



Active Healthy Kids Global Alliance Webinar
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Active Play Indicator: Rationale and Justification for Benchmarks, Key Points and Assessment

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Overview

- Definitions / Characteristics / Importance / Measurement
- Rationale & Justifications for active play benchmark
- Grading of active play indicator
- Examples of grades of active play indicator in some countries/regions
- Open discussion

Definition of Active Play

Definition used in Global Matrix 3.0:

*Active play may involve symbolic activity or games with or without clearly defined rules; the activity may be unstructured/unorganized, social or solitary, but the distinguishing features are a **playful context, combined with activity that is significantly above resting metabolic rate**. Active play tends to occur sporadically, with frequent rest periods, which makes it difficult to record.*

Truelove et al., 2017, JPAH

- Systematic review of active play definition and measurement in young children (2-6 years)
- A consistent definition of active play has not been established.
- The authors proposed the definition of “*a form of gross motor or total body movement in which young children exert energy in a freely chosen, fun, and unstructured manner*”.

Characteristics of Active Play

- Can take place indoor or outdoor
- Freely chosen
- Self-initiated
- Spontaneous
- Enjoyable & fun

(Active Healthy Kids Canada, 2012; Truelove et al., 2017)



Importance of Active Play

- Essential part of child development
- Development of motor function
- Development of social skills
- Improve creativity, decision-making, and problem-solving
- Opportunity to test boundaries and learn from mistakes
- Establish positive attitudes towards physical activity which help build lifelong active healthy habits

(Active Healthy Kids Canada, 2012; Truelove et al., 2017)

How to Measure Active Play

- Lack of valid and reliable method of measurement (Tremblay et al., 2016)
- Currently no standard approach to measuring active play (Bates & Stone, 2015).
- Recommendation for optimal measurement (mixed-methods): couple **subjective measure** (e.g. questionnaire) with **objectively measured activity** (e.g. accelerometry) (Bates & Stone, 2015; Truelove et al., 2017).
- Self- or proxy-report surveys was used to measure “Active Play” amongst the 20 countries that graded the behavior (Aubert et al., 2018).

Benchmarks for Active Play

Report Card	Active Play Benchmark
Global matrix 1.0 Global matrix 2.0	% of children and youth who engage in unstructured / unorganized active play for several hours a day
Global matrix 3.0	% of children and youth who engage in unstructured / unorganized active play at any intensity for >2 h a day (Aubert et al. 2018) / several hours a day (AHKGA, 2018) % of children who report being outdoors for >2 h a day (Aubert et al. 2018) / several hours a day (AHKGA, 2018)

- The benchmark of several hours / day is arbitrary
- Further research is needed to establish a benchmark that is linked to health outcomes

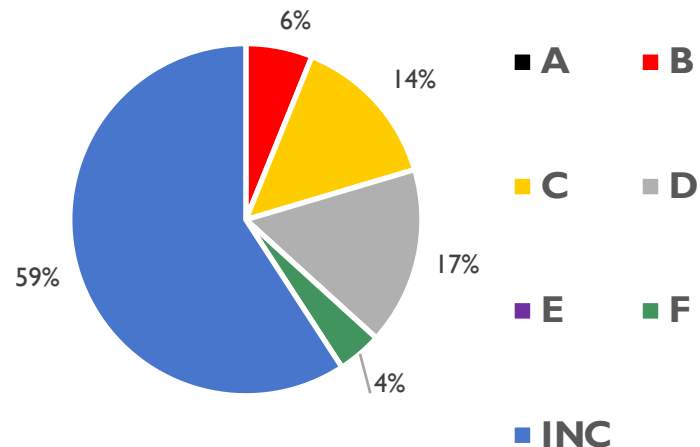
Aubert, S., Barnes, J. D., Abdeta, C., et al. (2018). Global Matrix 3.0 Physical Activity Report Card Grades for Children and Youth: Results and Analysis From 49 Countries, *Journal of Physical Activity and Health*, 15(s2), S251-S273.

ParticipACTION. (2018). ParticipACTION. The Brain + Body Equation: Canadian kids need active bodies to build their best brains. The 2018 ParticipACTION Report Card on Physical Activity for Children and Youth.

Grading of Active Play

- Lack of evidence – Active Play had the highest number of “INC” grades (29 out of 49) in Global Matrix 3.0.
- “B” was the highest Active Play grade in Global Matrix 2.0 (Tremblay et al., 2016) and 3.0 (Aubert et al., 2018).

Active Play Grades in the Global Matrix 3.0

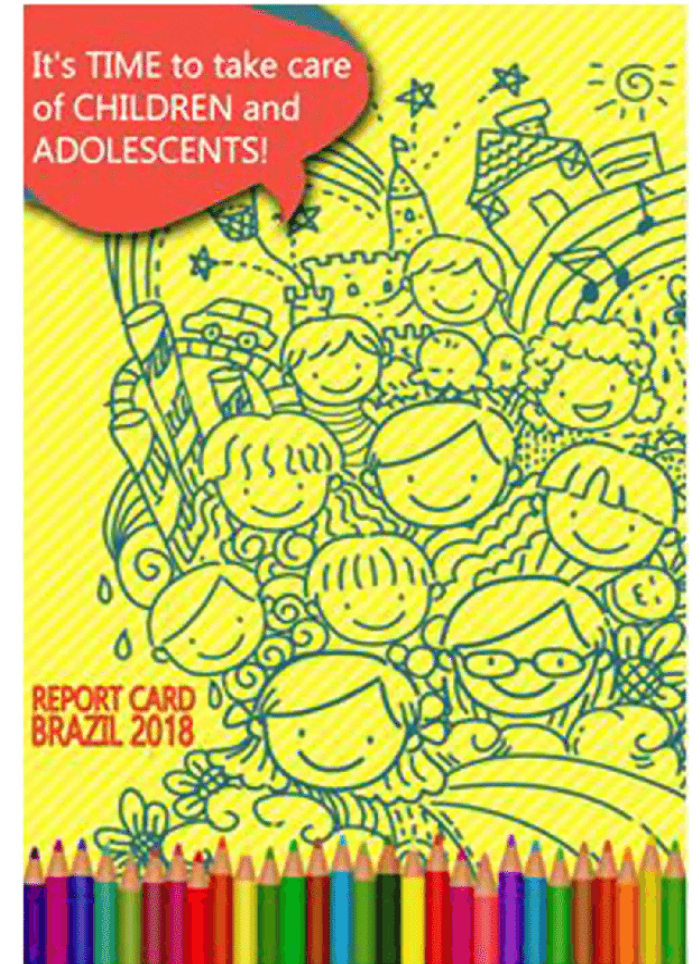


Countries that assigned letter grades to active play in Global Matrix 3.0

Botswana	Ethiopia	Nigeria
Brazil	Finland	Slovenia
Bulgaria	Germany	Spain
Canada	Ghana	Thailand
China	India	Wales
Czech Republic	The Netherlands	Zimbabwe
Estonia	New Zealand	

Brazil (2018)

Grade	D+
Benchmark	% of children and youth who engage in active play and non-organized / unstructured leisure activities for several hours a day
Evidence	Self-reported measure of active play
Rationale	36.0% of children and youth (6-19 year old) engaged in unstructured/unorganized active play for several hours a day



Canada (2018)

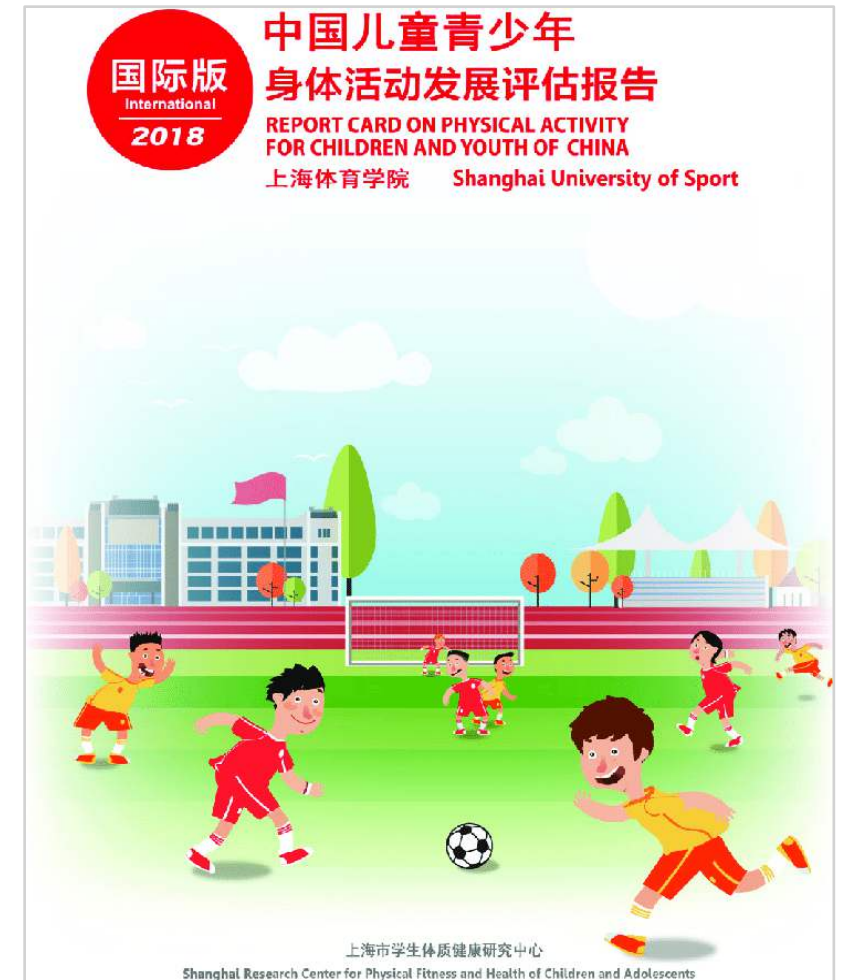
Grade	D
Benchmark	% of children and youth who engage in active play and non-organized/unstructured leisure activities for several hours a day
Evidence	Canadian Health Measures Survey (CHMS) Health Behavior in School-Aged Children Survey (HBSC)
Rationale	28% of 5-15 year-old (weighted approach) met the benchmark.



China (2018)

Grade	D+
Benchmark	% of children and youth who participate in unstructured/unorganized PA at least four times in the past week (at least 60 min per occasion).
Evidence	Physical Activity and Fitness in China - The Youth Study (PAFCTYS)*
Rationale	38.7% of students met the benchmark

**A national surveillance protocol developed by the Chinese Report Card team*



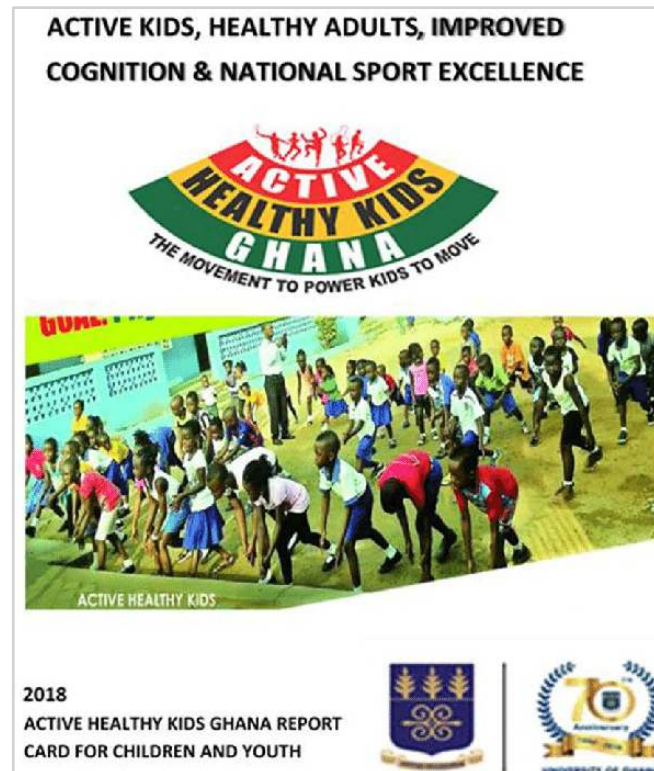
Ghana (2016 & 2018)

GHANA 2016 REPORT CARD ON PHYSICAL ACTIVITY FOR CHILDREN AND YOUTH



Ghana 2016 RC

2016 Grade	B
Evidence	interviews and self-reports obtained from school teachers and not-for-profit organizations that emphasize learning through play



2018 Grade	B-
Evidence	Based on the 2017 Right to Play report
Rationale	It was estimated that 60% of Ghanaian children and youth engage in various forms of play-based activities at school, home and in open spaces around the 216 districts in the country.

Note: benchmark was not stated in the documents

The Netherlands (2018)

Grade*	B
Benchmark	% of children who play actively outside more than one time per week
Evidence	Evidence from the Dutch National Institute for Public Health and the Environment (RIVM)
Rationale	70% of children play actively outside more than one time per week

*based on the score included in Global Matrix 3.0

A different grade was reported in the full paper publication due to different benchmark (Takken et al., 2020 Public Health, <https://doi.org/10.1016/j.puhe.2020.04.044>)



Issues to be Considered

1. AHKGA's Active Play Benchmark (2018)
several hours a day/any intensity for >2 h a day (Aubert et al. 2018)
2. Availability of data collected during-COVID lockdown
3. Effects of pandemic on benchmarks and grading of active play (e.g. outdoor time): be transparent in reporting
4. Forms/Choices of active play for children & youth in highly urbanized areas



Questions and Discussion



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