



**hbsc**  
HEALTH BEHAVIOUR IN  
SCHOOL-AGED CHILDREN  
WORLD HEALTH ORGANIZATION  
COLLABORATIVE CROSS-NATIONAL STUDY

# PHYSICAL ACTIVITY

## key findings factsheet

### Why should we pay attention to this issue during adolescence?

Physical activity is essential for long- and short-term physical and mental health and may improve academic and cognitive performance. It is associated with increased musculoskeletal and cardiovascular health and reduced anxiety and depression among children and adolescents. Good physical activity habits established in childhood and adolescence are likely to be carried through into adulthood, while lower levels are associated with obesity, a serious public health issue in Europe and North America.

WHO has issued guidelines on physical activity and some governments have advised children to undertake at least 60 minutes of moderate-to-vigorous physical activity (MVPA) daily. The evidence suggests, however, that a significant proportion of adolescents do not meet this minimum standard. Current recommendations suggest that children should not have more than 1–2 hours of quality television and/or screen time per day, but most children exceed these limits.

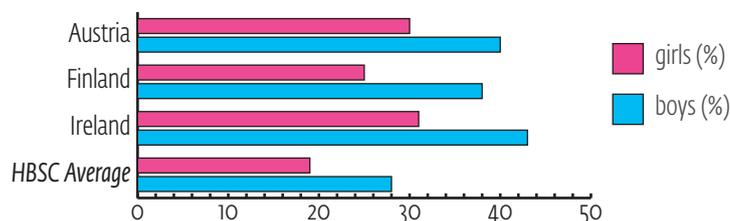
Analyses of the Health Behaviour in School-aged Children (HBSC) show no or a weak relationship between sedentary behaviour and physical activity. That is to say, young people do not always fall into one group or the other; a young person can have high levels of physical activity and sedentary behaviour and vice versa.

This fact sheet summarizes findings from the report on the 2009/2010 survey of the Health Behaviour in School-aged Children HBSC) study.<sup>1</sup>

The HBSC survey asked how many days young people were physically active for at least 60 minutes during the previous week. Sedentary behaviour was also surveyed, examining the proportion of young people who spent two or more hours watching television every weekday.

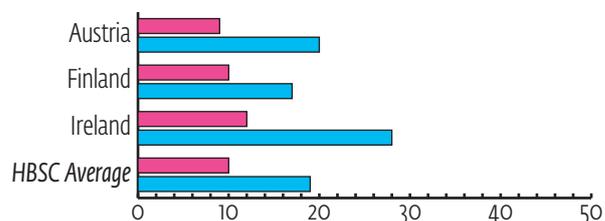
# Age

11-year-olds who report at least one hour of MVPA daily



Findings demonstrate that adolescence is a key period for intervention, with physical activity levels declining between the ages of 11 and 15 (see figures). This may reflect a change in the types of physical activity

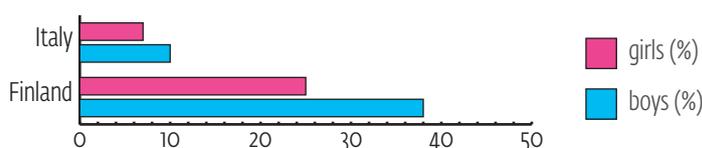
15-year-olds who report at least one hour of MVPA daily



undertaken by each age group. For example, free play is more common in the younger group whereas the older group tends to participate in more structured activities.

# Cross-national differences

Inequalities between countries; comparing 11-year-olds in Italy and Finland

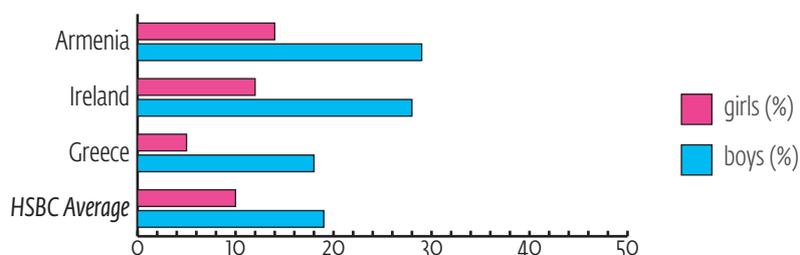


Differences in policies and guidelines may explain some country differences. For example, in Italy, a country with relatively low levels of daily exercise, physical education reform has resulted in fewer physical education teachers.

In Finland, by contrast, recommendations for physical activity exceed the WHO guidelines, resulting in higher levels of daily exercise (see figure).

# Gender

Gender differences in physical activity levels at age 15



Girls in particular are less likely to participate in physical activity as they grow older, with activity levels dropping by more than 10% in more than a quarter of the countries surveyed (see figure). This suggests that there is an opportunity to increase female particip-

ation by adapting activities to attract more girls. In contrast, sedentary behaviour is significantly higher among 15-year olds. While boys are more likely to report watching television, the gender differences are not large.

# Family affluence

There is a complex relationship between family affluence and physical activity, with differences between countries in the extent to which affluence affects participation in physical activity and in sedentary behaviour. In most countries, family affluence is not a strong predictor of levels of either physical activity or sedentary behaviour. The policy

context could partly explain why family affluence predicts physical activity in some countries and not others; for example, fee structures may prohibit access to facilities for those from less affluent households. Further research is required to understand the interaction between the policy context and the variables presented.

## How can policy help?

The HBSC findings underline the need for policy interventions to increase physical activity, especially among older adolescents, girls and low-affluence groups. Policy-makers and practitioners should seek to identify what prevents and motivates participation.

Factors that ensure equitable access may include:

- providing a range of activities that appeal specifically to girls;
- ensuring activities are free or affordable, with provision of free or low-cost transportation to the venue;
- involving young people in programme design to identify barriers to participation;
- ensuring a safe local environment in which children can actively travel and play; and
- educating the public through the mass media to raise awareness and change social norms on physical activity.

It is important to encourage physical activity in the younger years, so that participation can continue across the lifespan. Interventions that have been found to be effective include:

- engaging parents in supporting and encouraging their children's physical activity;
- providing interventions at multiple venues, using a combination of school-based physical education and home-based activities;
- developing school policies that promote highly

active physical education classes, suitable physical environments with resources to support structured and unstructured physical activity throughout the day, and active travel programmes;

- promoting interventions that recognize the positive influence of peers;
- promoting interventions that are specifically designed to increase physical activity rather than a range of health behaviours, and
- monitoring television and/or video game use.

The range of conclusive findings over the past decade regarding physical activity as an important health determinant provides a clear and strong call to action. In particular, the need for a life course approach and a focus on young people are central, as physical activity levels during childhood and adolescence have been linked to health outcomes and health behaviour in later life.

WHO has responded to this with recommendations on physical activity and the WHO global strategy on diet, physical activity and health.<sup>2</sup> There are numerous other reflections of the importance of physical activity in policy, such as the European Charter on Counteracting Obesity,<sup>3</sup> the Parma Declaration on Environment and Health<sup>4</sup> and, most recently, the Action Plan for implementation of the European Strategy for the Prevention and Control of Noncommunicable Diseases 2012–2016,<sup>5</sup> which puts forward a clear vision on the importance of physical activity in daily lives.

# References

1. Currie C et al., eds. *Social determinants of health and well-being among young people. Health Behaviour in School-aged Children (HBSC) study: international report from the 2009/2010 survey*. Copenhagen, WHO Regional Office for Europe, 2012 (Health Policy for Children and Adolescents, No. 6; <http://bit.ly/XXAqtG>, accessed 26 April 2012).
2. *World Health Assembly resolution WHA57.17 on a global strategy on diet, physical activity and health*. Geneva, World Health Organization, 2004 (<http://bit.ly/19wKYZH>, accessed 25 April 2012).
3. *European Charter on Counteracting Obesity*. Copenhagen, WHO Regional Office for Europe, 2006 (<http://bit.ly/11Kg6Ao>, accessed 25 April 2012).
4. *Parma Declaration on Environment and Health*. Copenhagen, WHO Regional Office for Europe, 2010 (<http://bit.ly/16B-bIDd>, accessed 25 April 2012).
5. *Action Plan for implementation of the European Strategy for the Prevention and Control of Noncommunicable Diseases 2012–2016*. Copenhagen, WHO Regional Office for Europe, 2011 (document EUR/RC61/12; <http://bit.ly/18hOO7X>, accessed 25 April 2012).