126	5.4	0.7	4.3	6.9	106	6.2	1.2	4.1	9.1	110	5.8	0.9	4.3	7.7
A single parent/carer with children at home full time	220	13.2	1.3	10.8	15.9	179	11.5	1.3	9.3	14.3	244	15.5	1.3	13.1	18.2

Variable			n with a lo al activity				Children wit of physical			=		Children of physica	with a high		
	N	%	SE	LCL	UCL	N	%	SE	LCL	UCL	N	%	SE	LCL	UCL
A single parent/carer with children at home some of the time	144	8.1	1	6.4	10.3	114	8.4	1.1	6.5	10.8	86	5.9	0.9	4.3	8
Live in carers with children either full or part of the time	10	0.4	0.2	0.2	1.1	8	0.3	0.2	0.1	1	14	0.9	0.4	0.4	2.1
Extended family or other household (e.g., Grandparents, other relatives, friends living together)	6	0.3	0.1	0.1	0.8	7	0.2	0.1	0.1	0.6	8	0.7	0.3	0.3	1.8
Total children in th	e househ	old						,						•	
Mean children in the household	1855	2.3	0	2.2	2.3	1701	2.2	0	2.2	2.2	1717	2.5	0	2.4	2.5

Question: What is the age and gender of the child or children 5–17 in your household? Does (Child) have a disability? Are you of Aboriginal or Torres Strait Islander origin? Do you speak a language other than English at home? May I also confirm your age? If refused: No worries, could you tell me if your age falls into any of these bands? What is your highest level of completed education? May I ask your current employment status? Which best describes your household? How many land telephone lines in your household? How many active mobiles do you receive calls on? Total children in household recorded by CATI system (Base: All parents/carers with a child 5–17 years)

Screen time profile of low, medium and high physical activity segments in Queensland

A screen time profile of segments is in Figure 58 and Table 69. Findings showed that children in the High Physical Activity segment and Medium Physical Activity segment spent a significantly <u>lower</u> amount of minutes on screens for school work, leisure, entertainment and other reasons and in total, compared to the Low Physical Activity segment (each p<.001).

It is also notable that 56.2% of the Low Physical Activity segment spent over 2 hours per day on screens, compared to 34.9% of the Medium Physical Activity segment and 29.2% of the High Physical Activity segment.

This general trend also held for children in all age groups It is interesting to note that the 15–17 year old Low Physical Activity segment spent a particularly high amount of time on screens.

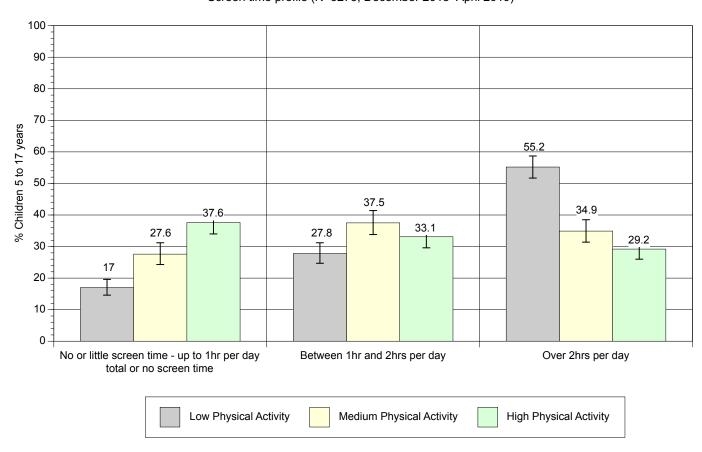
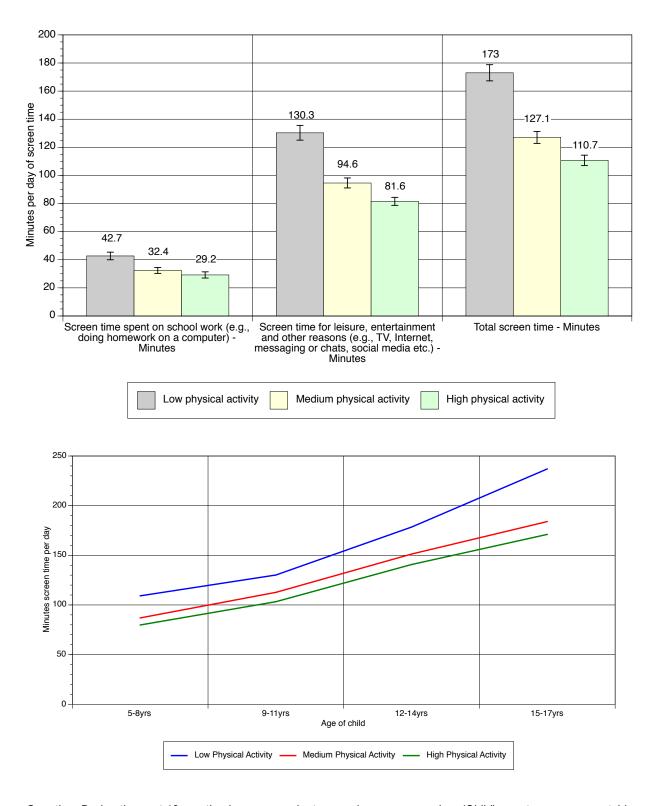


Figure 58. Low, medium and high physical activity segments in Queensland children 5–17 years – Screen time profile (N=5273, December 2018–April 2019)



Question: During the past 12 months, how many minutes per day on average has (Child) spent on screens outside school hours – like TV, tablets, video games and computers? Could you break this into screen time spent on school work and screen time for leisure, entertainment and other reasons? (e.g., TV, Internet, messaging or chats, social media etc.). (Base: All parents/carers with a child aged 5–17 years)

Children with a low level of physical activity (N=1855), Children with a medium level of physical activity (N=1701), Children with a high level of physical activity (N=1717)

Table 69. Low, medium and high physical activity segments in Queensland children 5–17 years – Screen time profile (N=5273, December 2018–April 2019)

Time spent on screens by children	_			ow level y (N=185					nedium le ity (N=17			hildren v f physica			
·	N	%	SE	LCL	UCL	N	%	SE	LCL	UCL	N	%	SE	LCL	UCL
Screen time on school work					•							•			
No screen time on school work	623	35.1	1.7	31.7	38.5	624	37.2	1.9	33.5	41.1	799	43.9	1.9	40.2	47.6
Up to 1hr per day screen time on school work	884	47.8	1.8	44.3	51.3	877	52.8	1.9	48.9	56.6	788	47.6	1.9	43.8	51.4
More than 1hr per day screen time on school work	348	17.1	1.4	14.6	20	200	10	1.0	8.3	12	130	8.5	1.1	6.6	10.9
Screen time on other activities															
No screen time on other activities	55	2.7	0.5	1.9	3.9	42	2.4	0.6	1.5	3.8	40	2.9	0.6	1.9	4.4
Up to 1hr per day screen time on other activities	655	32.7	1.6	29.6	36	855	49.1	1.9	45.3	53	963	57.3	1.9	53.6	60.9
Between 1 and 2 hrs of screen time on other activities	589	33.4	1.7	30.1	36.9	527	32.4	1.9	28.8	36.2	501	28.6	1.6	25.4	31.9
More than 2hrs of screen time on other activities	556	31.1	1.7	28	34.5	277	16.1	1.4	13.6	18.9	213	11.2	1.1	9.2	13.6
Total screen time					,							•			
No or little screen time – up to 1hr per day total or no screen time	347	17	1.3	14.6	19.6	483	27.6	1.8	24.3	31.2	668	37.6	1.9	34	41.4
Between 1hr and 2hrs per day	486	27.8	1.7	24.7	31.2	619	37.5	1.9	33.8	41.4	550	33.1	1.9	29.6	36.9
Over 2hrs per day	1022	55.2	1.8	51.7	58.7	599	34.9	1.8	31.4	38.5	499	29.2	1.7	26	32.7

Time spent on screens by children		_	ow leve sical ac	=				edium nysical	level activity				gher leve sical act		
	N	Mean	SE	LCL	UCL	N	%	SE	LCL	UCL	N	%	SE	LCL	UCL
Screen time in Minutes															
Screen time spent on school work (e.g., doing homework on a computer) – Minutes	1855	42.7	1.4	40	45.4	1701	32.4	1.1	30.3	34.5	1717	29.2	1.1	27	31.4
Screen time for leisure, entertainment and other reasons (e.g., TV, Internet, messaging or chats, social media etc.) – Minutes	1855	130.3	2.7	125.1	135.6	1701	94.6	1.8	91.1	98.2	1717	81.6	1.4	78.7	84.4
Total screen time – Minutes	1855	173	2.9	167.3	178.8	1701	127.1	2.2	122.8	131.3	1717	110.7	1.9	107	114.4

Question: During the past 12 months, how many minutes per day on average has (Child) spent on screens outside school hours – like TV, tablets, video games and computers? Could you break this into screen time spent on school work and screen time for leisure, entertainment and other reasons? (e.g., TV, Internet, messaging or chats, social media etc.). (Base: All parents/carers with a child aged 5–17 years). Children with a low level of physical activity (N=1855), Children with a medium level of physical activity (N=1701), Children with a higher level of physical activity (N=1717)

Physical literacy profile of low, medium and high physical activity segments in Queensland

The physical literacy profile of Physical Activity segments is in Figure 59 and Table 70. Compared to Low Physical Activity segments, Medium and High Physical Activity segments indicated stronger agreement with all attitudes (each p<.001).

Children were reported by parents/carers to be significantly more likely to understand the importance of being physically active, were more likely to report encouraging their child to be physically active and parents/carers were also more likely to report that their child had enough experience in physical movement to feel confident to participate in physical activity (an indicator of physical literacy).

In addition, the same trend generally applied within all age groups of children. That is, regardless of age, children in the High Physical Activity segment were reported by their parents as generally being more physically literate and showed stronger agreement with the attitudes presented.

While mean differences may be small, it should be noted that measurement error sometimes occurs in scales with a high susceptibility to social desirability. As such, while the mean difference may be small, it may potentially also represent a much larger real difference between segments. This would also benefit from further investigation.

This may highlight the value of building children's understanding of the importance of physical activity, getting parents to encourage children to be active and in increasing children's confidence in physical movement to provide a foundation for their physical activity participation.

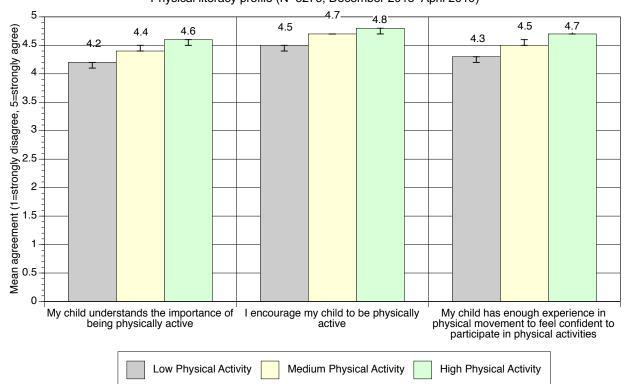


Figure 59. Low, medium and high physical activity segments in Queensland children 5–17 years – Physical literacy profile (N=5273, December 2018–April 2019)

Question: How much do you agree or disagree with the following (1 is strongly disagree, 5 is strongly agree and 3 is neutral) (Base: All parents/carers with a child aged 5–17 years). Children with a low level of physical activity (N=1855), Children with a medium level of physical activity (N=1701), Children with a high level of physical activity (N=1717)

Table 70. Low, medium and high physical activity segments in Queensland children 5–17 years – Physical literacy profile (N=5273, December 2018–April 2019)

Attitudes towards		Children physica							medium le vity (N=17				n with a h	igh level (N=1717)	
physical literacy	N	%	SE	LCL	UCL	N	%	SE	LCL	UCL	N	%	SE	LCL	UCL
My child understands the important	ce of being	g physica	ally activ	re						<u> </u>	-		-		
Strongly disagree	42	3.1	0.7	1.9	4.8	19	0.9	0.3	0.5	1.7	15	1	0.4	0.5	2.1
Disagree	80	3.7	0.5	2.8	4.9	39	2.3	0.6	1.4	3.7	25	1.6	0.7	0.7	3.6
Neutral	295	16.6	1.4	14	19.5	195	12.7	1.4	10.3	15.6	155	8.4	1	6.7	10.6
Agree	468	24.2	1.5	21.3	27.4	360	20.9	1.5	18	24.1	272	15.8	1.4	13.2	18.8
Strongly agree	970	52.4	1.8	48.9	55.9	1088	63.1	1.9	59.4	66.7	1250	73.2	1.7	69.7	76.4
I encourage my child to be physical	lly active								•					•	
Strongly disagree	12	0.6	0.2	0.3	1.1	5	0.2	0.1	0.1	0.4	2	0.1	0.1	0	0.3
Disagree	28	1.0	0.2	0.6	1.5	7	0.4	0.3	0.1	1.4	6	0.3	0.2	0.1	0.9
Neutral	185	9.6	1	7.9	11.8	79	4.4	0.6	3.3	5.8	64	4.6	1	3.1	6.9
Agree	501	27.6	1.7	24.5	31	331	20.1	1.6	17.2	23.4	215	12.8	1.2	10.5	15.4
Strongly agree	1129	61.1	1.8	57.6	64.5	1279	74.9	1.7	71.5	78.1	1430	82.2	1.5	79.1	85
My child has enough experience in	physical n	novemen	nt to feel	confide	nt to par	ticipate	in physi	cal acti	vities					•	
Strongly disagree	49	2.5	0.4	1.8	3.5	13	1.3	0.7	0.5	3.5	5	0.2	0.1	0.1	0.7
Disagree	95	5.1	0.8	3.8	6.9	34	2.5	0.8	1.3	4.5	17	0.6	0.2	0.3	1.1
Neutral	260	13.3	1.2	11.2	15.8	149	8.6	1	6.9	10.7	116	5.7	0.8	4.4	7.4
Agree	431	22.3	1.5	19.5	25.4	308	16.3	1.3	13.9	18.9	224	13.3	1.3	11	16.1
Strongly agree	1020	56.7	1.8	53.2	60.1	1197	71.3	1.7	67.9	74.5	1355	80.2	1.5	77.1	82.9

Attitudes towards physical literacy	N	Mean	SE	LCL	UCL	N	Mean	SE	LCL	UCL	N	Mean	SE	LCL	UCL
My child understands the importance of being physically active	1855	4.2	0	4.1	4.2	1701	4.4	0	4.4	4.5	1717	4.6	0	4.5	4.6
I encourage my child to be physically active	1855	4.5	0	4.4	4.5	1701	4.7	0	4.7	4.7	1717	4.8	0	4.7	4.8
My child has enough experience in physical movement to feel confident to participate in physical activities	1855	4.3	0	4.2	4.3	1701	4.5	0	4.5	4.6	1717	4.7	0	4.7	4.8

Question: How much do you agree or disagree with the following (1 is strongly disagree, 5 is strongly agree and 3 is neutral) (Base: All parents/carers with a child aged 5–17 years). Children with a low level of physical activity (N=1855), Children with a medium level of physical activity (N=1701),

Children with a high level of physical activity (N=1717)

Physical activity profile of low, medium and high physical activity segments in Queensland

A physical activity profile of the Physical Activity segments is in Figure 60 and Table 71. While the High and Medium Physical Activity segments are based on activity frequency, it is nevertheless of interest to profile the general types of activities undertaken by segments. Overall, findings suggest that the High and Medium Physical Activity segments have higher participation in all types of physical activity and participation is also more frequent. In addition, they spend a longer time on each session (based on the top three activities reported).

In this respect, results suggest that they just tend to move more, no matter the activity.

In relation to physical activity participation:

Children in the High Physical Activity segment and Medium Physical Activity segment had significantly higher participation levels in all forms of physical activity, compared to the Low Physical Activity segment.

Specific results included:

- Cycling and scootering participation was significantly higher in the Medium Physical Activity segment (OR=2.7, p<.001) and in the High Physical Activity segment (OR=6.0, p<.001)
- Walking participation was significantly higher in the Medium Physical Activity segment (OR=1.4, p<.01) and in the High Physical Activity segment (OR=2.1, p<.001)
- Active transport participation was significantly higher in the Medium Physical Activity segment (OR=1.7, p<.001) and in the High Physical Activity segment (OR=2.6, p<.001)
- General exercise and fitness participation was significantly higher in the Medium Physical Activity segment (OR=1.9, p<.001) and in the High Physical Activity segment (OR=3.4, p<.001)
- Sport participation was significantly higher in the Medium Physical Activity segment (OR=1.5, p<.01) and in the High Physical Activity segment (OR=2.3, p<.001)
- Recreational activities participation was significantly higher in the Medium Physical Activity segment (OR=1.3, p<.05) and in the High Physical Activity segment (OR=2.2, p<.001)
- Children in the High Physical Activity segment participated significantly more frequently in all activities than the Medium and Low Physical Activity segments (each p<.001).</p>
- Children in the High Physical Activity segment spent significantly more minutes on average on General exercise and fitness participation than the Low Physical Activity segment (p<.01).</p>
- Children in the High Physical Activity segment <u>travelled less</u> in kilometres than the Low Physical Activity segment for the following activities Walking and General exercise and fitness (p<.01).</p>

Participation in the top physical activities

- Compared to the Low Physical Activity Segment, the High Physical Activity Segment had significantly higher participation in the following specific activities:
 - Chores or work involving physical activity (OR=4.5, p<.001)
 - o Active play (OR=7.9, p<.001)
 - Swimming leisure (not laps) (OR=2.8, p<.001)
 - o Walking active transport (e.g., to school, shops) (OR=1.9, p<.001)
 - Cycling/bike riding footpath/open spaces (not on road) (OR=2.8, p<.001)
 - Swimming laps/sprints for fitness (OR=1.4, p<.001)
 - Scooter riding general (OR=3.9, p<.001)
 - Walking for exercise (exclude active transport to get somewhere) (OR=1.5, p<.01)
 - o Walking dog (OR=2.8, p<.001)
 - Cycling/bike riding BMX (general riding) (OR=2.4, p<.001)

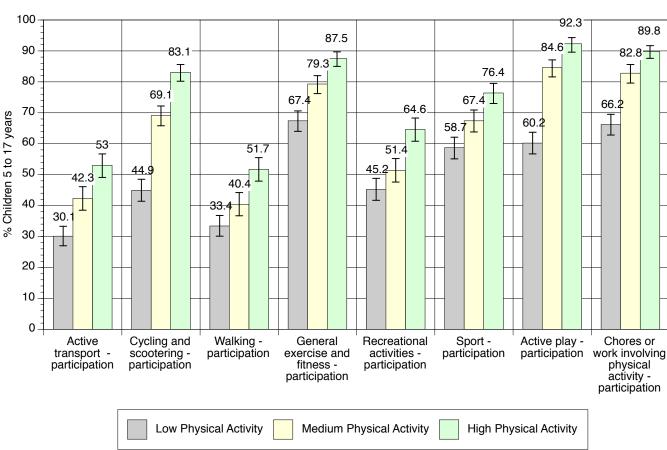
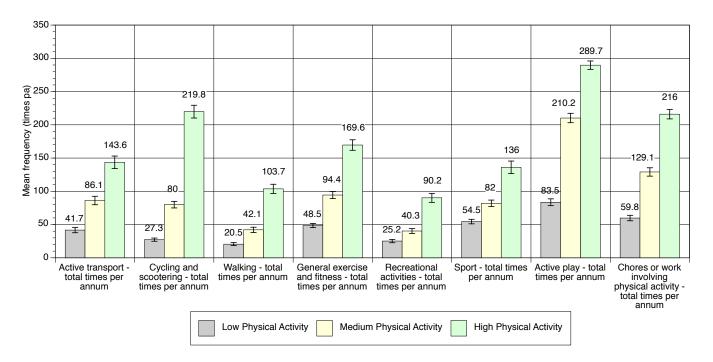


Figure 60. Low, medium and high physical activity segments in Queensland children 5–17 years – Physical activity profile (N=5273, December 2018–April 2019)



Question: How often did (Child) participate in (ACTIVITY) during the past 12 months? (Base: All parents/carers with a child aged 5 to 17 years – Children not participating are included in this analysis to generate a population wide estimate for frequency of participation) (Though children participating who did more than 12 activities may have their data excluded from the analysis, if that activity was not randomly selected for frequency data) (as a maximum of 12 activities were rated). Children with a low level of physical activity (N=1855), Children with a medium level of physical activity (N=1701), Children with a higher level of physical activity (N=1717)

Table 71. Low, medium and high physical activity segments in Queensland children 5–17 years – Physical activity profile (N=5273, December 2018–April 2019)

Activity participation		Children v f physical					nildren wit f physical				c	Children vor			
	N	%	SE	LCL	UCL	N	%	SE	LCL	UCL	N	%	SE	LCL	UCL
Active Transport – participation	571	30.1	1.6	27	33.3	713	42.3	1.9	38.5	46.1	941	53	1.9	49.1	56.7
Cycling and scootering – participation	792	44.9	1.8	41.4	48.5	1100	69.1	1.6	65.8	72.2	1388	83.1	1.4	80.2	85.6
Walking – participation	596	33.4	1.7	30.1	36.8	646	40.4	1.9	36.7	44.2	856	51.7	1.9	47.9	55.5
General exercise and fitness – participation	1228	67.4	1.7	64	70.6	1345	79.3	1.5	76.2	82	1486	87.5	1.2	85	89.7
Recreational activities – participation	811	45.2	1.8	41.7	48.8	886	51.4	2.0	47.6	55.2	1142	64.6	1.9	60.8	68.3
Sport – participation	1074	58.7	1.8	55.1	62.1	1173	67.4	1.8	63.8	70.9	1321	76.4	1.6	73	79.5
Active play – participation	1139	60.2	1.8	56.7	63.7	1463	84.6	1.4	81.6	87.1	1603	92.3	1.2	89.6	94.3
Chores or work involving physical activity – participation	1226	66.2	1.7	62.8	69.5	1405	82.8	1.5	79.6	85.6	1531	89.8	1.0	87.6	91.7
Mean activity frequency (Includes non–participants with zero times per annum)	N	Mean	SE	LCL	UCL	N	Mean	SE	LCL	UCL	N	Mean	SE	LCL	UCL
Active Transport – total times per annum	1850	41.7	2.1	37.7	45.8	1695	86.1	3.2	79.8	92.5	1708	143.6	4.8	134.2	153
Cycling and scootering – total times per annum	1852	27.3	1.2	24.9	29.7	1695	80	2.5	75	84.9	1705	219.8	4.9	210.2	229.4
Walking – total times per annum	1851	20.5	1.1	18.3	22.8	1696	42.1	2	38.1	46	1706	103.7	3.5	96.8	110.6
General exercise and fitness – total times per annum	1854	48.5	1.6	45.4	51.7	1699	94.4	2.7	89.1	99.7	1711	169.6	4.0	161.7	177.5
Recreational activities – total times per annum	1854	25.2	1.3	22.7	27.7	1700	40.3	1.8	36.7	43.9	1714	90.2	3.5	83.4	96.9
Sport – total times per annum	1843	54.5	1.7	51.1	57.9	1687	82	2.4	77.2	86.8	1709	136	4.8	126.6	145.5

Active play – total times per annum	1855	83.5	2.6	78.4	88.7	1701	210.2	3.6	203.2	217.3	1717	289.7	3.2	283.4	296
Chores or work involving physical activity – total times per annum	1855	59.8	2.1	55.7	63.9	1701	129.1	3.2	122.8	135.4	171	216	3.6	208.9	223

Mean minutes per session (Based on only the 3 most		Children v f physical				_	nildren wit f physical					Children w of physical			
frequent activities)	N	Mean	SE	LCL	UCL	N	Mean	SE	LCL	UCL	N	Mean	SE	LCL	UCL
Active Transport – minutes per session	443	21.9	0.9	20.2	23.7	516	18.8	0.5	17.8	19.9	573	21	0.8	19.5	22.6
Cycling and scootering – minutes per session	388	44.2	1.8	40.7	47.7	508	42.5	3.7	35.1	49.8	735	46.5	3.9	38.8	54.1
Walking – minutes per session	328	45.2	2.6	40.1	50.3	282	42	2	38.1	45.9	361	38.5	2.5	33.7	43.3
General exercise and fitness – minutes per session	807	55.7	1.4	52.8	58.5	663	60.8	1.8	57.2	64.3	492	63.2	2.1	59.1	67.2
Recreational activities – minutes per session	396	84.4	10.2	64.4	104.4	241	79.6	4	71.7	87.5	217	68.4	4	60.6	76.2
Sport – minutes per session	767	76.1	2.1	72	80.3	597	83.2	2.3	78.6	87.8	277	78.1	2.9	72.4	83.7

Mean km to activity (one way travel) (Based on only the 3 most frequent activities)	Children with a low level of physical activity (N=1855)						nildren wit physical a				Children with a higher level of physical activity (N=1717)				
	N	Mean	SE	LCL	UCL	N	Mean	SE	LCL	UCL	N	Mean	SE	LCL	UCL
Active Transport – mean km	443	1.5	0.2	1.1	1.9	516	0.9	0.1	0.7	1.1	573	2.4	1.5	-0.6	5.4
Cycling and scootering – mean km	388	1.7	0.4	1	2.5	508	1.0	0.2	0.7	1.4	735	1.0	0.2	0.6	1.3
Walking – mean km	328	2.8	0.7	1.5	4.1	282	1.6	0.3	1	2.3	361	0.9	0.1	0.7	1.1
General exercise and fitness – mean km	807	7.0	0.8	5.4	8.6	663	4.3	0.4	3.5	5.1	492	2.9	0.4	2.1	3.6
Recreational activities – mean km	396	25.8	12.7	0.8	50.8	241	14.8	7.4	0.2	29.4	217	5.4	0.6	4.1	6.6
Sport – mean km	767	16.1	1.3	13.6	18.6	597	12.2	1.2	9.8	14.5	277	21.2	5.6	10.1	32.3
Total activities					•					•					
Number of total activities per child	1855	5.1	0.1	4.9	5.2	1701	6.8	0.1	6.7	6.9	1717	8.4	0.1	8.3	8.6

Question: How often did (Child) participate in (ACTIVITY) during the past 12 months? (Base: All parents/carers with a child aged 5 to 17 years — Children not participating are included in this analysis to generate a population wide estimate for frequency of participation) (Though children participating who did more than 12 activities may have their data excluded from the analysis, if that activity was not randomly selected for frequency data) (as a maximum of 12 activities were rated). How many minutes per session did (Child) do the activity on average? (e.g., twice per week for 60 minutes > write 60 minutes) ______ minutes. How many kilometres did (Child) have to travel to the activity — one way only? ______ km (WRITE 0 if no travel required) Children with a low level of physical activity (N=1855), Children with a medium level of physical activity (N=1701), Children with a higher level of physical activity (N=1717) (Base: All parents/carers with a child 5–17 years and reporting specific activities where relevant)

Profile of top physical activities of low, medium and high physical activity segments in Queensland

The top physical activities by segment are in Figure 61 and Table 72. Results shown include the top 11 activities, given some small differences in the top 10 by segment. The top physical activities were virtually identical across segments, however, participation levels differed.

It is noteworthy that the Low Physical Activity segment appears to have lower participation in all activities and may have a lower inclination to be involved in movement—based activities generally. It is interesting that this also applies to Active play and Chores or work involving physical activity.

Such activities require limited to no planning or equipment, however, the Low Physical Activity segment appears to be generally not interested in such activities. Such results may highlight the need to shift the focus away from encouraging specific sport, exercise and recreation activities and increase parent/carer motivation to just encourage all sorts of movement in their children.

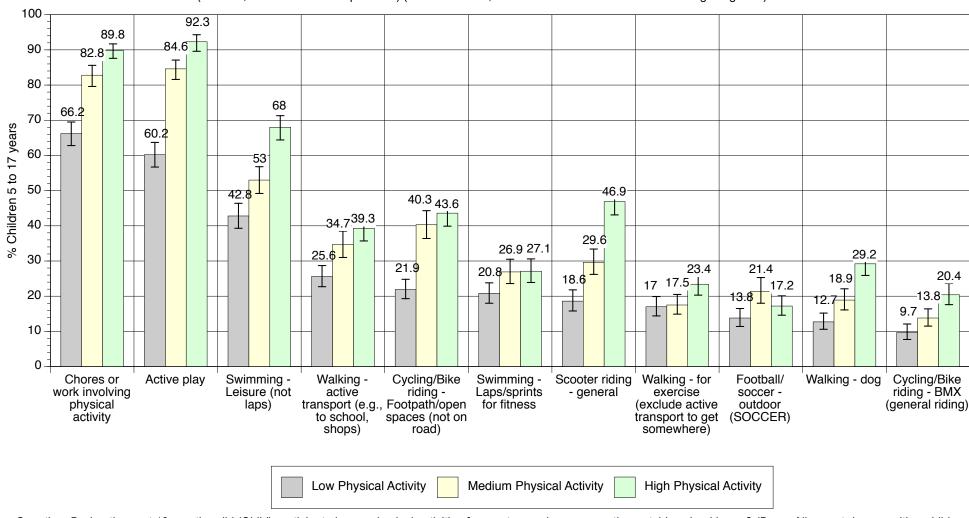


Figure 61. Top 10 physical activities for the low, medium and high physical activity segments (N=5273, December 2018–April 2019) (N=1855 for low, N=1701 for medium and N=1717 for high segment)

Question: During the past 12 months, did (Child) participate in any physical activities for sport, exercise or recreation outside school hours? (Base: All parents/carers with a child aged 5 to 17 years). Children with a low level of physical activity (N=1855), Children with a medium level of physical activity (N=1701),

Children with a high level of physical activity (N=1717)

Table 72. Top 10 physical activities for the low, medium and high physical activity segments (N=5273, December 2018–April 2019) (N=1855 for low, N=1701 for medium and N=1717 for high segment)

Top physical activities		dren with a sical activ				dren with a hysical acti			Children with a high level of physical activity (N=1717)				
	%	SE	LCL	UCL	%	SE	LCL	UCL	%	SE	LCL	UCL	
Chores or work involving physical activity	66.2	1.7	62.8	69.5	82.8	1.5	79.6	85.6	89.8	1.0	87.6	91.7	
Active play	60.2	1.8	56.7	63.7	84.6	1.4	81.6	87.1	92.3	1.2	89.6	94.3	
Swimming – leisure (not laps)	42.8	1.8	39.3	46.4	53.0	1.9	49.2	56.8	68	1.8	64.4	71.3	
Walking – active transport (e.g., to school, shops)	25.6	1.5	22.7	28.7	34.7	1.9	31	38.5	39.3	1.9	35.7	43	
Cycling/bike riding – footpath/open spaces (not on road)	21.9	1.4	19.3	24.8	40.3	2.0	36.4	44.3	43.6	1.9	39.9	47.4	
Swimming – laps/sprints for fitness	20.8	1.5	18	23.8	26.9	1.8	23.6	30.5	27.1	1.7	23.9	30.6	
Scooter riding – general	18.6	1.5	15.8	21.8	29.6	1.8	26.2	33.4	46.9	1.9	43.1	50.7	
Walking – for exercise (exclude active transport to get somewhere)	17.0	1.4	14.4	19.9	17.5	1.4	14.9	20.5	23.4	1.7	20.3	26.8	
Football/soccer – outdoor (SOCCER)	13.8	1.3	11.4	16.5	21.4	1.9	18	25.3	17.2	1.4	14.6	20.1	
Walking – dog	12.7	1.2	10.6	15.2	18.9	1.5	16.1	22.1	29.2	1.8	25.9	32.8	
Cycling/bike riding – BMX (general riding)	9.7	1.1	7.7	12.1	13.8	1.3	11.5	16.4	20.4	1.5	17.6	23.6	

Question: During the past 12 months, did (Child) participate in any physical activities for sport, exercise or recreation outside school hours? (Base: All parents/carers with a child aged 5 to 17 years). Children with a low level of physical activity (N=1855), Children with a medium level of physical activity (N=1701), Children with a higher level of physical activity (N=1717)

Profile of physical activity barriers for low, medium and high physical activity segments in Queensland

Both child and parent–related barriers to physical activity were also profiled by each Physical Activity segment. Results are in Figure 62 and Table 73. No barriers is excluded from the graph for easier display of barriers.

Child-related physical barriers for physical activity segments

The top barrier for children in the Low Physical Activity segment was not being interested/not liking physical activity/exercise/sport (12.4%), not enough time/too many commitments (10.1%) and being too lazy (9.5%).

A number of significant trends were identified in relation to child-related barriers to physical activity.

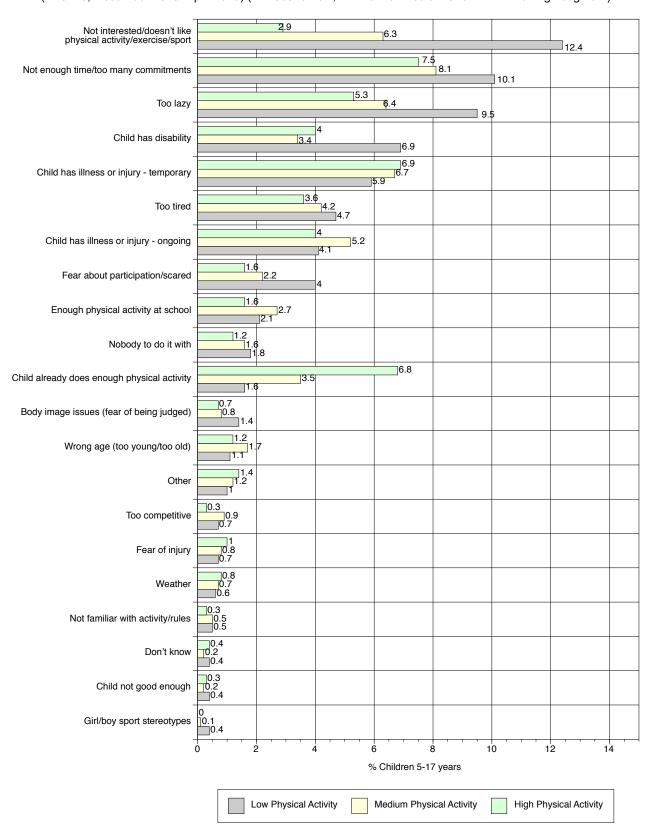
Compared to the Low Physical Activity segment, the High Physical Activity segment reported the following child related barriers:

- They were less likely to report not being interested/not liking physical activity/exercise/sport (OR=0.2, p<.001).</p>
- They were less likely to report being lazy (OR=0.5, p<.01).</p>
- They were less likely to report fear about participation/scared (OR=0.4, p<.05).</p>
- They were less likely to report the barrier of girl/boy sport stereotypes (OR=0.04, p<.01).</p>
- They were less likely to report the child having a disability (OR=0.5, p<.01).</p>
- They were more likely to report the child already does enough physical activity (OR=2.3, p<.001).</p>
- They were more likely to report no barriers for the child increasing their physical activity (OR=1.4, p<.01).</p>

Compared to the Low Physical Activity segment, the Medium Physical Activity segment also reported the following child related barriers:

- They were less likely to report not being interested/not liking physical activity/exercise/sport (OR=0.5, p<.001).</p>
- They were less likely to report fear about participation/being scared (OR=0.4, p<.05).</p>
- They were less likely to report the child has a disability (OR=0.5, p<.01).</p>
- They were more likely to report the child already does enough physical activity (OR=2.3, p<.05).</p>
- They were more likely to report no barriers for the child (OR=1.5, p<.01).</p>

Figure 62. Barriers to physical activity for the low, medium and high physical activity segments – Child related barriers (N=5273, December 2018–April 2019) (N=1855 for low, N=1701 for medium and N=1717 for high segment)



Question: Were there any barriers for (Child) personally doing or increasing his/her physical activity over the past 12 months?

Just barriers for (Child). (Base: All parents/carers with a child aged 5–17 years).

Confidence intervals not presented for graph clarity.

Table 73. Barriers to physical activity for the low, medium and high physical activity segments – Child related barriers (N=5273, December 2018–April 2019) (N=1855 for low, N=1701 for medium and N=1717 for high segment)

Barriers to physical activity from the child's perspective		ildren with ysical activ					a medium ctivity (N=1		Children with a higher level of physical activity (N=1717)				
	%	SE	LCL	UCL	%	SE	LCL	UCL	%	SE	LCL	UCL	
No barriers for child	49.2	1.8	45.7	52.7	57.7	2	53.8	61.4	58.1	1.9	54.3	61.9	
Not interested/doesn't like physical activity/exercise/sport	12.4	1.2	10.3	14.9	6.3	1.0	4.6	8.5	2.9	0.6	1.9	4.4	
Not enough time/too many commitments	10.1	1.2	8.0	12.7	8.1	0.9	6.6	10	7.5	1.0	5.7	9.8	
Too lazy	9.5	1.1	7.6	11.7	6.4	1.1	4.5	8.9	5.3	1.0	3.6	7.6	
Child has disability	6.9	0.9	5.3	9	3.4	0.7	2.3	5.2	4.0	0.9	2.6	6.2	
Child has illness or injury – temporary	5.9	0.8	4.5	7.7	6.7	1.2	4.7	9.5	6.9	0.9	5.3	8.9	
Too tired	4.7	0.6	3.6	6.1	4.2	0.6	3.1	5.7	3.6	0.7	2.5	5.1	
Child has illness or injury – ongoing	4.1	0.8	2.8	5.9	5.2	1.3	3.2	8.3	4.0	0.8	2.7	5.9	
Fear about participation/scared	4.0	0.8	2.7	5.8	2.2	0.4	1.4	3.2	1.6	0.6	0.8	3.2	
Enough physical activity at school	2.1	0.4	1.5	3.1	2.7	0.4	2	3.6	1.6	0.5	0.9	3.1	
Nobody to do it with	1.8	0.4	1.2	2.8	1.6	0.7	0.7	3.7	1.2	0.3	0.7	2.1	
Body image issues (fear of being judged)	1.4	0.4	0.9	2.3	0.8	0.3	0.5	1.6	0.7	0.4	0.3	1.9	
Wrong age (too young/too old)	1.1	0.4	0.5	2.2	1.7	0.7	0.8	3.6	1.2	0.3	0.7	2.1	
Other	1.0	0.2	0.7	1.6	1.2	0.3	0.7	2.1	1.4	0.5	0.8	2.7	
Fear of injury	0.7	0.2	0.4	1.4	0.8	0.3	0.4	1.5	1.0	0.6	0.4	2.9	
Too competitive	0.7	0.3	0.3	1.8	0.9	0.4	0.4	2.0	0.3	0.1	0.1	0.8	
Weather	0.6	0.2	0.3	1	0.7	0.2	0.5	1.2	0.8	0.2	0.5	1.2	
Not familiar with activity/rules	0.5	0.2	0.2	1.2	0.5	0.2	0.3	1.1	0.3	0.1	0.1	0.7	

Barriers to physical activity from the child's perspective		ldren with ysical activ			_		a medium I ctivity (N=17		Children with a higher level of physical activity (N=1717)				
	%	SE	LCL	UCL	%	SE	LCL	UCL	%	SE	LCL	UCL	
Girl/boy sport stereotypes	0.4	0.2	0.2	1.1	0.1	0.1	0	0.5	0	0	0	0.1	
Child not good enough	0.4	0.1	0.2	0.8	0.2	0.1	0.1	0.6	0.3	0.1	0.1	0.6	
Don't know	0.4	0.2	0.2	1.1	0.2	0.1	0.1	0.4	0.4	0.1	0.2	0.8	
Child already does enough physical activity	1.6	0.4	1	2.6	3.5	0.8	2.3	5.3	6.8	1.3	4.7	9.8	

Question: Were there any barriers for (Child) personally doing or increasing his/her physical activity over the past 12 months? Just barriers for (Child) (Base: All parents/carers with a child aged 5–17 years)

Parent/carer-related physical barriers for physical activity segments

Parent/carer—related physical activity barriers for the Physical Activity Segments are in Figure 63 and Table 74. Interestingly, the top parent/carer barriers to low physical activity children increasing their physical activity were all related to not having time or being restricted in travel.

They included lack of time (30.1%), too expensive/high cost (27.4%), work commitments (23.6%), no car/poor public transport/can't get there/too far (5.9%) and caring for children (7.5%).

A number of statistically significant differences were also obtained for parent/carer related barriers.

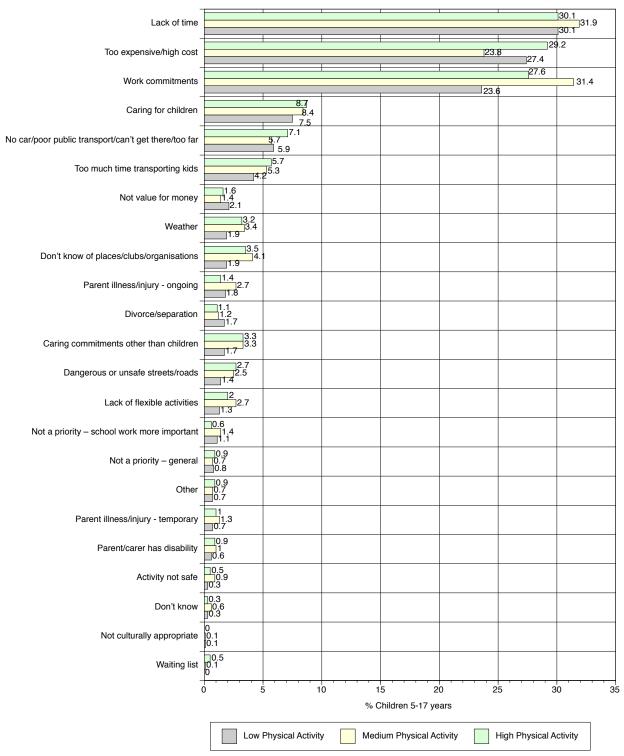
Compared to the Low Physical Activity segment, the High Physical Activity segment reported the following parent/carer related barriers:

- They were more likely to report work commitments (OR=1.5, p<.01).</p>
- They were more likely to report not knowing of places/clubs/organisations (OR=1.8, p<.05).</p>
- They were more likely to report waiting lists (OR=25.4, p<.01).</p>

Compared to the Low Physical Activity segment, the Medium Physical Activity segment reported the following parent/carer related barriers:

- They were more likely to report not knowing of places/clubs/organisations (OR=2.1, p<.05).</p>
- They were more likely to report the weather as a barrier (OR=1.8, p<.05).</p>

Figure 63. Barriers to physical activity for the low, medium and high physical activity segments –
Parent related barriers (N=5273, December 2018–April 2019)
(N=1855 for low, N=1701 for medium and N=1717 for high segment)



Question: Were there any barriers for (Parent/carer) personally in the child doing or increasing his/her physical activity over the past 12 months? (Base: All parents/carers with a child aged 5–17 years).

Confidence intervals not presented for graph clarity.

Table 74. Barriers to physical activity for the low, medium and high physical activity segments – Parent related barriers (N=5273, December 2018–April 2019) (N=1855 for low, N=1701 for medium and N=1717 for high segment)

Barriers to physical activity from parent's perspective			h a low lo tivity (N=			en with a i		Children with a high level of physical activity (N=1717)				
perspective	%	SE	LCL	UCL	%	SE	LCL	UCL	%	SE	LCL	UCL
No barriers for parent	40.0	1.8	36.6	43.5	36.5	1.9	32.8	40.3	35.1	1.8	31.6	38.7
Lack of time	30.1	1.7	27	33.4	31.9	1.8	28.5	35.5	30.1	1.8	26.7	33.7
Too expensive/high cost	27.4	1.7	24.2	30.8	23.8	1.6	20.8	27	29.2	1.8	25.8	32.9
Work commitments	23.6	1.4	20.9	26.6	31.4	1.9	27.9	35.3	27.6	1.7	24.4	31
Caring for children	7.5	1.1	5.6	9.9	8.4	1.1	6.4	10.9	8.7	1.3	6.4	11.7
No car/poor public transport/can't get there/too far	5.9	0.8	4.4	7.8	5.7	0.8	4.3	7.5	7.1	0.9	5.6	9.1
Too much time transporting kids	4.2	0.7	3	5.9	5.3	0.7	4.1	7	5.7	0.8	4.3	7.5
Not value for money	2.1	0.5	1.2	3.4	1.4	0.3	0.9	2.2	1.6	0.5	0.9	2.8
Don't know of places/clubs/organisations	1.9	0.4	1.3	2.9	4.1	0.9	2.6	6.2	3.5	0.7	2.4	5
Weather	1.9	0.4	1.3	2.8	3.4	0.7	2.3	5	3.2	0.5	2.3	4.4
Parent illness/injury – ongoing	1.8	0.4	1.1	2.9	2.7	0.8	1.5	4.8	1.4	0.4	0.8	2.3
Caring commitments other than children	1.7	0.5	0.9	3.2	3.3	0.8	2	5.4	3.3	0.8	2.1	5.1
Divorce/separation	1.7	0.6	0.9	3.5	1.2	0.4	0.6	2.4	1.1	0.4	0.5	2
Dangerous or unsafe streets/roads	1.4	0.4	0.7	2.6	2.5	0.7	1.4	4.3	2.7	0.6	1.7	4.1
Lack of flexible activities	1.3	0.3	0.8	2.2	2.7	0.9	1.4	5.2	2.0	0.5	1.2	3.3
Not a priority – school work more important	1.1	0.3	0.6	1.8	1.4	0.4	0.8	2.5	0.6	0.2	0.3	1.2
Not a priority – general	0.8	0.3	0.4	1.6	0.7	0.2	0.4	1.3	0.9	0.3	0.5	1.8
Parent illness/injury – temporary	0.7	0.3	0.3	1.8	1.3	0.4	0.7	2.4	1.0	0.3	0.6	1.7

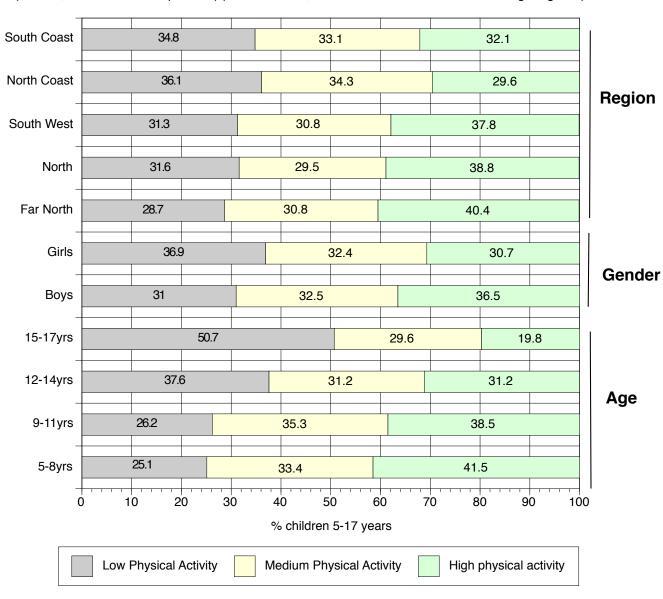
Barriers to physical activity from parent's perspective	Children with a low level of physical activity (N=1855)					n with a r sical activ		Children with a high level of physical activity (N=1717)				
	%	SE	LCL	UCL	%	SE	LCL	UCL	%	SE	LCL	UCL
Other	0.7	0.2	0.4	1.2	0.7	0.2	0.3	1.3	0.9	0.3	0.4	1.8
Parent/carer has disability	0.6	0.2	0.3	1.2	1.0	0.5	0.4	2.7	0.9	0.3	0.4	1.9
Activity not safe	0.3	0.1	0.2	0.7	0.9	0.3	0.4	1.8	0.5	0.2	0.2	1.3
Don't know	0.3	0.1	0.1	0.8	0.6	0.2	0.3	1	0.3	0.1	0.1	0.5
Not culturally appropriate	0.1	0.1	0	0.9	0.1	0.1	0	0.5	0	0	0	0
Waiting list	0	0	0	0.1	0.1	0.1	0	0.4	0.5	0.4	0.1	2.1

Question: Were there any barriers for (Parent/carer) personally in the child doing or increasing his/her physical activity over the past 12 months? (Base: All parents/carers with a child aged 5–17 years).

Distribution of low, medium and high Physical Activity segments in Queensland

The distribution of low, medium and high physical Activity segments in Queensland is in Figure 64 and Figure 65. This provides a graphical presentation of the segments both for Queensland overall and then broken down into region, age and gender groupings. This latter data should be interpreted with caution, as there was not sufficient sample to reliably estimate the size of segments at such a detailed level. As such, data should be considered indicative, rather than definitive.

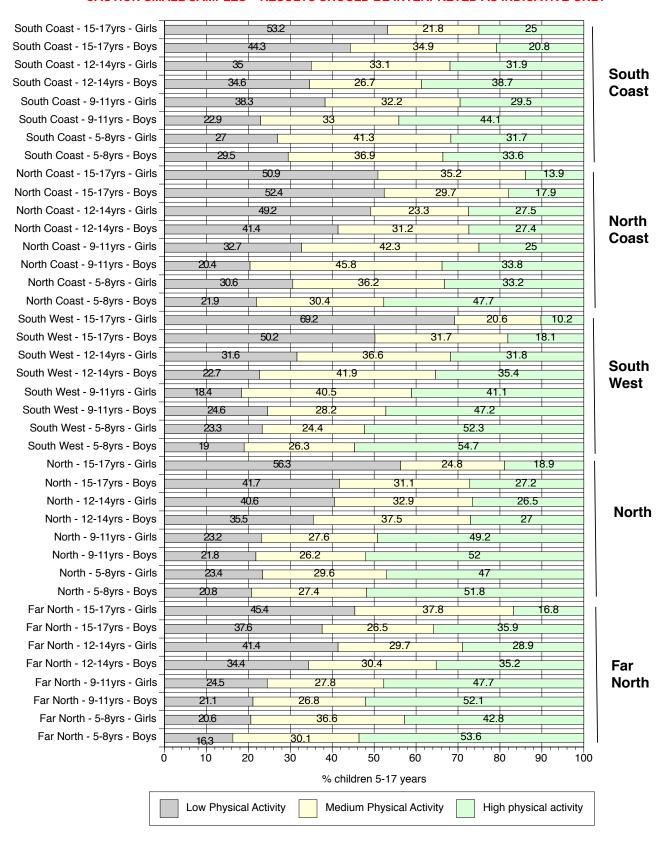
Figure 64. Distribution of Low, Medium and High Physical Activity segments – Results for Queensland (N=5273, December 2018–April 2019) (N=1855 for low, N=1701 for medium and N=1717 for high segment)



Question: Segments formed based on total physical activity segments split into approximate terciles (Base: All parents/carers with a child 5–17 years)

Figure 65. Distribution of Low, Medium and High Physical Activity segments (N=5273, December 2018–April 2019) – Detailed results by region, age and gender (N=1855 for low, N=1701 for medium and N=1717 for high segment)

CAUTION SMALL SAMPLES – RESULTS SHOULD BE INTERPRETED AS INDICATIVE ONLY



Question: Segments formed based on total physical activity segments split into approximate terciles (Base: All parents/carers with a child 5–17 years)