

Trends in vigorous physical activity in relation to FAS in 34 countries between the years 2006-2014

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Background:

The aim of this study was to examine trends in vigorously intense physical activity (VPA) among adolescents in relation to family affluence scale (FAS) across 34 countries.

Methods:

This study used data from 34 countries (Austria, Belgium/Flemish/, Canada, Croatia, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Greenland, Hungary, Iceland, Ireland, Israel, Italy, Latvia, Luxembourg, the Netherlands, Norway, Poland, Romania, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine, Macedonia, England, Scotland, Wales) participating in the HBSC study in survey cycles 2005/2006 and 2013/2014, including adolescents aged 11-15 years (2005/2006: n = 167,176; 51.6% girls, 2013/2014: n = 61,764; 51.6% girls). The cut-off point for VPA was at least 30 minutes for four or more times per week. The FAS summary score was split into low, medium and high. The significance of trends was tested using logistic regression analysis.

Results:

Significant increase in VPA was found in low FAS boys/girls in 4/10 countries and a decrease was shown in 4/3 countries, with the lowest prevalence of boys/girls meeting VPA guideline observed in England (29.2%2014) and in Spain (12.6%2006). In boys/girls with high FAS, we found significant increase in 9/11 countries and a decrease in 2/3 countries, with the lowest proportion in meeting VPA guideline in Macedonia (42.1%2006) and in France (20.5%2006). Overall, significant ($p < 0.001$) increase in meeting VPA guideline was found in high FAS boys (OR = 1.11) and in all girls regardless of the FAS category.

Conclusions:

There was high variability between countries in meeting VPA guideline. In all countries the increase in VPA was observed primarily in medium and high FAS categories. Overall, there was an increase in VPA among all FAS girls and in high FAS boys.

Key messages:

- This study indicated a need to focus on VPA efforts especially in low FAS boys.
- Enhanced participation in VPA is a promising vehicle for an active lifestyle.