# **Rev Bras Cineantropom Hum**

### editorial

DOI: http://dx.doi.org/10.5007/1980-00372018v20n4p36

# It's time to take care of Brazilian children and adolescents

## É tempo de cuidar das crianças e dos adolescentes brasileiros

Diego Augusto Santos Silva<sup>1</sup> Mark Stephen Tremblay<sup>2</sup>

Issue 4 of the 2018 Brazilian Journal of Kinanthropometry and Human Performance (*Revista Brasileira de Cineantropometria e Desempenho Humano - RBCDH*) addresses a theme that deserves focused attention from different sectors of society. The health of children and youth is one of the most precious assets for the future of a country. Healthy children will have a healthier future, which will result in lower expenditures on health services and longer, more productive lives, both personally and professionally.

One important way to promote health and create a brighter future for children and youth is to support and encourage regular physical activity from the earliest years of life<sup>1</sup>. Regular physical activity provides physical, mental and social health benefits for children and youth, is essential for healthy child development, and must be present in all contexts, at home, at school and in the community<sup>2</sup>.

The importance of physical activity is gaining ground in global political agendas. In 2018, the 2018-2030 Global Plan of Action for Physical Activity<sup>3</sup> was launched by the World Health Organization (WHO). This report presents the current situation of physical activity around the world, showing that three out of four school-age youth did not meet the *minimum* recommended amount of physical activity for health<sup>3</sup>. Surveillance of physical activity levels of the population, including children and youth, is one of the actions recommended by the WHO as a way of assessing the population health of each country<sup>3</sup>.

Other organizations around the world also recommend monitoring physical activity indicators for school-age youth as one of the ways of assessing health and monitoring progress and planning the future<sup>4</sup>. For example, the Active Healthy Kids Global Alliance leads the Global Matrix<sup>4</sup> project, which in 2018 will release its third edition ("Global Matrix 3.0"). This project aims to assess and compare physical activity and health indicators of school children and youth around the world. Brazil has participated in this project since 2016 and in that year, it published the first report (Report Card Brazil 2016) on the physical activity of children and adolescents<sup>5,6</sup>. Country Report Cards are developed following a harmonized approach that is explained in detail elsewhere<sup>7,8</sup>.

Brazil is now developing the second Report Card on the physical activity of children and youth, and the this current journal issue aims to present methodological aspects and results of the different indicators surveyed for Report Card Brazil 2018<sup>9</sup>.

- 1 Federal University of Santa Catarina. Florianopolis, SC. Brazil.
- 2 Children's Hospital of Eastern Ontario Research Institute. Ottawa, ON. Canada.

Received: 12 May 2018 Accepted: 01 August 2018



Editorial Silva & Tremblay

#### Indicators covered

The Global Matrix 3.0 project focuses on 10 key indicators related to health-related physical activity of children and youth. In addition to the key indicators of the Global Matrix project, Brazil added obesity as another indicator of the Report Card. In this aspect, eleven indicators related to physical activity are investigated in Report Card 2018, divided into four dimensions: (1) government strategies and investments; (2) sources of influence, (3) daily behaviors, and (4) health outcomes (see Figure 1).

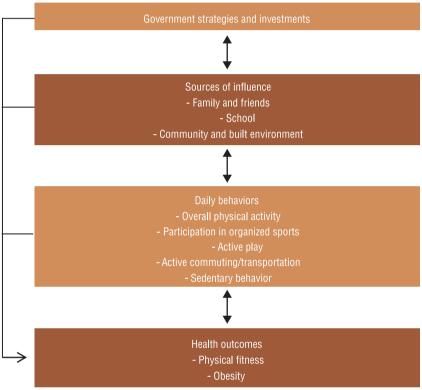


Figure 1. Dimensions and indicators surveyed in the Report Card Brazil 2018.

#### **Project development**

The Report Card project leader in Brazil is Professor Diego Augusto Santos Silva, who brought together a group of experts in the different Report Card indicators, belonging to different institutions in the country and who are carrying out research activities in three different geographic regions of Brazil (Northeast: Prof. Roberto Jerônimo dos Santos Silva and Prof. Valter Cordeiro Barbosa Filho. Southeast: Prof. Diego Giulliano Destro Christofaro, Prof. Gerson Luis de Moraes Ferrari, Prof. Rômulo Araújo Fernandes. South: the project leader, Prof. Nelson Nardo Júnior, and Prof. Kelly Samara da Silva). The meeting of different researchers who know the reality of different regions of Brazil allows a more in-depth discussion in theoretical and applied perspectives of the indicators addressed in this project, which allows greater transparency, representativeness and richer discussions. Each of these researchers gathered their research groups to work on the search for the best evidence to inform the Report Card grades.

Comprehensive research, including scientific papers, research reports, official information from the federal government and other sources, allowed mapping the best evidence available in Brazil on the indicators. This journal has the opportunity to disclosure this research, identifying and explaining the grades for each of these indicators in Brazil. The Government Strategies and Investments indicator was treated in its entirety only in the full version of Report Card Brazil, available in the Global Matrix project<sup>9,10</sup>.

#### **RESULTS**

Readers can find in this issue the results found for the different indicators. The purpose of the Global Matrix project is to compare the different indicators across countries by assigning grades (concepts) for the indicators (Box 1).

Based on recommendations for assigning grades (concepts) and the effort of the group of experts from Brazil who worked on different indicators, the results for Brazil are summarized in Box 2.

**Box 1.** Scale of grades (concepts) for all countries belonging to the Global Matrix project of the Active Healthy Kids Global Alliance.

A+ (94% - 100%)	Brazil is succeeding with the vast majority of children and
A (87% - 93%)	adolescents
A- (80% - 86%)	
B+ (74% - 79%)	Brazil is succeeding with more than half of children and adoles- cents
B (67% - 73%)	
B- (60% - 66%)	Oute
C+ (54% - 59%)	Brazil is succeeding with about half of children and adolescents
C (47% - 53%)	
C- (40% - 46%)	
D+ (34% - 39%)	Brazil is succeeding with less than half of children and adolescents
D (27% - 33%)	
D- (20% - 26%)	
F	Brazil is succeeding with few children and adolescents
INC	Incomplete or insufficient data for grade assignment

Box 2. Grades (concepts) of indicators surveyed in the Report Card Brazil 2018

GRADE	INDICATORS
	Daily behaviors
D	Overall physical activity
C+	Participation in organized sports
D+	Active play
С	Active commuting/transportation
D-	Sedentary behavior
	Health Outcomes
D	Physical Fitness
14.5%	Obesity*
	Sources of influence
C-	Family and friends
С	School
C-	Community and Built Environment
D-	Government Strategies and Investments†

Note. \*Results presented only in prevalence values; †all information is included in the full report  $^{9,10}$ .

Editorial Silva & Tremblay

#### What now?

In the different papers published in this issue, the reader can verify the recommendations that each specialist and what the respective research group has made for the results found. In general, it was observed that Brazil performed from moderate to weak in all indicators. This shows that urgent measures to promote the physical activity of children and youth in different contexts are necessary to preserve the health of our children and protect the future wellbeing of our country. One of the most important aspects of this project is that the information relates not only to the individual (e.g., daily behaviors) but also to macro-structural aspects that influence daily behavior. It is observed that such aspects are beyond the control of the individual and that a range of contextual actions are necessary in the country to modify this scenario and respond to the WHO Global Plan of Action for Physical Activity<sup>3</sup>.

The "It is time to take care of Brazilian children and adolescents" project is, above all, a message to wake up society, governments, families and individuals to challenge each other and their representatives, to preserve, protect, and promote health physical activity as an important conduit to a brighter, healthier, more equitable and prosperous future for Brazilian children and adolescents.

#### REFERENCES

- 1. Carson V, Lee EY, Hewitt L, Jennings C, Hunter S, Kuzik N, et al. Systematic review of the relationships between physical activity and health indicators in the early years (0-4 years). BMC Public Health 2017;17(Suppl 5):854.
- 2. Poitras VJ, Gray CE, Borghese MM, Carson V, Chaput JP, Janssen I, et al. Systematic review of the relationships between objectively measured physical activity and health indicators in school-aged children and youth. Appl Physiol Nutr Metab 2016;41(6 Suppl 3):S197-239.
- 3. World Health Organization. Global Action Plan on Physical Activity 2018-2030: more active people for a healthier world. Geneva: World Health Organization; 2018.
- 4. Tremblay MS; Active Healthy Kids Global Alliance. Coordinated efforts in the reporting of global physical activity. Lancet 2015;385(9962):28.
- 5. Nardo N Jr, Silva DAS, Ferrari GL, Petroski EL, Pacheco RL, Martins PC, et al. Results from Brazil's 2016 Report Card on Physical Activity for children and youth. J Phys Act Health 2016;13(11 Suppl 2):S104-9.
- Nardo N Jr, Silva DAS, Ferrari GL, Petroski EL, Pacheco RL, Martins PC, et al. Boletim Brasil 2016: Atividade física para crianças e adolescentes. 2016. Disponível em: https://www.activehealthykids.org/wp-content/uploads/2016/11/brazil-report-card-long-form-2016.pdf [03 de Março de 2018].
- Tremblay MS, Barnes JD, González SA, Katzmarzyk PT, Onywera VO, Reilly JJ, et al. Global Matrix 2.0: Report Card Grades on the Physical Activity of Children and Youth Comparing 38 Countries. J Phys Act Health 2016;13(11 Suppl 2):S343-66.
- 8. Colley RC, Brownrigg M, Tremblay MS. A model of knowledge translation in health: the Active Healthy Kids Canada Report Card on physical activity for children and youth. Health Promot Pract 2012;13(3):320-30.
- 9. Silva DAS, Christofaro DGD, Ferrari GL, Silva KS, Nardo N Jr, Silva RJS, et al. Results from Brazil's 2018 Report Card on physical activity for children and youth. J Phys Act Health in press.
- 10. Active Healthy Kids Global Alliance. The Global Matrix 3.0 on physical activity for children and youth. 2018; Available from: https://www.activehealthykids.org/[2018 jul 07].

#### **CORRESPONDING AUTHOR**

Diego Augusto Santos Silva Federal University of Santa Catarina, Sports Center University campus, Trindade, Zip code: 88040-900, Florianópolis, Brazil E-mail: diegoaugustoss@vahoo.

E-mail: diegoaugustoss@yahoo. com.br