

PHYSICAL ACTIVITY OF CHILDREN AND YOUNG PEOPLE

National Assembly for Wales

Evidence from: Professors [Russell Jago](#) and [Angie Page](#) on behalf of the Centre for Exercise, Nutrition and Health Sciences at the University of Bristol and members of the DECIPHer (Development and Evaluation of Complex Interventions for Public Health Improvement) UKCRC Centre.

In this response, we provide recommendations and evidence for two of the eight terms of reference set out in the consultation. Specifically:

Term of reference 4: Barriers to increasing the levels of physical activity among children in Wales, and examples of good practice in achieving increases in physical activity, and in engagement with hard to reach groups, within Wales, the UK and internationally.

Paragraph 1: Active Travel

- Only 49% of Welsh primary-school children walk to school at least once a week, while cycling accounts for 2% of trips. These levels are lower among secondary-school children (35% and <1% respectively).¹
- Active travel is one of the most promising ways to sustainably increase girls' activity. Our research shows that girls are less likely to travel to school in active ways (walking, cycling or scooting) than boys, however, active travel to school makes a bigger contribution to girls' activity (35.6%) compared to boys (31.3%). In addition, for both girls and boys, changing from car travel to walking provided an extra 16% of daily physical activity.²

Recommendation: Active travel should be endorsed as an important strategy to help reduce the age-related decline in physical activity in young people, especially for girls. School travel plans should equally promote active travel in girls and boys and consider monitoring travel mode by gender.

Paragraph 2: Playing Out

- A recent report from Public Health Wales revealed that while 97% of parents in Wales think it is important for their child to play outdoors every day, 29% of children under five aren't getting the time outdoors that they need.³ Despite there being over 250 streets regularly 'Playing

Out' (playingout.net) across the UK, there is currently only one street registered with the initiative in Wales (Abergavenny).⁴

- Children are 3 to 5 times more active outside compared to inside. 22.6% of children's time spent outside after school is moderate-to-vigorous physical activity compared to 4.4% of time spent inside. Conversely, 52.5% of children's time spent inside is sedentary compared to only 23.6% of time spent outside.⁵

Recommendation: Safe spaces to play close to home in addition to traditional greenspaces are needed to increase children's time spent outdoors and physical activity. Temporary street play closures are a scalable intervention that can, with support for residents and local authorities, be rolled out locally and nationally.

Term of reference 8: The role of schools, parents and peers in encouraging physical activity, and the role of Sport Wales, NHS Wales and Public Health Wales in improving levels of physical activity.

Paragraph 3: After-school clubs

- Research from Sport Wales suggests that 48% of Year 3 to 11 pupils in Wales take part in extracurricular or community club sports at least three or more times per week.⁶
- Our research has shown that children who attended clubs at school 3-4 days per week obtained an average of 7.58 (95% CI: 2.7 to 12.4) more minutes of MVPA per day than children who never attended. The research also showed that children who attended clubs at school 3-4 days per week were 83% more likely to meet the public health guidance of an hour of moderate-to-vigorous physical activity per day than children who did not attend.⁷
- Our research has shown that the current provision of after-school clubs is dominated by team sports.⁸
- We have shown via the Action 3:30 project that training Teaching Assistants to deliver physical activity programmes is a cost-effective means of helping more children to be physically active.⁹

Recommendation 1: Schools need to diversify their offer and provide a broader range of active opportunities that aid children's physical and emotional development.

Recommendation 2: Increasing the provision of after-school clubs is an effective means of increasing children's physical activity. This approach can have reach across all socio-economic groups and is a scalable public health

strategy. Impact and efficiency can be further enhanced by training the existing school staff.

Paragraph 4: The role of parents

- The 'Health of Children and Young People in Wales' report in 2013 stated that parents are the single biggest influence on a child's early development.¹⁰
- Our research suggests that mothers and fathers can provide important sources of support for their child. We have found that logistic support (e.g., providing transport to and from physical activity provisions, helping with enrolment in new activities, watching and showing interest), parents' own activity behaviours and being active with their child inspires children's confidence to be active.¹¹
- Interviews we have conducted with parents have also revealed that parents identify with different ways of motivating their children to be active depending on their gender, for example, fathers reported more involvement in their children's active pursuits at weekends.¹²

Recommendation: Where possible, interventions should involve parents, for example by sending parent-focused materials home with advice on how to support their child's activity and motivation to be active, and acknowledge that fathers and mothers can provide important (and perhaps different) support for their child's physical activity.

Paragraph 5: The role of peers

- The stop smoking trial (ASSIST) provides strong evidence that influential adolescents can have a strong positive effect on health behaviours among peers. Results showed that the peer-led intervention had a more pronounced effect among schools located in the South Wales valleys compared to schools in England.
- We are currently completing a project called PLAN-A which uses the same peer-led approach as ASSIST but aims to increase physical activity amongst adolescent girls. PLAN-A has shown that it is possible to successfully identify and train *girls* to informally promote physical activity among their peers and that doing so could increase girls' physical activity (publications are forthcoming).¹³
- Our research has also shown that children report being part of friendship groups that have similar activity levels, meaning that a child's friends can have a pivotal role in promoting or discouraging physical activity.

Recommendation 1: When planning physical activity provisions for children, schools and health promoters should recognise the importance of peer-influence and identify those who are “opinion leaders” (not necessarily sports leaders /athletes) who have the potential to support their peers and create new norms for physical activity amongst others their age.

Recommendation 2: Physical activity provisions/clubs could be accepting of children enrolling in pairs or small peer-groups and/or use current members to encourage and support their friends to join.

References:

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- ³ Public Health Wales. (2017) Nearly a third of under-fives aren't getting enough outdoor play. Public Health Wales, Cardiff. <http://www.wales.nhs.uk/sitesplus/888/news/45907>
- ⁴ <http://playingout.net/>
- ⁵ Cooper AR, Page AS, Wheeler BW, Hillsdon M, Griew P, Jago R. (2010) Patterns of GPS measured time outdoors after school and objective physical activity in English children: the PEACH project. International Journal of Behavioral Nutrition and Physical Activity, 22(7):31. <https://doi.org/10.1186/1479-5868-7-31>
- ⁶ Sport Wales. (2015) School Sport Survey 2015: State of the Nation. Sport Wales. http://sport.wales/media/1667736/school_sport_survey_2015_-_state_of_the_nation_english.pdf
- ⁷ Jago R, Macdonald-Wallis C, Solomon-Moore E, Thompson JL, Lawlor DA, Sebire SJ. (In press) Associations between participation in organised physical activity in the school or community outside school hours, and neighbourhood play with child physical activity and sedentary time: a cross-sectional analysis of primary school-aged children from the UK. BMJ Open.
- ⁸ Davies B, Wood L, Banfield K, Edwards MJ, Jago R. (2014) The provision of active after-school clubs for children in English primary schools: implications for increasing children's physical activity. Open Journal of Preventive Medicine, 4:598-605. <http://dx.doi.org/10.4236/ojpm.2014.47069>
- ⁹ Jago R, Sebire SJ, Davies B, Wood L, Edwards MJ, Banfield K, Fox KR, Thompson JL, Powell JE, Montgomery AA. (2014) Randomised feasibility trial of a teaching assistant led extracurricular physical activity intervention for 9 to 11 year olds: Action 3:30. International Journal of Behavioral Nutrition and Physical Activity, 11:114. <http://bit.ly/2sGhbNA>

¹⁰ Public Health Wales Observatory. (2013) Health of Children and Young People in Wales. Public Health Wales NHS Trust, Carmarthen.

<http://www.publichealthwalesobservatory.wales.nhs.uk/child-profile-overview>

¹¹ Sebire SJ, Haase AM, Montgomery AA, McNeill J, Jago R. (2014) Associations Between Physical Activity Parenting Practices and Adolescent Girls' Self-Perceptions and Physical Activity Intentions. *Journal of Physical Activity & Health*, 11(4):734-40. <http://bit.ly/2siqCjv>

¹² Zahra J, Sebire SJ, Jago R. (2015) "*He's probably more Mr. sport than me*" – a qualitative exploration of mothers' perceptions of fathers' role in their children's physical activity. *BMC Pediatrics*, 15:101. <http://bit.ly/2ryk0jZ>

¹³ Sebire SJ, Edwards MJ, Campbell R, Jago R, Kipping R, Banfield K, Tomkinson K, Garfield K, Lyons RA, Simon J, Blair PS, Hollingworth W. (2016) Protocol for a feasibility cluster randomised controlled trial of a peer-led school-based intervention to increase the physical activity of adolescent girls (PLAN-A). *Pilot and Feasibility Studies*, 2:2. <http://bit.ly/2szPmGR>