

- Summary and evaluation of national data on physical activity and its indicators.
- Collaboration between academia and government agencies.
- Part of the Global Matrix 4.0, an international initiative using systematic and transparent approaches to generate globally comparable evidence.

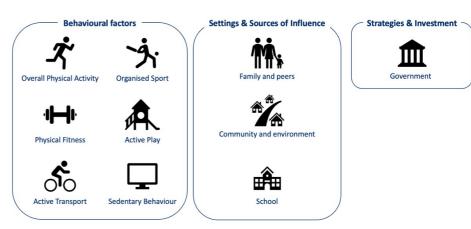


Figure: Indicators in Global Matrix 4.0

**HOM**s

# **PREPARATION**

Research Report Cards from Asian countries

Indicator meeting and decision with Research Work Group members

Liaison with local stakeholders (academia and government) to identify Identify Stakeholder Group members

## **IMPLEMENTATION**

Review literature and determine data sources on key indicators (n = 36)

Identify national surveys or large-scale longitudinal

Data analysis and evidence synthesis

Grade assignment

## **GRADE ASSIGNMENT**

A+	94% - 100%	We are succeeding with a large majority of children and adolescents	
Α	87% - 93%		
A-	80% - 86%		
B+	74% - 79%		
В	67% - 73%	We are succeeding with well over half of children and adolescents	
B-	60% - 66%		
D-	60% - 66%		
C+	54% - 59%	We are succeeding with about half of children and adolescents	
С	47% - 53%		
C-	40% - 46%		
D+	34% - 39%		
		We are succeeding with less than half of children and adolescents	
D	27% - 33%		
D-	20% - 26%		
_			
F	<20%	We are succeeding with very few children and	
		adolescents	
INC		Incomplete – insufficient or	
		inadequate information to	

assign a grade



Overall Physical Activity

Data from the national Student Health Survey, which is school-based and selfreported, revealed that 23.7% of school-going adolescents aged 13-17 years old engaged in ≥60 minutes daily moderate-to-vigorous intensity physical activity. From the GUSTO cohort study survey data, 65% of 8 years old children in the study met the international recommendation. The simple average is 44.4%.



**Organised Sport** and Physical Activity

Based on the National Sports Participation Survey, 75% of children aged 13 to 19 reported to participate in organized sports at least once a week. 52% of 8-yearold children in the GUSTO cohort study were involved in organized sport activity during the week. The simple average is 63.5%.



Behavioural factors

**Active Play** 

In the GUSTO cohort study, 44.4% of 8-year-old children spend an average of more than 2 hours per day in indoor and/or outdoor active play.



**Active Transport** 

In the GUSTO cohort study, 48% of 8-year-old children spend ≥50% of total transport duration in active transport to get to and from school, including walking and biking.



Sedentary Behaviour

In the GUSTO cohort study, 41% of 8-year-old children engage in <120 mins of recreational screen time.



Physical Fitness

There was no nationally representative or data from large-scale observational studies available to match the benchmark under the indicator.



Family and peers

In the GUSTO cohort study, 55% of parents or caregivers encouraged their 8-yearold child to play outside when the weather is suitable, and 29% of parents or caregivers were physically active with or in front of their child. The simple average is 42%.





Quantitative evidence specific to the benchmarks of the indicator were unattainable.

School



Community and environment

In the GUSTO cohort study, 99.8% of 5.5-year-old parents and 97% of 8-year-old parents reported the presence of neighbourhood open areas, park, playground, swimming pool, gym, or sports activities club. 88.5% of 5.5-year-old parents perceived the neighbourhood environment to be safe for children's physical activity. The simple average across these three data points is 95.1%.



The built environment in Singapore is generally supportive of physical activities. Overall, it is evident that the government agencies are actively providing resources to promote physical activity among children and adolescents in Singapore. However, the effectiveness of these activities remains largely unknown. In 2016, a multi-agency government taskforce was set to promote health among children and adolescent. Presence of existing coordination with multi-stakeholders such as private sector and civil society is unclear.

Along with 56 countries, the Global Matrix 4.0 was applied in this first comprehensive evaluation of the physical activity landscape among children and adolescents in Singapore.

Contribution by stakeholders from both the government and non-government sectors has facilitated the process. Common limitations such as the lack of access to some available data and the lack of nationally representative data for certain indicators or age groups were faced by the Research Work Group.

Overall, with a supportive government, Singapore has fared well in organizing the community and the environment to support physical activity among the young. However, behavioral indicators were not optimal. As such, additional efforts are required to strengthen frequency and quality of surveillance efforts, as well as the development and evaluation of strategies to promote key behaviors.

### **ACKNOWLEDGEMENTS**

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Recommended citation: Tay Z, Chen BZ, Kui KY, Padmapriya N, Choong MFF, Müller AM, Lee EL, Troy E, Müller-Riemenschneider F. Active Healthy Kids Singapore Report Card on physical activity for children and adolescents (Short format), 2022. Available at: https://blog.nus.edu.sg/sphpanda/research-projects/mapping-environmental-determinants/AHKGA-singapore-report-card/

The authors would like to thank the following individuals for their contributions to the 2022 Singapore Report Card: Aaron Sim (Health Promotion Board), Jing Song (Sport Singapore), Amir Mohamed (Sport Singapore, Singapore), Pamela Marique (Sport Singapore).

This work is supported by the Ministry of Education, Singapore, under its Academic Research Fund Tier 1 [Grant number: A-0002049-00-00].





