Results from Scotland’s 2018 Report Card on Physical Activity for Children and Youth

Adrienne R. Hughes, Avril Johnstone, Farid Bardid, and John J. Reilly

Introduction

Previous Active Healthy Kids Scotland Report Cards from 2013 and 2016 (www.activehealthykidsscotland.co.uk) demonstrated that only a small minority of Scottish school-aged children and adolescents meet the recommended amount of daily moderate-to-vigorous intensity physical activity (MVPA; ≥60 minutes).1,2 These low levels of MVPA occur despite a favorable physical and policy environment in Scotland.1,2 Previous report cards also identified major limitations in surveillance of physical activity and related behaviors in Scotland. The aim of this short paper is to (a) summarize the Scottish grades included in the Global Matrix 3.0 (www.activehealthykids.org) and (b) highlight the continuing limitations in surveillance of physical activity among children and adolescents in Scotland.

Methods

Similar to previous report cards in Scotland, data sources were used for grading if they had been derived from recent (i.e. from 2014 onwards) nationally representative surveys, and if methods of measurement had small or negligible bias.1,2 The main data sources used for the Scottish grades for the Global Matrix 3.0 were the Health Behaviours in School-Age Children survey (HBSC) 2014, the Scottish Health Survey (SHS) 2016, Hands Up Scotland (HUS) 2016, Transport & Travel in Scotland (TATIS) 2016 and the Scottish Household Survey (SHS) 2016. The report card working group graded the 10 core physical activity indicators included in the Global Matrix 3.0 (Overall Physical Activity, Organized Sport and Physical Activity, Active Play, Active Transportation, Sedentary Behaviors, Family and Peers, School, Community and Environment, Government, and Physical Fitness). The grades were reviewed by key stakeholders from national organizations before being finalized and submitted to the Global Matrix 3.0. The grades for the 2018 Active Healthy Kids Scotland Report Card (to be released later in 2018) may differ in some respects from the Scottish grades included in the Global Matrix 3.0, as the Scottish report card will include evidence for children under 5 years old and additional indicators (obesity and diet).

Results and Discussion

Scottish grades for the Global Matrix 3.0 are summarized in Table 1. Scotland’s 2018 Report Card cover is displayed in Figure 1. Four indicators (including Active Play and Physical Fitness) could not be graded due to a lack of appropriate data, which highlights continuing major gaps in the surveillance of important health behaviors and influences in Scotland. Furthermore, two grades (Overall Physical Activity and Sedentary Behaviours) were based on limited data from the previous (2016) report card. For instance, the Overall Physical Activity grade was based on adolescent data from the 2014 Health Behaviour in School-aged Children survey; our main Scottish national survey, the Scottish Health Survey could not be used for grading because it assumes that all child and adolescent physical activity reported by parents is MVPA, resulting in a substantial overestimation of MVPA levels.1,2,6

The WHO has recently emphasised the importance of child physical activity and sedentary behaviour surveillance and policy for obesity and NCDs prevention and control.7 Weaknesses in Scottish surveillance, policy, and evaluation suggest that important opportunities for obesity and NCD prevention and control are being missed.

Conclusion

Few Scottish children and adolescents meet the guidelines for physical activity and sedentary behaviour. These problems begin well before adolescence, affect both sexes8,9 and exist despite a favorable policy and physical environment,1,2 suggesting that cultural barriers to physical activity and drivers of sedentary behavior may be important. Several indicators could not be graded,

Hughes, Johnstone, and Reilly are with the Physical Activity for Health Group, School of Psychological Sciences and Health, University of Strathclyde, Glasgow, UK. Bardid is with the School of Education, University of Strathclyde, Glasgow, UK; and the Department of Movement and Sports Sciences, Ghent University, Ghent, Belgium. Hughes (adrienne.hughes@strath.ac.uk) is corresponding author.

Figure 1 — Scotland’s 2018 Report Card cover.
demonstrating major limitations with Scottish health surveillance. Future child and adolescent health surveillance in Scotland should adopt best practice from other countries (e.g. Canada10), including objective measures of physical activity.

**References**


