







Results from Sweden's 2018 Report Card on Physical Activity for Children and Youth

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Introduction

In children and youth there are numerous studies showing the associations between low levels of physical activity and high amounts of sedentary time with reduced physical and mental health. Therefore, the consolidation of physical activity and sedentary behavior data is important, in order for researchers, policy makers, and key stakeholders to identify problem areas and intervene appropriately. Here we report the results of Sweden's 2018 Report Card on Physical Activity for Children and Youth. The summary is part of the global compilation within the network Active Healthy Kids Global Alliance (https://www.activehealthykids.org/). It was established in 2014 with 15 participating countries. Since then it has increased to 38 countries (2016) and 50 countries are participating in 2018.

Methods

Sweden's 2018 Report Card included the ten core physical activity indicators that are common to the Global Matrix 3.0, which are: overall physical activity, organized sport participation, active play, active transportation, sedentary behaviors, physical fitness, family and peers, school, community and environment, and government. Additionally, an indicator for diet was also included. Each of the 11 indicators were assigned a grade ranging from F to A+ representing the percentage of children and youth meeting a defined benchmark. If there was no data or insufficient data for an indicator it was marked as incomplete.

Data from a multitude of sources from 2013 to 2018 were compiled in order to inform the grades for the 11 indicators. Where possible, results from national surveys were used to inform the grades (e.g., The Health Behaviour in School-aged Children (HSBC) 2013-14, Children's Routes to School Survey 2015-16, Living Conditions Survey of Children 2016-17, and The National Dietary Survey 2016-17. Where no national data was available peer reviewed literature and gray literature (e.g., governmental reports) were utilized.

Results and Discussion

Sweden's 2018 Report Card on physical activity for children and youth builds on the findings from Sweden's 2016 Report Card.⁵ The results are summarized in Table 1.



Three of the 11 indicators, i.e., active play, family and peers, and physical fitness were assigned a grade of incomplete due to the lack of available data for these indicators, thus showing that knowledge and research gaps exist. Even though the grades were based on the best available evidence some limitations need to be acknowledged. For overall physical activity there was no national level data available. However, for the next report card national objectively measured physical activity data will be available, as it is currently being analyzed. Therefore, for this Report Card individual studies reporting the number of children meeting the overall physical activity benchmark were used. The additional indicator, diet was given a grade of "C" as less than 20% of 11-18 year olds consumed ≥500g of fruits and vegetables each day; 60-70% of 11-18 year olds ate fish ≥1 time/week; and 64-76% of 11-18 year olds consumed sugar sweetened beverages ≤1 time/week.

As the relatively low grades for the 2018 Report Card have remained virtually unchanged since 2016 for daily behavior indicators such as overall physical activity, sedentary behavior, and active transportation it is vital that key stakeholders begin to plan how to appropriately intervene in order to increase overall physical activity and decrease sedentary time in Swedish children and youth.

Table 1: Grades and rationales for Sweden's 2018 Report Card

Indicator	Grade	Rational
Overall physical activity	D+	18% of girls and 43% of boys aged 6-11 years accumulate \geq 60 min of MVPA/day on average.
		33% of girls and 46% of boys aged 13-15 years accumulate \geq 60 min of MVPA/day on average. 7
Organized sport participation	B+	75% of 11-15 year olds participate in organized sport ≥2times/week. ¹
Active play	INC	Insufficient data to grade this indicator.
Active transportation	С	48% and 57% of 6-15 year olds use active transportation to and from school in the winter and summer months, respectively. 2
Sedentary behaviors	C+	55% of 6 year olds had <2hrs of screen time/day on average. ⁸
		61 % of 6-9 year olds had <2hrs of screen time/day on average. 9
		71% and 49% of girls and boys aged 6-11 years had <2hrs of screen time/day on average. 6
		62% of 11-15 year olds had <2hrs of screen time on an average day. 1
Physical fitness	INC	Insufficient data to grade this indicator.
Family and peers	INC	Insufficient data to grade this indicator.
School	C+	The Education Act includes after school childcare and emphasizes the promotion of a healthy lifestyle.
		Physical education is mandatory in primary/secondary school (minimum of 90 and 115 min/week, respectively).
Community and environment	Α	94-100% of 0 to 15 year olds living in urban areas (minimum 30 000 inhabitants) have access to greenspace within 300 meters of their house. 10
		99% and 89% of 12-18 year olds report feeling safe or quite safe outside where they live during the daytime and nighttime, respectively. ³
Government	В	Physical activity is one of the 11 objective domains for the national public health policy. The transportation and urban planning agencies have policies and guidelines addressing physical activity and a national cycling strategy for increased and safe cycling has recently been put forward.

Note: The grade for each indicator is based on the percentage of children and youth meeting a defined benchmark. A+ is 94-100%; A is 87-93%; A- is 80-86%; B+ is 74-79%; B is 67-73%; B- is 60-66%; C+ s 54-59%; C is 47-53%; C- is 40-46%; D+ is 34-39%; D is 27-33%; D- is 20-26%; F is <20%; and INC is Incomplete. The overall physical activity grade is based on objective data collected using accelerometry.

According to the Health Behaviour in School-aged children survey (HSBC) 2013/2014, 13% (girls) and 21% (boys) of 11 year olds, as well as 10-15% of 13-15 year olds reached the recommendation of more than 60 minutes MVPA / day. Furthermore, 62% of 11-15 year olds had less than two hours of screen-time per day.

MVPA, Moderate-to-vigorous physical activity

Conclusion

In Sweden the community and the built environment favor an active lifestyle and the promotion of physical activity. Furthermore, there are strong government initiatives that promote physical activity among children and youth. Despite the conductive environment for physical activity in Sweden, overall physical activity is low and sedentary behavior is high, which indicates a need for a more integrated approach to promote physical activity in Sweden's children and youth.



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