PHYSICAL ACTIVITY FOR CHILDREN AND ADOLESCENTS
The 2022 Philippine Report Card on Physical Activity for Children and Adolescents

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The 2022 Philippine Report Card on Physical Activity for Children and Adolescents

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<td>B</td>
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About the Report Card

There is a global concern over the increasing levels of physical inactivity and sedentary behaviors in children and adolescents. In response to this public health issue, the Global Matrix Project was launched in 2014 to have a better understanding of the worldwide variation of children's and adolescents' physical activity and its correlates. The Global Matrix Project is led by the umbrella organization called the Active Healthy Kids Global Alliance (AHKGA), which provides guidance and support to all participating countries through monthly e-newsletters and reminders. AHKGA is a not-for-profit organization consisting of researchers, health professionals, and stakeholders who collaborate to advance PA in children and adolescents worldwide.

Like many developing countries, the Philippines faces a double burden of malnutrition with a high prevalence of undernutrition and an increasing level of over-nutrition in young people, in addition to insufficient physical activity and sedentary behaviors. These are risk factors for many non-communicable diseases and, therefore, increasing uptake and sustained physical activity participation is an essential component in improving public health. The Philippines' participation in the Global Matrix 4.0 project aims to increase awareness of the need to provide more physical activity opportunities for children and adolescents to address these public health concerns.

The report card aims to advance knowledge and influence stakeholders and advocacy leaders to create more physical activity opportunities for young people. The 2022 Philippine Physical Activity Report Card presents the grades for all Filipino children and adolescents.

The 2022 Philippine Physical Activity Report Card was developed and produced by a team consisting of academics, sports leaders, advocacy groups, and organizations, in collaboration with the AHKGA. The Report Card summarizes the available evidence on ten indicators influencing physical activity among Filipino children and adolescents. These ten physical activity indicators are common to all participating countries in the Global Matrix 4.0: (1) Overall Physical Activity, (2) Physical Fitness, (3) Organized Sport and Physical Activity, (4) Active Play, (5) Active Transportation, (6) Sedentary Behaviors, (7) Family and Peers, (8) School, (9) Community and Environment, and (10) Government. Indicators 1-6 are behaviors or traits whereas indicators 7-10 are sources and settings of influence.

The AHKGA provides the definition and benchmarks of the indicators, which the country workgroup uses as reference. Some of the indicators have multiple benchmarks because AHKGA acknowledges that not all countries have the same available data. After gathering and assessing the available data, each indicator is assigned a grade based on standard criteria.

The development of the 2022 Philippine Physical Activity Report Card is supported by Sun Life Philippines as part of its advocacy to help Filipino live healthier lives.
Methodology

The Report Card is a communication and advocacy tool that uses existing published or unpublished surveillance data to show the extent to which a country is promoting and facilitating physical activity opportunities for children and adolescents. The AHKGA guides each participating country in developing their country’s report cards. Each country follows a standardized methodology established by the AHKGA.

The first stage of the process is a comprehensive review of academic and non-academic literature on each indicator to develop the contents of the Report Card. Current evidence of the benefits and outcomes of regular physical activity are assessed and described within the Report Card to provide context, background, and justification for the importance of physical activity in public health.

Next, the most recently collected national and regional surveillance data are identified and assessed for relevance. Five national surveys were identified to contain potentially relevant information to inform the grade assigned for each indicator: (1) the 2013 Young Adult Fertility and Sexuality Study: Philippines, (2) the 2015 Global School-based Student Health Survey: Philippines, (3) the 2017 Philippine National Demographic and Health Survey, (4) the 2018 Philippine Health Statistics, and (5) the 2018 FNRI National Nutrition Survey. In addition, more than 30 studies with potentially relevant data have been identified via systematic database searches.

The research workgroup (RWG) consisting of 25 academics and practitioners in the fields of physical activity, sports science, PE, psychology, and physical therapy from the University of the Philippines was formed in May 2021 to develop and produce the 2022 Philippine Physical Activity Report Card. The RWG reviewed the identified national surveys and published literature and extracted relevant information to grade the indicators.

Indicators with quantitative data were evaluated and graded using the standardized benchmarks and grading scheme provided by the AHKGA. The grading scheme uses a letter grade typical of a school report card. For example, a grade of “A” means that the country is succeeding with 80% or more of the children and youth meeting the benchmark. The country can also be more specific by adding “+” or “−” signs to their grades. If there is no sufficient data available, then a grade of INC was assigned to an indicator.
In the Philippine Report Card, Government was the only indicator that had qualitative data based on the 10 policies identified through the online search of government databases. These policies were evaluated and quantified following the scoring rubric suggested by Ward et al. This scoring rubric was based on the Policy Audit Tool Version 2 (PAT v2) developed by the Health-Enhancing Physical Activity (HEPA) Europe, which includes six (6) criteria with different score weights totaling to 100%: number and breadth of relevant policies (10%), identified supporting actions (20%), identified accountable organization (25%), identified reporting structures (15%), identified funding (20%), and monitoring and evaluation plan (10%).

The RWG invited sports and physical activity leaders, advocacy groups, health and education experts, and other stakeholders from around the country to an online meeting on 8 November 2021 to present and discuss the group’s preliminary findings. Suggestions from the stakeholders to investigate further and request data from appropriate government agencies were considered. No additional data were identified; hence, the preliminary grades were retained, except for the Government indicator as additional policies were located. Follow-up consultations with selected stakeholders were then held in January 2022 to collect additional comments. These comments and recommendations were incorporated into the final version of the report.

### The Grading Criteria

<table>
<thead>
<tr>
<th>Grade</th>
<th>Criteria</th>
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<tbody>
<tr>
<td>A+</td>
<td>94% - 100%</td>
</tr>
<tr>
<td>A</td>
<td>We are succeeding with a large majority of children and adolescents (87% - 93%)</td>
</tr>
<tr>
<td>A-</td>
<td>80% - 86%</td>
</tr>
<tr>
<td>B+</td>
<td>74% - 79%</td>
</tr>
<tr>
<td>B</td>
<td>We are succeeding with well over half of children and adolescents (67% - 73%)</td>
</tr>
<tr>
<td>B-</td>
<td>60% - 66%</td>
</tr>
<tr>
<td>C+</td>
<td>54% - 59%</td>
</tr>
<tr>
<td>C</td>
<td>We are succeeding with about half of children and adolescents (47% - 53%)</td>
</tr>
<tr>
<td>C-</td>
<td>40% - 46%</td>
</tr>
<tr>
<td>D+</td>
<td>34% - 39%</td>
</tr>
<tr>
<td>D</td>
<td>We are succeeding with less than half of children and adolescents (27% - 33%)</td>
</tr>
<tr>
<td>D-</td>
<td>20% - 26%</td>
</tr>
<tr>
<td>F</td>
<td>We are succeeding with very few children and adolescents (&lt;20%)</td>
</tr>
<tr>
<td>INC</td>
<td>We do not have sufficient data to assign a grade</td>
</tr>
</tbody>
</table>
Overall Physical Activity

Overall physical activity is any bodily movement produced by skeletal muscles that requires energy expenditure.

Key Findings

Two national surveys [1,2] and three empirical studies [3-5] were considered to have potentially useful data to grade Overall PA. In the 2013 YAFS4, 47.3% of Filipino adolescents (15-19 years) reported doing physical exercise at least twice a week [2]. However, the duration and intensity of exercise were not reported. The three empirical studies used pedometers or accelerometers to measure physical activity of Filipino children and adolescents, but they had small sample sizes [3,4] or were limited only to one province [5]. Data from YAFS4 and the three empirical studies were ruled out for not meeting the AHKGA benchmark. The 2019 FNRI ENNS reported that 84.5% of Filipino adolescents were insufficiently active (i.e., doing less than 60 minutes of moderate- to vigorous- PA per day) [1]. The proportion of insufficient PA among males (80.5%), females (88.8%), and those living in rural (84.9%) and urban areas (84.3%) were also reported. The 2019 FNRI ENNS data implies that **15.4% of Filipino adolescents (19.5% males, 11.2% females; 15.1% rural, 15.7% urban) were sufficiently active** (i.e., doing 60 minutes or more of moderate- to vigorous-intensity PA per day). Hence, a grade of F was assigned for Overall PA based on this information.
Organized Sport and Physical Activity

A subset of physical activity that is structured, goal-oriented, competitive, and contest-based

Key Findings

Data from YAFS42 and one peer-reviewed study [6] were considered for this indicator. In YAFS4, participants were asked to list down all activities they do in their leisure time, and 24.6% of adolescents reported playing sports as one of their leisure activities [2]. However, it was unclear whether sports were played in structured, organized, and contest-based contexts as defined by AHKGA. In one peer-reviewed paper involving 408 students (11-19 years) from two public high schools in Metro Manila, 137 (33.6%) reported to participate in afterschool sports [6]. Of these 137, 75 (54.70%) were boys, and 62 (45.30%) were girls. Data from this study, however, was limited only to two public schools in Metro Manila. No other nationally represented data were identified to inform the grade. Hence, this indicator was assigned a grade of INC.
Active Play

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.

Key Findings

Two studies were identified to potentially contain data related to active play. In a study involving 380 schoolchildren [7], 29.0% of 12-year-old boys to 40.8% of 11-year-old girls reported free play in the form of traditional Philippine games (e.g., patintero, tumbang preso) as one of the most common activities they take part in. In another study (n = 437), Bernardo [8] investigated the activities Filipino children play at home and in school, and found that 32% of girls and 40.5% of boys reported playing outdoor/motor games at home. Both studies had small sample sizes and were deemed insufficient to grade the indicator. The RWG could not find any other data on Active Play and was, therefore, assigned a grade of INC.
Active Transport

Active transportation refers to any form of human-powered transportation – walking, cycling, using a wheelchair, in-line skating or skateboarding.

Key Findings

Three potential sources of data were considered for Active Transportation. In one study involving 2,043 adolescents (14-16 years: 1053 males, 990 females) in Cebu, it was reported that 40% walked to school, and less than 1% rode a bike [5]. In another study involving 1208 schoolchildren, 8-10 years, from public (n = 642) and private (n = 566) schools in Metro Manila, it was reported that 49.5% of children from public schools versus 9.0% of children from private schools walked to school [9]. Data from both studies, however, were almost two decades old and focused only on one locality. One item in the 2015 GSHS asked respondents to report the number of days they walk or ride a bicycle to or from school [10]. Based on the 2015 GSHS data, we found that 29.5% of Filipino schoolchildren (27.2% males; 31.5% females) walked or biked to school at least five days a week. A grade of D was then assigned to this indicator using the information from the GSHS.
Sedentary Behaviors

Any waking behavior characterized by an energy expenditure ≤1.5 metabolic equivalents, while in a sitting, reclining, or lying posture.

Key Findings

One national survey and one empirical paper were considered for this indicator. In a study describing the PA and inactivity levels of Filipino adolescents aged 14-16 years in Cebu, the authors reported that 48% of Filipino adolescents watched TV two or more hours per day (i.e., 52% watched TV for less than 2 hours per day) [5]. Data from this study, however, is almost two decades old and taken only from one province. Again, the data from the GSHS was used because it was based on a national sample and the most recent data identified by the RWG at the time of data collection. In the 2015 GSHS [11,12], it was reported that 31.9% of Filipino adolescents spent three or more hours per day sitting and watching TV, playing computer games, or talking with friends, indicating that 68.1% (68.4% males; 67.8% females) spent two hours or less per day on those activities. Hence, a grade of B was assigned to this indicator.
Physical Fitness

Physical fitness is a set of characteristics that permit a good performance of a given physical task in a specified physical, social, and psychological environment.

Key Findings

Four studies that included physical fitness as a variable were identified via systematic database searches [13-16]. However, these studies were not based on nationally representative samples and, therefore, not sufficient to inform the grade. In addition, consultation meetings with stakeholders involved in school sports and PE revealed that public schools conducted regular physical fitness testing [17], but no publicly available reports had been produced. Physical fitness was therefore assigned a grade of INC.
Family and Peers

Any member within the family who can control or influence the physical activity opportunities and participation of children and youth in this environment.

Key Findings

Two studies were identified to potentially contain data relevant to the Family and Peer indicator. Florentino et al. [9] reported that about 80% of Filipino parents “consider PA very important to child’s health” and more than 50% “always encourages their child to take part in PA.” Data, however, was limited to 1,208 children 8-10 years of age from urban Manila only. In the study of Khan et al. examining the relationship between parental or peer support and adolescents’ physical activity [18], they found that Southeast Asia, including the Philippines, had the highest association between peer support and adolescents’ physical activity. This report used the 2015 GSHS data that measured parental and peer support using the following items: “During the past 30 days, how often did your parents or guardians understand your problems and worries?” and “During the past 30 days, how often were most of the students in your school kind and helpful?” These items did not meet the AHKGA benchmarks and were deemed insufficient. The RWG did not identify any other relevant data on this indicator and was therefore assigned a grade of INC.
School

Any policies, organizational factors (e.g., infrastructure, accountability for policy implementation) or student factors (e.g., physical activity options based on age, gender, or ethnicity) in the school environment that can influence the physical activity opportunities and participation of children and youth in this environment.

Key Findings

Data from the 2015 GSHS [11,12] showed that 46.5% of Filipino students (44.6% males, 48.4% females) attended PE classes on three or more days each week. We requested data from the Department of Education through the government FOI portal, but the request returned negative (i.e., no available data). No other data were available, except for the GSHS. Therefore, this indicator was graded C-.
Community and Environment

Any policies or organizational factors (e.g., infrastructure, accountability for policy implementation) in the municipal environment that can influence the physical activity opportunities and participation of children and youth in this environment.

Key Findings

A grade of INC was assigned to this indicator due to a lack of data. While there are local government policies pertaining to the establishment of facilities for use in sports and recreation and the creation of barangay sports councils, the RWG was not able to identify any data illustrating the percentages of children or parents who report having access to these local sports and recreation facilities and programs.
Government

Any governmental body with authority to influence physical activity opportunities or participation of children and youth through policy, legislation, or regulation.

Key Findings

Ten (10) national policies were identified to promote active lifestyles among Filipino children and adolescents, including those with disabilities. Following the suggested scoring tool [19], these policies were evaluated as follows: number and breadth of relevant policies (5/10), identified supporting actions, (13/20) identified accountable organizations, (22/25) identified reporting structures (6/15), identified funding (16/20), and monitoring and evaluation plans (5/10), totaling to 67. Hence, a grade of B was assigned to this indicator. Details of the evaluation will be published in a separate report.
Key Messages

The 2022 Philippine Report Card provides a broad picture of the status of PA among children and adolescents in the country.

A vast majority of Filipino adolescents are physically inactive, both boys and girls, and those living in urban and rural areas.

We do not have data for children under 13 years.

While we have existing policies, implementation needs to be improved if we are to encourage more Filipino children and adolescents to be physically active.

We need to develop national physical activity surveillance mechanisms that capture not only overall physical activity but also other physical activity-related characteristics, behaviors, and sources of influence.

We need to have a national physical activity plan.

We need to have physical activity research agenda.

The 2022 Philippine Report Card provides a baseline for monitoring physical trends for children and adolescents in the Philippines.
References


