

Research Brief: Association between Achievement and Physical Activity

This brief examines the relationship between self-reported physical activity, and achievement, based on the 2009/10 Satisfaction Survey. It finds a significant positive relationship – students who report higher levels of physical activity are also more likely to report significantly higher levels of academic achievement.

Analysis was limited to students who reported some school location for their physical activity (i.e. In my regular classroom, In my PE classes, In school teams or clubs, In other activities at school, or At class trips to recreation centres), so that achievement results might be associated to school-related activities, and not to other activity outside of school. Analysis was based on positive responses (i.e. those who responded “all of the time” or “many times”).

Elementary student results are based on about 73,000 Grade 3/4 and Grade 7 students who responded to both questions being compared. Secondary student results are based on about 59,000 students in Grade 10 and Grade 12 who responded to both questions being compared.

Elementary School Students

Of those elementary school students who reported exercising 5 days of the past 5 school days:

- 55 per cent reported satisfaction with what they were learning at school compared to 28 per cent who reported exercising 0 of the past 5 school days.
Students who exercise most frequently are almost twice as likely to report satisfaction with their learning compared with those who do not exercise.
- 75 per cent reported their reading skills were improving compared to 55 per cent who reported exercising 0 days of the past 5 school days.
- 68 per cent reported their writing skills were improving compared to 45 per cent who reported exercising 0 days of the past 5 school days.
- 72 per cent reported their math skills were improving compared to 49 per cent who reported exercising 0 days of the past 5 school days.

Secondary School Students

Of those secondary school students who reported exercising over two and a half hours in the past week:

- 42 per cent reported being satisfied with what they were learning at school compared to 31 per cent of those who reported exercising half an hour or less in the past week.
- 51 per cent reported their reading skills were improving compared to 41 per cent of those who reported exercising half an hour or less in the past week.
- 58 per cent reported their writing skills were improving compared to 41 per cent of those who reported exercising half an hour or less in the past week.
- 55 per cent reported their math skills were improving compared to 36 per cent of those who reported exercising half an hour or less in the past week.

Specific question wording and other details about the Satisfaction Survey can be found on the web at:
http://www.bced.gov.bc.ca/sat_survey/welcome.htm