

# Results From Brazil's 2018 Report Card on Physical Activity for Children and Youth

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## Introduction

The practice of regular physical activity in children and adolescents is important for better health and development throughout the life course.<sup>1</sup> Nonetheless, data from Brazil's 2016 Report Card revealed that only 40% of children and youth (6-19 years old) met the recommendations for moderate-to-vigorous physical activity (MVPA).<sup>2</sup> This data also showed unfavorable grades for other behaviors (e.g., sedentary behavior and active transportation). This paper aims to summarize the results of Brazil's 2018 Report Card.

## Methods

The 2018 Report Card included the 10 core physical activity indicators that are common to the Global Matrix 3.0 and obesity prevalence, which made up four indicator dimensions: I) Daily Behaviors (5 indicators: Overall Physical Activity, Organized Sport Participation, Active Play, Active Transportation, Sedentary Behaviors); II) Settings and Sources of Influence (3 indicators: Family and Peers, School, Community and Environment); III) Government Strategies and Investments (1 indicator); and IV) Health Outcomes (2 indicators: Physical fitness, Obesity).

Comprehensive searches, including peer-reviewed and gray literature searches, were performed for each indicator. Data was considered from systematic reviews,<sup>3</sup> local and national surveys,<sup>4</sup> national reports (e.g., National Survey of School Health), website and official information on the policies from the Brazilian Government.<sup>5-9</sup> All information published up to December 2017 were considered for this Report Card.

Brazil's 2018 Report Card (Figure 1) was developed by a group of researchers with expertise in all areas of physical activity covered in the Report Card. This group of experts allowed transparency in the process and determined more accurate levels physical activity in Brazil. Systematic and narrative reviews were developed for each one of the indicators and published in the Brazilian Journal of Kinanthropometry and Human Performance (scientific journal from Brazil).<sup>3</sup>

## Results and Discussion

This is the second wave of Brazil's Report Card and for the first time, information was reported for all the indicators surveyed in the Global Matrix (Table 1). This result was an effort by a diverse group of researchers who reviewed all the available national literature. The next step will be to give visibility to this information to make physical activity promotion in children and youth a priority in Brazil.



Figure 1 — Brazil's 2018 Report Card cover.

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**Table 1 Grades and rationales for Brazil's 2018 Report Card**

Indicator	Grade	Rational	Measure
Overall Physical Activity	D	31.1% children and youth (6 to 19-year old) met the recommendations of MVPA (Global Recommendations on Physical Activity for Health, which recommend that children and youth accumulate at least 60 minutes of MVPA per day on average). <sup>3</sup>	Self-reported and objective measures
Organized Sport Participation	C+	58.1% of children and youth (10- to 18-year old) participated in organized sport and/or physical activity programs. <sup>3</sup>	Self-reported
Active Play	D+	36.0% of children and youth (6- to 19-year old) engaged in unstructured/unorganized active play for several hours a day. <sup>3</sup>	Self-reported
Active Transportation	C	55.0% of children and youth (6- to 21-year old) used active transportation to get to and from school. <sup>3</sup>	Self-reported
Sedentary Behaviors	D-	24.0% of children and youth (3- to 19-year old) reported no more than 2 hours of screen time (TV viewing) on an average day. <sup>3</sup>	Self-reported and objective measures.
Physical Fitness	D	32.2% of children and youth (6- to 19-year old) met the recommendation of the cardio-respiratory fitness (according to the guidelines of AAPHERD, CSEP, FITNESSGRAM, and PROESP-BR), 62.5% of children and youth (6- to 19-year old) in Brazil met the recommendation of the muscular strength (according to the guidelines of CSEP, and PROESP-BR), 38.8% of children and youth (6- to 19-year old) in Brazil met the recommendation of the curl up test (according to the guidelines of AAPHERD, FITNESSGRAM, and PROESP-BR), 55.6% of children and youth (6- to 19-year old) in Brazil met the recommendation of the flexibility (according to the guidelines of AAPHERD, FITNESSGRAM, and PROESP-BR). <sup>3</sup>	Different Physical Fitness Tests
Family and Peers	C+	52.2% of family members (e.g., parents, guardians) facilitated physical activity and sport opportunities for their children, 54.9% of family members were physically active with their kids, 22.5% of children and youth had friends and peers who encouraged and supported them to be physically active. <sup>3</sup>	Self-reported
School	C	96.5% of schools with active school policies, 27.3% of schools where the majority (≥ 80%) of students are offered the mandated amount of Physical Education classes, 59.3% of schools that offer physical activity opportunities (excluding Physical Education) to the majority (> 80%) of their students, 84.4% of schools with students who have regular access to facilities and equipment that support physical activity (e.g., gymnasium or outdoor playgrounds). <sup>4</sup>	Self-reported
Community and Environment	C-	47.3% of children or parents who perceive their community/municipality are doing a good job at promoting physical activity, 62.0% of children or parents who report having facilities, programs, parks and playgrounds available to them in their community, 42.0% of children or parents who report living in a safe neighbourhood where they can be physically active. 50% of children or parents who report having well-maintained facilities, parks and playgrounds in their community that are safe to use. <sup>3</sup>	Self-reported and objective measures
Government	D+	We have any evidence of leadership and commitment in providing physical activity opportunities for all children and youth. There is no information on the resources allocated to the programs and there is no information on the progress of these programs. <sup>5-7</sup>	Official information on the policies from the Brazilian Government.
Obesity	-	14.5% of children and youth were classified as obese according to World Health Organization's (WHO) <sup>10</sup> body mass index (BMI)-for-age reference standards.	Direct measures of weight and height for the calculation of BMI.

Obesity was investigated for being considered a public health problem, one of the causes being physical inactivity. This indicator, obesity, is not addressed in the Global Matrix 3.0 and therefore it has been decided not to give a grade to it. The information on the obesity prevalence represents a parameter and allows other countries and regions to investigate this health outcome for future comparisons.

While all 11 indicators were investigated in the 2018 Report Card for Brazil, research gaps remain that, if addressed, would better define the grades. One gap was that daily behaviors were mostly self-reported in the Brazilian data, whereas, other countries have national evidence of direct measures. Thus, the next step for research in Brazil is to consider direct measures of these behaviors, clearly defining the cut points for activity and sedentary behavior.

Another gap was that Brazilian regions with less Postgraduate programs, such as the North, Northeast and Midwest, had less scientific information than South and Southeast regions. This highlights the need for government policies to stimulate research across the Brazilian territory.

## Conclusion

In general, grades from the indicators in Brazil's 2018 Report Card ranged from D- (sedentary behavior) to C (school). Only three out of ten indicators had grades of C+ or better. Thus, promoting physical activity and other health indicators among Brazilian children and adolescents is still a challenge for the country.