

Results from Ghana's 2018 Report Card on Physical Activity for Children and Youth: A Global Matrix 3.0 Paper

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Abstract:

Background: It is recommended that children aged 5 to 17 years should accumulate at least 60 minutes of moderate- to vigorous-intensity physical activity (MVPA) daily. However, there is limited empirical evidence on how much physical activity Ghanaian children and youth engage in. The 2018 report card (RC) seeks to create awareness about physical activity and sedentary behaviour among children and the youth in Ghana. **Methods:** The 2018 RC synthesized data from multiple sources including, best available evidence including, peer-reviewed literature, and gray literature such as government and non-government reports and policy guidelines. **Results:** Overall physical activity grades increased from grade D in 2016 to grade C in 2018 RC, indicating that more than 50% of children are meeting PA recommendation in 2018. Both organised sport participation and active transportation also increased from grade C in 2016 to C+. Active play declined from B to B- due to limited documentation, while sedentary behaviors moved from a D in 2016 to INC in 2018. Four indicators, School-infrastructure, policies and programs, Family and Peers, Government Strategies and Investments maintained their 2016 grades. **Conclusion:** A more coordinated strategic approach to physical activity promotion is necessary to increase physical activity levels for better health.

Keywords:

Children and youth, physical activity behaviors, policy, settings and sources of influence

Background



Ghana, a country on the West Coast of Africa, is one of the most thriving democracies on the continent. It shares boundaries with Togo to the east, la Cote d'Ivoire to the west, Burkina Faso to the north and the Gulf of Guinea, to the south. A country covering an

area of 238,500 square kilometres, Ghana has an estimated population of 29.46 million,¹ which ranks 48th in the world. According to the latest WHO data published in 2018, life expectancy in Ghana is: Male 62.5, female 64.4 and total life expectancy is 63.4, which gives Ghana a World Life Expectancy ranking of 155.² Yet only 44% of children born in the country today will become productive when they grow up. About 56% of Ghana's human capital will go to waste in the next 18 years because of poor quality education system, the 2018 Human Capital Index (HCI) report by the World Bank revealed.³

Introduction

The HCI revelation and the population estimates are stunning.^{1,3} With a population rank of 49 and a growth rate of 2.18%, more children and youth will go waste if the Ghana educational system is not reformed to improve academic achievement and to place physical activity at the center of curriculum development and learning. Regular physical activity among children and youth is associated with physical, psychosocial and cognitive wellbeing,⁴ decreased adiposity,^{5,6} improved academic achievement,^{4,7} and brain health and development.⁸ Despite these known benefits, a significant proportion of children and adolescents do not accumulate the recommended amount of daily physical activity.^{9,10} Insufficient physical activity^{5,6} in children and youth pose a significant public health challenge because it is associated with non-communicable diseases in adulthood.

Methods

Experts from various physical activity-related sectors formed the Ghana Report Card Working Group that gathered data and information. A combination of manual literature search, document review, and systematic evidence gathering for relevant information spanning 2016 to 2018 were conducted. Grades were based on the best available evidence. Sources included policy guidelines, peer-reviewed published literature, and gray literature including reports of

government and nongovernment institutions. The data were aggregated and consolidated following a harmonized process (Tremblay, et. al 2016)¹¹. Grades (A = excellent, to F = failing) were assigned to each of twelve common indicators using a standardized grading rubric. The ten common indicators were: Overall Physical Activity, Organized Sport and Physical Activity Participation, Active Play, Active Transportation, Sedentary Behaviours, Physical Fitness, Family and Peers, School, Community and Environment, and Government. Experts in the working group appraised the available evidence, discussed discrepancies, and reached consensus, before awarding a grade for each indicator. Assigned grades and justifications, were submitted, and audited by the scientific sub-committee of the Active Healthy Kids Global Alliance (www.activehealthykids.org).

Results and discussion

In all, 10 indicators were assigned grades in the 2018 Ghana Active Healthy Kids Report Card. Although there were slight changes in the grades as compared to the 2016 grades, there are still research gaps, policy and monitoring issues which remain to be addressed to better inform the grades. A more robust assessment, for example, keep fit club membership statistics, school physical education and sports adherence, spontaneous play during playtime in schools and communities and other recreational and sports programs by NGOs would assist in providing a more complete picture of the overall physical activity level of children and youth in Ghana. At present, many keep fit clubs, recreational and organized sport activities abound in the country but without an objective monitoring or surveillance system. Grades for all 10 indicators are shown in Table 1.

Overall Physical Activity Levels: C

There is a slight change in the overall physical activity for 2018 compared to the 2016 report card, and the change is due to the availability of few documentation and not necessarily an increase in the overall activity level of children and youth in the country. Expert observations based on various forms of physical activities that children and youth engage in (for example, school sports and PE, walking and cycling to school, weekend keep fit activities, games and others.),¹² revealed that approximately 48% of children and youth engage in some meaningful activities that contribute to overall physical activity level in Ghana. The indicator was graded as (C).

Organized Sport Participation: C+

The country is succeeding with 54% - 59% of children and youth engaging in organized inter-zonal, inter-district, inter-regions and national sports festivals.¹² In addition, there is an increase in the number of recreational sports organized by non-governmental organizations and communities. The indicator was graded as (C+).

Active Play: B-

Experts agreed that about 60% of Ghanaian children and youth engage in various forms of play at school, home and in open spaces around the country. Experts' review of the Right to Play report of 2017 showed a moderate percentage of children and youth engaged in play-based activities in the 216 districts of the country. The indicator was graded as (B-).

Active Transportation C+

About 54% of children and youth especially those in the rural areas walk to school and back home covering about 2km. The community day senior high schools that have been built in the various districts in Ghana are encouraging active transportation. Students in such schools walk to school and back home everyday with some covering more than two kilometres daily. The indicator was graded as (C+).

Sedentary Behaviours: INC

There were no data to describe children and youth's sedentary behaviour and/or screen time per day. The indicator was graded as incomplete (INC).

Physical Fitness: INC

There are over 500 keep fit clubs in Ghana. Although, children and the youth participate massively in these activities, there are no data to describe children and youth's physical fitness levels. The indicator was graded as incomplete (INC).

Family and Friends: F

No additional data exist to support grade adjustment, so the 2016 grade was maintained as (F).

Community and Environment: D+

Progress is being made through the building of 46 community Day Senior High Schools¹³ in various districts in the country in 2017. These school were equipped with open spaces and facilities that can promote physical activity and sport in school and to increase active participation. The indicator was graded as (D+).

Government Strategies and Investments: D

The Physical Education and Sports implementation guideline,¹² the National Teacher Education Curriculum Framework¹⁴ and the Physical Education and Sport specialism curriculum for the Colleges of Education¹⁵ in Ghana provide some evidence of government's effort to promote physical activity and sport among teacher trainees to influence children and youth participation in school physical activity programs. The indicator was graded as (D).

Table 1: Grades according to Physical Activity Indicators in the 2018 Ghana Report Card on Physical Activity for Children and the Youth

INDICATOR	GRADE
1-Overall Physical Activity	C
2-Organized Sport & Physical Activity Participation	C+
3-Active Play	B-
4-Active Transportation	C+
5-Sedentary Behaviours	INC
6-Physical Fitness	INC
7-Family & Peers	F
8-School	D
9-Community & the Built Environment	D+
10- Government Strategies and Investments	D

The grade for each indicator is based on the percentage of children and youth meeting a defined benchmark

A+ =94% - 100%, A= 87% - 93%, A-=80% - 86%, B+=74% - 79%, B = 67% – 73%, B-=60% - 66%, C+=54% - 59%, C=47% – 53), C-=40% - 46%,

D+=34% - 39% D= 27% - 33%, D-20% - 26%, F< 20%; INC is Incomplete data.

Conclusion

The paper reveals that the proportion of Ghanaian children who achieve the World Health Organization recommended amount of physical activity is low.^{3,16} Additionally, there is a clear need for high quality geographical representative data, to better understand the levels of physical activity participation in Ghana. The grades appear to be higher for 3 behavioral indicators and lower for sources of influence and settings. This means that active play, organized sports participation and active transportation are not driven by the community environments. Perhaps, if the environments are built to be friendly and safe more, children will be inspired to move more to increase their physical activity levels and fitness in Ghana.

Future Directions/Recommendations

Based on the results of the 2018 Report Card on Ghanaian Children and Youth, the following priorities to improve the 2020 Report Grades are identified for future consideration and research;

1. Conduct a pilot research on barriers and enabling practices to physical education and sport implementation in schools,
2. Implement existing Ghana Education Service policy guidelines for physical education and sport in schools¹² and
3. Develop a robust monitoring and surveillance mechanism to generate quality data on physical activity and related behaviors.

It is recommended that children aged 5 to 17 years should accumulate at least 60 minutes of moderate- to vigorous-intensity physical activity (MVPA) daily.^{16,17} The Ghana Education Service requirement of at least 80 minutes per week of physical education¹² must be enforced to increase levels of physical activity participation among children and youth. When children fail to achieve the minimum recommended physical activity levels, they are at risk of adverse health consequences.

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