

# ACTIVE HEALTHY KIDS 2016 PORTUGUESE REPORT CARDS



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## ABBREVIATIONS AND DEFINITIONS

**PA** – Physical Activity

**IPDJ** – Portuguese Institute for Sport and Youth

**FCT** – Portuguese Foundation for Science and Technology

**AHK** – Active Healthy Kids

**MVPA** – Moderate to Vigorous Physical Activity

**HBSC** – Health Behaviour in School-Aged Children

**SB** – Sedentary Behaviour

**WHO** – World Health Organization

**PE** – Physical Education

**HB** – Health Behaviours

**CVD** – Cardiovascular Disease

## SUMMARY OF GRADES ASSIGNED TO INDICATORS

### Physical Activity and Health Behaviour Outcomes

<p><b>Sedentary Behaviour</b></p> <p>20% of pupils aged 10 to 18 years old revealed to watch TV more than 4 hours per day during weekdays, and 47% during weekends (1)</p>	<b>D</b>
<p><b>Overall Physical Activity Levels</b></p> <p>Only 34% of boys and 17% of girls, aged 11-15 years, were sufficiently active (2) Only 36% of 10 to 11 years old, and 4% of 16 to 17 years old adolescents meet physical activity guidelines (3)</p>	<b>D</b>
<p><b>Active Play and Leisure</b></p> <p>49% children and adolescent aged 12-18 years regularly participated in physical activities outside of school 14% engaged at least once per week (1)</p>	<b>D</b>
<p><b>Active Transport</b></p> <p>45% were associated with active transport to and from school (4) Thus walking were identified as the main choice of transportation, 30% of children aged 7 to 8 years old commuted either by foot or cycling on a regular basis during school days (5)</p>	<b>C</b>
<p><b>Organised Sports Participation</b></p> <p>Participation in school sports reached 85% (1, 6)</p>	<b>B</b>

### Settings and Influences on Physical Activity and Health

<p><b>Family and Peers</b></p> <p>Fathers and mothers have similar influence on children's PA levels, irrespective of their sex (7) Only 9% of adults engaged in vigorous-intensity physical activity on at least 4 days, and 14% of adults reported that they engaged in moderate-intensity on at least 4 days within the past 7 (8)</p>	<b>C</b>
<p><b>School</b></p> <p>PA is provided as physical education classes in almost all schools and academic grades providing participation in schools sport activities for all students (9)</p>	<b>B</b>
<p><b>Community and the Built Environment</b></p> <p>In Portuguese youngsters, perceptions of environment correlates are gender and behaviour (4)</p>	<b>D</b>
<p><b>Policy</b></p> <p>Despite the policies have not created all of the necessary conditions, they did establish an official position that recognizes PA as an important factor in public health and youth development (10, 11)</p>	<b>C</b>

## AUTHORS AND CONTRIBUTORS

The Portuguese 2016 Report Card was produced by an expert group of academics and professional including representatives from Research Center in Physical Activity, Health and Leisure (Faculty of Sports, University of Porto); Faculty of Sport Sciences and Physical Education (University of Coimbra); Sport and Health Department (Science and Technology School, University of Évora); Research Center in Sports Sciences Health and Human Development (University of Évora) and Exercise and Health Laboratory (Faculty of Human Kinetics, University of Lisbon).

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## ACCESS TO THE ACTIVE HEALTHY KIDS - PORTUGAL REPORT CARD

Available on the CIAFEL website: <http://ciafel.fade.up.pt>

## REFERENCING TO THE AHK PORTUGAL REPORT CARDS

**Mota J, Coelho e Silva MJ, Raimundo AM, Sardinha LB.: Portugal's 2016 Report Card on Physical Activity for Children and Youth. This card can be reproduced freely**

## AIMS

Portugal is currently developing national recommendations and policies on health-related physical activity, but the systematic evaluation of the factors that affect physical activity behaviours in Portuguese youngsters is essential and can be useful for public health strategies targeting enhancing PA levels.

## BACKGROUND TO THE ACTIVE HEALTHY KIDS – PORTUGAL REPORT CARD

The Portuguese Report Card followed the inspiration and procedures used in the Active Healthy Kids Canada (1). Due to the need for nation-wide studies in children and adolescents, since available results are not consistent, and since a robust surveillance data for Portugal that would address these needs are still lacking, these report cards seemed an exceptional opportunity for presenting the data in a format that can be used by researchers, policy makers, and practitioners.

## STAGES OF WORK

The Research Center in Physical Activity, Health and Leisure (CIAFEL) located in the Faculty of Sports Sciences at the University of Porto (FADEUP) led and coordinated the Portuguese 2016 Report Card workgroup. A 4-member committee was established to prepare these report cards, with a team that included researchers in the field of sport and physical activity representing institutions at National Level.

This resulted in four meetings:

### **1<sup>st</sup> Expert Group Meeting**

Evaluate the evidence and discuss the grades, which was set considering the grading, the quality of the evidence, the sample size, and the year of the study (2010-2016).

## 2<sup>nd</sup> and 3<sup>rd</sup> Expert Group Meetings

Prior to these meetings, a member previously assigned showed a grade on the best available evidence, and during the meetings the expert group critically discussed the grade.

## 4<sup>th</sup> Expert Group Meeting

The matrix for the report cards was developed, and the final grades discussed and assigned.

# GRADING SYSTEM AND METHOD

The grading system used was developed by the Canadian group and is common to all National Report Cards in the Global Alliance. The grades range from A where 80 to 100% of children are meeting the criteria, to E where 0-19% met the recommended threshold. The intention of the expert group was to assign grades wherever possible using the “best available evidence”.

Whilst there were many gaps in the evidence base, there was a sustained starting point with the consensus of the expert group, which made possible to elaborate these report cards.

Further the expert group have also included recommendations on the evidence required for future AHK-Portugal report cards.

Table 1: Active Healthy Kids Global Alliance Grade System

Grade	Descriptor	Prevalence %
<b>A</b>	Portugal is succeeding with a large majority of children and adolescents	80-100
<b>B</b>	Portugal is succeeding with well over half of children and adolescents	60-79
<b>C</b>	Portugal is succeeding with about half of children and adolescents	40-59
<b>D</b>	Portugal is succeeding with less than half of children and adolescent	20-39
<b>E</b>	Portugal is succeeding with very few children and adolescents	0-19

In Portugal, the grading system was used to access 9 quality indicators grouped into two categories explained in table 2.

Table 2: AHK: Portugal Report Card Categories and Quality Indicators

Physical Activity and Health Behaviours and Their Outcomes	Settings and Influences on PA and Health
Sedentary Behaviour Overall Physical Activity Levels Active Play and Leisure Active Transport Organized Sports Participation	Family and Peers School Community and the Built Environment Policy

## THE PROCESS USED TO ASSIGN GRADES TO QUALITY INDICATORS

The process used to assign the grades for the health indicators involved:

1. The “best available” evidence for each quality indicator. This resulted in the use of quantitative survey data for indicators 1 through 5 and a combination of quantitative and qualitative data and information for indicators 6 through 8.
2. During meetings a rationale for using particular survey data was discussed. In the first instance surveys that were representative of children in Portugal were selected. Where nationally representative data were not available the best available survey data was used. In all cases surveys included a significant sample that enabled the expert group to assign a grade to a quality indicator.
3. For settings and influences, policy documents, strategy documents and other guidance that was publicly available was used to inform the expert group. This process involved a subjective analysis of selected documents between the years 2010 and 2016.
4. For each quality indicator, data were considered against a recommendation or benchmark. For example, one recommended benchmark is that children should engage in 60 minutes of moderate to vigorous physical activity (MVPA) per day.
5. The rationale for using the data source was given and likely biases in the data recorded.
6. Subsequently major gaps in the data were noted and considerations given to limitations in the “best available evidence.”
7. Recommendations on how to improve the grade or improve measurement were provided.



8. Every grade was achieved through a verification process involving presentation to the expert group by the assign members of every grade suggestion and then discussed according to survey methodology and data quality.

## **A DESCRIPTION OF THE PROCESS FOR AWARDING A GRADE TO EACH QUALITY INDICATOR**

The following section specifies each quality indicator and the criteria used to determine each grade, such as recommendations or benchmark, data sources and trends, biases and gaps, ending with some suggestions on how to improve these grades in the future. There are 5 quality indicators related to “Physical Activity and Health Behaviours and Their Outcomes”, and 4 related to “Settings and Influences on PA and Health”.

## PHYSICAL ACTIVITY HEALTH BEHAVIOURS AND OUTCOMES



## Sedentary Behaviour

20% of pupils aged 10 to 18 years old revealed to watch TV more than 4 hours per day during weekdays, and 47% during weekends (1)

D

### Recommendation or Benchmark:

Sedentary behaviour is negatively related to “all-cause mortality”. This means that the longer we stay inactive the higher risk to develop diseases and reduce life longevity (12).

International recommendations suggest that youngsters need to accumulate at least 60 minutes of MVPA every day and, to reduce health risks, youngsters need to limit the use of electronic media for entertainment to no more than two hours a day, breaking up long periods of sitting as often as possible.

### Main data sources considered:

(1) Matos MG, Simões C, Tomé G, Camacho I, Ferreira M, Ramiro L, Reis M, Gaspar T, Veloso S, Loureiro N, Borges A, Diniz JA, Equipa Aventura Social. *Aventura Social & Saúde - A Saúde dos Adolescentes Portugueses - Relatório do Estudo HBSC 2010*. Lisboa: Centro de Malária e Outras Doenças Tropicais/IHMT/UML and Faculdade de Motricidade Humana; 2012.

(3) Baptista F, Santos DA, Silva AM, Mota J, Santos R, Vale S, Ferreira JP, Raimundo AM, Moreira H, Sardinha LB. Prevalence of the Portuguese population attaining sufficient physical activity. *Med Sci Sports Exerc*. 2012;44(3):466-473.

(12) Baptista F, Silva AM, Santos DA, Mota J, Santos R, Vale S, Ferreira JP, Raimundo A, Moreira H. *Observatório Nacional da Atividade Física – Livro Verde da Atividade Física*. Lisboa: Edições Instituto Desporto de Portugal; 2011.

### Reasons for choice of data source used to assign grade:

These publications reflect the information derived from studies using objective assessment of PA, including governmental reports.

### Likely biases in the Portugal data:

The information obtained from self-report methods such as HBCS study suggested lower levels of SB when compared to studies using objective assessment of PA.

### Are trend data available?

The HBCS study presented data from 1998, 2002, 2006 and 2010. However, they are based upon self-reported data namely TV watching and computer use.

### Are inequality data available?

Data from the HBCS provided some information regarding gender and inequalities on health parameters.

**Major gaps in the Portugal data:**

The lack of trend data limits the clarification of more profound assessment of sedentary behaviour patterns.

**How to improve the grade in future:**

The majority of Portuguese children and adolescent need to increase their levels of PA. Popularization of mobile phones and new forms of electronic-based social interactions are contributors to new juvenile cultures. Studies of objectively assessed SB are need.

### Overall Physical Activity Levels

Only 34% of boys and 17% of girls, aged 11-15 years, were sufficiently active (2)  
Only 36% of 10 to 11 years old, and 4% of 16 to 17 years old adolescents meet physical activity guidelines (3)

**D**

#### Recommendation or Benchmark:

The recommendations for children and young people are to engage in moderate to vigorous intensity PA (MVPA) for at least 60 minutes and up to several hours every day.

#### Main data sources considered:

(1) Matos MG, Simões C, Tomé G, Camacho I, Ferreira M, Ramiro L, Reis M, Gaspar T, Veloso S, Loureiro N, Borges A, Diniz JA, Equipa Aventura Social. *Aventura Social & Saúde - A Saúde dos Adolescentes Portugueses - Relatório do Estudo HBSC 2010*. Lisboa: Centro de Malária e Outras Doenças Tropicais/IHMT/UML and Faculdade de Motricidade Humana; 2012.

(2) World Health Organization (WHO). *Global Recommendations on Physical Activity for Health*. Geneva, Switzerland: World Health Organization; 2010.

(3) Baptista F, Santos DA, Silva AM, Mota J, Santos R, Vale S, Ferreira JP, Raimundo AM, Moreira H, Sardinha LB. Prevalence of the Portuguese population attaining sufficient physical activity. *Med Sci Sports Exerc*. 2012;44(3):466-473.

(12) Baptista F, Silva AM, Santos DA, Mota J, Santos R, Vale S, Ferreira JP, Raimundo A, Moreira H. *Observatório Nacional da Atividade Física – Livro Verde da Atividade Física*. Lisboa: Edições Instituto Desporto de Portugal; 2011.

#### Reasons for choice of data source used to assign grade:

These publications reflect the information derived from studies using objective assessment of PA, including governmental reports.

#### Likely biases in the Portugal data:

The information obtained from self-report methods such as HBSC study suggested higher levels of PA when compared to studies using objective assessment of PA.

#### Are trend data available?

There are limited data regarding objective data. Self-reported data are available from HBSC since 1998.

#### Are inequality data available?

There are limited data on the full spectrum of inequalities such as deprivation, ethnicity, disability, age and gender.

**Major gaps in the Portugal data:**

Data are not totally consistent about overall levels of PA, and the lack of trend and inequality data limit the clarification of more profound assessment of PA levels.

**How to improve the grade in future:**

The majority of Portuguese children and adolescent need to increase their levels of PA, which can be achieved with a wide range of activities including dance, sport, active transportation and active play.

For a significant role in the effort to increase PA levels, it's needed more systematic and robust data collection addressing research for children across the age range and gender. Physical literacy and effect of physical activity interventions needs to be quantified.

## Active Play and Leisure

49% children and adolescent aged 12-18 years regularly participated in physical activities outside of school

14% engaged at least once per week (1)

**D**

### Recommendation or Benchmark:

There are no specific recommendations for the duration of time spent in active play, or the amount of time spent in active outdoors play. Nonetheless, it is advised to engage unstructured/unorganized active play for several hours a day. In addition, the evidence suggests that children are more active when they are playing outside.

### Main data sources considered:

(1) Matos MG, Simões C, Tomé G, Camacho I, Ferreira M, Ramiro L, Reis M, Gaspar T, Veloso S, Loureiro N, Borges A, Diniz JA, Equipa Aventura Social. *Aventura Social & Saúde - A Saúde dos Adolescentes Portugueses - Relatório do Estudo HBSC 2010*. Lisboa: Centro de Malária e Outras Doenças Tropicais/IHMT/UML and Faculdade de Motricidade Humana; 2012.

### Reasons for choice of data source used to assign grade:

Very few data is available addressing active play and leisure activities among Portuguese school-aged children. The HBSC report is one of them. Despite the steadily increase of organized sport participation during the last few years the evidence showed that active play during leisure as well as non organized sport activities seems to be reducing due to increasing access to technology and other activities.

### Likely biases in the Portugal data:

The data are collected using questionnaires and items record play behaviour not specifically “active play”. Active outdoor play patterns are affected by seasonal bias.

### Are trend data available?

Limited data are available for this quality indicator.

### Are inequality data available?

Limited data are available regarding the full spectrum of inequalities such as deprivation, ethnicity, disability, age and gender.

### Major gaps in the Portugal data:

The major gap is the lack of data regarding this quality indicator. More data is needed to identify the nationally and early years representatives on play in multiple environments.

**How to improve the grade in future:**

Promotion of active and outdoor play from early childhood through adolescence is needed. By encouraging schools to maintain recess periods, and emphasising physical literacy, reducing the perception that outdoor environments are unsafe. Parents and care-providers must be encouraged to allow children to spend more time outside. For instance, Parents should be informed about the importance for children to actively use neighborhood facilities, such as parks and school and kindergarten yards for physical activities.



### Active Transport

45% were associated with active transport to and from school (4)  
Thus walking were identified as the main choice of transportation, 30% of children aged 7 to 8 years old commuted either by foot or cycling on a regular basis during school days (5)

C

#### Recommendation or Benchmark:

There are no recommendations for active transport (walking, cycling or others). Children should be encouraged to take active forms of transport wherever practically possible. These should include travel to and from places (school, park, mall, friend's place).

#### Main data sources considered:

(4) Pizarro A, Santos MP, Ribeiro JC, Mota J. Physical activity and active transport are predicted by adolescents' different built environment perceptions. *J Public Health*. 2012; 20:5-10.

(5) Administração Regional de Saúde do Alentejo (ARSA). *Estudo de Saúde da População Infantil da Região Alentejo – Relatório*. Évora: Núcleo Regional do Alentejo da Plataforma contra a Obesidade da ARSA; 2013.

(13) Pizarro A, Ribeiro JC, Marques EA, Mota J, Santos MP. Is walking to school associated with improved metabolic health?: a cross sectional study in 10 to 12 year old Portuguese children. *International Journal of Behavioral Nutrition and Physical Activity*. 2013;10(1):12.

(14) Pizarro A, Schipperijn, J, Andersen HB, Ribeiro JC, Mota J, Santos MP. Active commuting to school in Portuguese adolescents: using PALMs to detect trips. *Journal of Transport & Health*. doi:10.1016/j.jth.2016.02.004.

(15) Cordovil R, Lopes F, Neto C. Children's (in)dependent mobility in Portugal. *J Sci Med Sport*. 2015;18(3):299-303.

#### Reasons for choice of data source used to assign grade:

These studies identify the patterns in physical activity and active transport in Portuguese children and adolescents, according to built environment perceptions.

#### Likely biases in the Portugal data:

Detailed data are only available for a sub-sample of Portuguese Youth.

#### Are trend data available?

No data available.

#### Are inequality data available?

At the best of our knowledge the available data found were limited on this regard.

**Major gaps in the Portugal data:**

Absence of national legislation promoting active travel to schools and the implementation of programs enhancing the active transportation to schools.

**How to improve the grade in future:**

Despite the local initiatives (essentially from municipalities), implementing programs to enhance cycling/walking to schools are needed. Thus, national legislation and active programs must be revised.

Parents and care-providers should also encourage children and adolescents to take active travel options. Beyond that, additional studies monitoring active travel behaviours in children and adolescents are required.

**Recommendation or Benchmark:**

There are no specific recommendations for the amount of children's sport or dance participation. However, children's vigorous physical activity is experienced throughout sport and dance participation.

**Main data sources considered:**

(1) Matos MG, Simões C, Tomé G, Camacho I, Ferreira M, Ramiro L, Reis M, Gaspar T, Veloso S, Loureiro N, Borges A, Diniz JA, Equipa Aventura Social. *Aventura Social & Saúde - A Saúde dos Adolescentes Portugueses - Relatório do Estudo HBSC 2010*. Lisboa: Centro de Malária e Outras Doenças Tropicais/IHMT/UML and Faculdade de Motricidade Humana; 2012.

(6) Direção Geral de Educação (DGE). *Relatório do Programa do Desporto Escolar 2009-2012*. Lisboa: Divisão do Desporto Escolar da Direção Geral da Educação; 2012.

(16) Instituto Português do Desporto e Juventude. Estatísticas do Desporto. Instituto Português do Desporto e Juventude. <http://www.idesporto.pt/conteudo.aspx?id=103>. Published 2012. Accessed April 2016.

**Reasons for choice of data source used to assign grade:**

Statistics relating to sports clubs, athletes, coaches and participation rates by years and federations are collected, organized and published by the Portuguese Institute for Sports and Youth, which gives us a national panorama of organized sports participation.

**Likely biases in the Portugal data:**

Data were gathered from Portuguese Institute Youth and Sports Official Statistics and combined with some National wide self-reported data such as the HBSC.

**Are trend data available?**

Organized sports participation data are available since 2008.

**Are inequality data available?**

The most recent reports from Portuguese Institute for Sports and Youth achieve significant coverage from sport clubs, athlete's coaches and federations. This allowed inequality data to be reported.

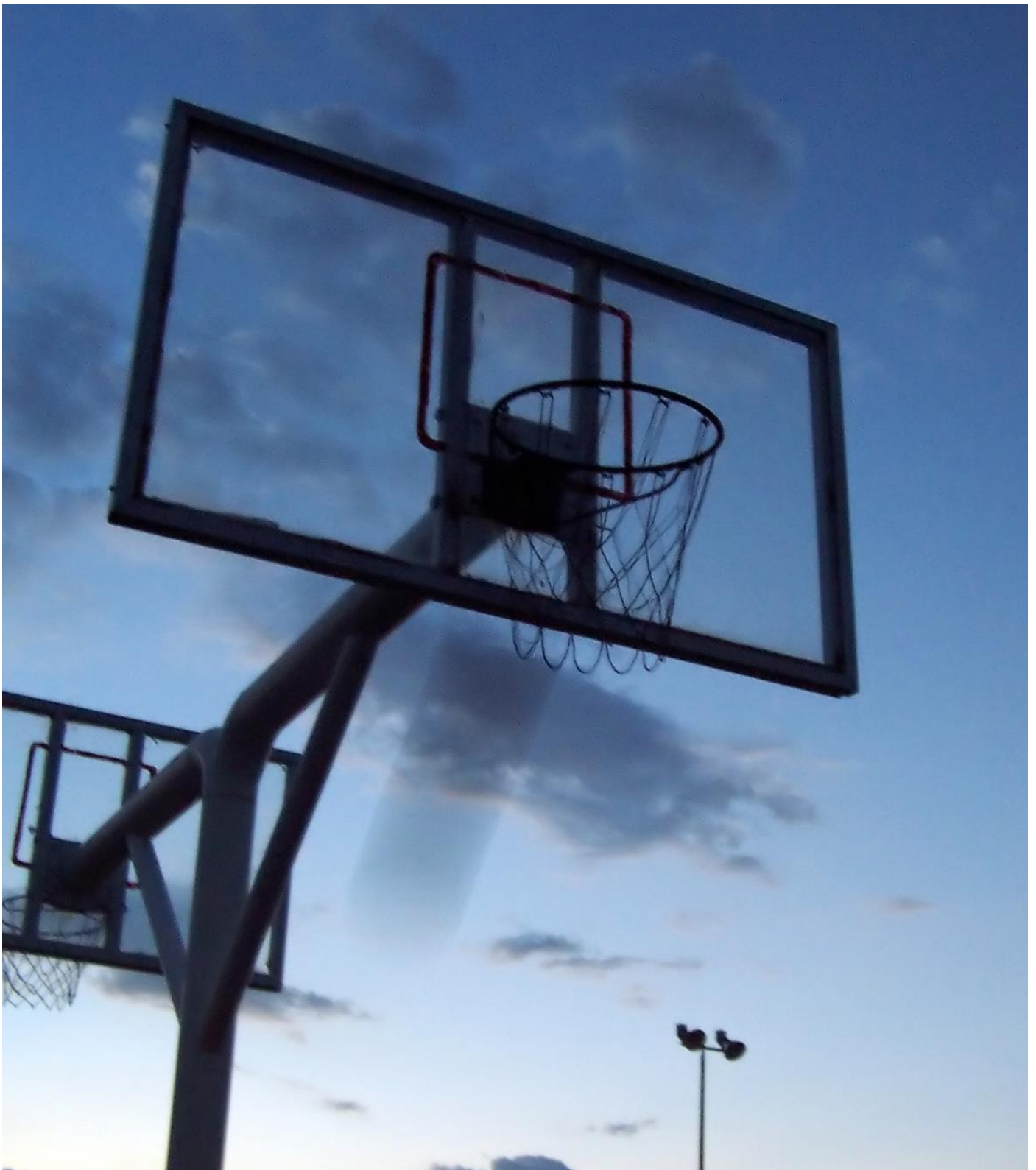
**Major gaps in the Portugal data:**

The data provided by the Portuguese Institute of Youth and Sports comprised all the available statistics of the registered participants in sports. We also obtained data from the educational system (Sports participation in schools)

**How to improve the grade in future:**

Maintain investment in sport programmes for children from a young age, promoting identical opportunities for a wide range of activities. Reorganization of school tasks to allowed time to competitive sports (including transportation between places). Longitudinal research is needed on how participation in organized sports contributes to overall physical activity levels, with comparisons to those who are not participating.

## SETTINGS AND INFLUENCES ON PHYSICAL ACTIVITY AND HEALTH



## Family and Peers

Fathers and mothers have similar influence on children's PA levels, irrespective of their sex (7)

Only 9% of adults engaged in vigorous-intensity physical activity on at least 4 days, and 14% of adults reported that they engaged in moderate-intensity on at least 4 days within the past 7 (8)

C

### Recommendation or Benchmark:

There are no specific recommendations for parent's involvement although a significant number of studies have shown the positive relationship between active parents and childhood activity (17). However, for adults, the WHO recommendations suggests between 75 to 150 minutes or 150 to 300 minutes of vigorous or moderate physical activity per week (2).

### Main data sources considered:

(3) Baptista F, Santos DA, Silva AM, Mota J, Santos R, Vale S, Ferreira JP, Raimundo AM, Moreira H, Sardinha LB. Prevalence of the Portuguese population attaining sufficient physical activity. *Med Sci Sports Exerc.* 2012;44(3):466-473.

(8) Directorate-General for Education and Culture. Special Eurobarometer 412 – Sport and Physical Activity. Brussels: European Commission; 2014.

(18) Gomes TN, Dos Santos FK, Garganta RM, Kenny DA, Katzmarzyk PT, Maia JA. Multi-level modelling of physical activity in nuclear families. *Ann Hum Biol.* 2014;41(2):138-44.

(19) Santos MP, Pizarro A, Mota J, Marques E. Parental physical activity, safety perceptions and children's independent mobility. *BMC Public Health.* 2013;13(1):584-590.

(20) Vale S, Ricardo N, Soares-Miranda L, Santos R, Moreira C, Mota J. Parental education and physical activity in pre-school children. *Child Care Health Dev.* 2014;40(3):446–452.

### Reasons for choice of data source used to assign grade:

Data from Eurobarometer and the National Observatory study are the key publication addressing national physical activity data on adult population.

### Likely biases in the Portugal data:

This indicator is very difficult to examine based on a lack of empirical data adhering to the grading framework. Data from self-report surveys may over-report health behaviours.

### Are trend data available?

The available data is based on the Eurobarometer questionnaire

### Are inequality data available?

Eurobarometer data addressed the gender and inequalities issue. Data based on empirical studies showed interactions between parents and their children.

**Major gaps in the Portugal data:**

Due to the lack of empirical data adhering to the grading framework, this indicator is very difficult to examine.

**How to improve the grade in future:**

The need for more systematic studies in national representative surveys is required to analyse familial determinants and correlates of sport and physical activity.

Besides, e parental participation in sport, and physical activity should be encouraged as well as for parents to engage in active play with their children.

## School

PA is provided as physical education classes in almost all schools and academic grades providing participation in schools sport activities for all students (9)

**B**

### Recommendation or Benchmark:

There is no specific recommendation for physical education regarding duration and week frequency. However, once in Portugal, physical education is mandatory for all Portuguese students until 12<sup>th</sup> grade, usually the time allocated to compulsory classes ranges between 90 to 135 minutes per week.

### Main data sources considered:

(6) Direção Geral de Educação (DGE). *Relatório do Programa do Desporto Escolar 2009-2012*. Lisboa: Divisão do Desporto Escolar da Direção Geral da Educação; 2012.

(9) Silva P, Sousa M, Sá C, Ribeiro J, Mota J. Physical activity in high school during the “free-time” periods. *European Physical Education Review*. 2015;21:135-148.

(21) Matos MG, Simões C, Camacho I, Reis M. *Relatório do Estudo HBSC 2014 - A Saúde dos Adolescentes Portugueses em Tempos de Recessão – Dados Nacionais do Estudo HBSC de 2014*. Lisboa: Centro de Malária e Outras Doenças Tropicais/IHMT/UML and Faculdade de Motricidade Humana; 2015.

### Reasons for choice of data source used to assign grade:

Data were gathered from National Official Report and combined with some National wide self-reported data such as the HBSC.

### Likely biases in the Portugal data:

School Sports participation are available over years. PE classes are mandatory.

### Are trend data available?

Yes

### Are inequality data available?

Official data allowed inequality information to be reported.

### Major gaps in the Portugal data:

The lack of more objective studies about relationship of PE classes and school sports with major outcomes such as cognitive and motor development over time.

### How to improve the grade in future:



Schools provide the participation in schools sports activities for all students. So, investment and the attribution of academic importance need to be encouraged over time.

## Community and the Built Environment

In Portuguese youngsters, perceptions of environment correlates are gender and behaviour (4)

D

### Recommendation or Benchmark:

There are no specific recommendation but it was reported the relationship between the built environment and PA.

### Main data sources considered:

(2) World Health Organization (WHO). *Global Recommendations on Physical Activity for Health*. Geneva, Switzerland: World Health Organization; 2010.

(4) Pizarro A, Santos MP, Ribeiro JC, Mota J. Physical activity and active transport are predicted by adolescents' different built environment perceptions. *J Public Health*. 2012; 20:5-10.

(22) Loureiro N, Matos MG, Santos MM, Mota J, Diniz JA. Neighborhood and physical activities of Portuguese adolescents. *Int J Behav Nutr Phys Act*. 2012;7:33.

(23) Vitor Fontes Rodrigues. Ciclovias de Portugal. Ciclovias. <http://www.ciclovias.pt/>. Published 2008-2016. Accessed April 2016.

### Reasons for choice of data source used to assign grade:

Sources gather information referring to promotion of physical activity across built environment options (for example, municipality cycling paths)

### Likely biases in the Portugal data:

Grades were assigned using a qualitative analysis of the documents.

### Are trend data available?

Not available

### Are inequality data available?

Active transport to school was associated with safety issues in girls. Parks having recreational facilities and good environmental quality, amenities and security are related with increased physical activity among female adolescents.

### Major gaps in the Portugal data:

Large-scale studies addressing this issue among Portuguese youngsters are still scarce and future research in the topic is needed.

### How to improve the grade in future:

Improvements in perceived safety, access, and facilities may lead towards increased levels of physical activity and reduction in sedentary behaviours. More investment is needed to stimulate the creation of opportunities for all to engage in physical active behaviours as well as the home environment.

## Policy

Despite the policies have not created all of the necessary conditions, they did establish an official position that recognizes PA as an important factor in public health and youth development (10, 11)

C

### Recommendation or Benchmark:

There are several government laws and regulations intended to promote participation in PA and sports. The vision is for all citizens to live healthier lifestyles and enjoy greater quality of life. The integration of sports policies into the Portuguese National Health Plan focus these policy strategies on healthy lifestyles and reflect the importance of PA for national health.

### Main data sources considered:

(10) IPDJ. Programa Nacional de Desporto para Todos [National Sports for All Programme]. Lisbon: Portuguese Institute of Youth and Sports (IPDJ); 2015.

(11) Directorate-General of Health. *National health plan 2004-2010*. In: Directorate-General of Health, ed. *Health Mo*. Lisbon: Government of Portugal; 2004:101–112.

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### Reasons for choice of data source used to assign grade:

The documents reviewed included specific reference to the promotion of physical activity or reducing sedentary behaviours with articulation to the Portuguese Governments vision, policies and strategies towards population's active lifestyle.

### Likely biases in the Portugal data:

The expert data analysis was qualitative. No available data of the real impact of the strategic plans.

### Are trend data available?

There is a continuum by Portuguese Government policies allowing resources allocation and strategy plans to support physical activity promotion.

### Are inequality data available?

Portuguese Government appears to be committed to reducing inequalities by promoting strategies to reduce health inequalities, including those related to physical activity by targeting gender specific issues and areas of higher deprivation.

### Major gaps in the Portugal data:

Although the policies have not created all of the necessary conditions, levels of PA and practice of sport have not been impaired by lack of regulations. The official position of Government institutions recognizes PA as an important factor in public health and youth development.

**How to improve the grade in future:**

The creation of more local programmes of PA for all as well as the emphasis on national programs is required. Further, multisectorial-coordinating committee allowing partnerships on different levels of policy implementation will be required.

Data collection approaches that provide robust data to assess all nine indicators included in these report cards are also required.

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