

Results From Spain's 2018 Report Card on Physical Activity for Children and Youth

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Introduction

Trend data from the Spanish National Health Survey shows that the proportion of children who are physically active (some kind of leisure time physical activity at least several times per month) range from 45% in 1993 to 59% in 1997 and 56% in 2011.¹ Data collected for the 2016 Report Card indicated that less than 50% children and adolescents adhered to the recommended recreational screen time.² The purpose of this paper is to update the data on physical activity and sedentary time for children and adolescents since the publication of the 2016 Spanish Report Card.²

Methods

The Research Working Group convened to develop the 2018 Spanish Report Card (Figure 1), identified and gathered data for the 10 core physical activity indicators that are common to the Global Matrix 3.0 (Overall Physical Activity, Organized Sport and Physical Activity, Active Play, Active Transportation, Sedentary Behavior, Family and Peers, School, Community and Environment, Government and Physical Fitness). Four of the indicators were assigned incomplete grades due to a lack of information (Family and Peers, Community and Environment and Government) or limited data (Physical Fitness). Data sources included: ALADINO study (Alimentación, Actividad Física, Desarrollo Infantil y Obesidad—Food, Physical Activity, Child development and Obesity),³ a periodic cross-sectional study of Spanish children of primary school age (data from 2015),³ ESCA survey (Enquesta de Salut de Catalunya—Health Catalan Survey),⁴ a periodic cross sectional study of the Catalan population (data from 2016), ANIVA study (Antropometría y Nutrición Infantil de Valencia—Valencian Anthropometry and Child Nutrition),⁵ a cross-sectional study in the province of Valencia (data from 2013–2014 and 2014–2015) and one study conducted in the Spanish provinces of Murcia.⁶

Results and Discussion

Adherence to physical activity recommendations is fairly low among 5–17-year-old Spanish children and adolescents, and the results indicate little improvements compared to the 2016 Spanish Report Card.² Results in Table 1 shows that only three indicators

were graded as at least B. Besides, the grades would have been even lower if we would have used a more strict definition of the physical activity pattern. For instance, the screen time indicator, graded as B, is likely to have been over reported as the data to grade it was based on a self-report questionnaire that contained categorical answers, that might have underestimated the recreational screen time.³ The Active transportation indicator referred to commuting to school only and for short distances. As the distance to and from school increased (>1 km), the proportion of children using active transportation decreased significantly.

Although Physical Fitness was graded as incomplete, data provided by the UP & DOWN researchers with a small sample size



Figure 1 — Spain's 2018 Report Card cover.

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Table 1 Grades and rationales for Spain's 2018 Report Card

Indicator	Grade	Rationale
Overall Physical Activity	D	52% males and 39.8% females from 6 to 9 years old achieved at least 60 MVPA per day (ANIVA study, Valencia (2013-2014 & 2014-2015) ⁵) 31% males and 14.9% females from 3 to 18 years old achieved 5 or more days of 60 MVPA ⁶ 34.2% males and 26.9% females from 3 to 14y old achieved at least 60 MVPA per day ⁴
Organized Sport and Physical Activity	B	73.3% males and 65.6% females 6 to 9 year old participated in organized sport and/or physical activity programs out of school ³
Active Play	C-	40.3% males and 32.7% females from 6 to 9 years old reported being outdoors 2 or more hours per day during the week, and 65.9% males and 61.1% females during the weekend ³
Active Transportation	B-	55% children 6 to 9 years old walked to school and 56.9% walked back from school ³ 61.3% 3 to 14 years old walked to and from school ⁴
Sedentary Behaviours	B+	82.6% males and 83.8% females 6 to 9 years old reported around 2 hours or less of screen time per day during the week (and 53% males and 56% females during the weekend) ³
Physical Fitness	INC	There was very limited data to accurately assign a grade for this indicator
School	C+	74% of schools offered their outdoor facilities out of school time ³ 24 to 30% of schools where students were offered the mandated amount of Physical Education ³
Family and Peers	INC	No data was available to assign a grade for this indicator
Community and Environment	INC	No data was available to assign a grade for this indicator
Government	INC	No data was available to assign a grade for this indicator

Abbreviation: INC, Incomplete.

(n = 226) of 6 to 10 years old children indicated that 37% of males and 70% of females met the criterion-referenced standards for cardiorespiratory fitness (42 and 35 ml/kg/min in males and females respectively),⁷ which would be equivalent to a D+ and a B for males and females respectively.

The main limitation of the 2018 Report Card is its reliance on data obtained from subjective methods of PA measurement and different type of questionnaires, which make comparison across surveys and studies quite difficult. Moreover, Spain being a country of 17 autonomous regions, periodic data on physical activity is limited in most of them.

Conclusion

The proportion of Spanish children and youth who achieve the recommended levels of physical activity and screen time was low, especially among females. There is a need to harmonize the methods to evaluate physical activity and sedentary habits in the Spanish population.

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