

This item was submitted to Loughborough's Research Repository by the author. Items in Figshare are protected by copyright, with all rights reserved, unless otherwise indicated.

## An advocacy paper for physical education and school sport

PLEASE CITE THE PUBLISHED VERSION

http://www.afpe.org.uk/membership-services/member-journals/physical-education-matters

**PUBLISHER** 

© Association for Physical Education

**VERSION** 

AM (Accepted Manuscript)

**PUBLISHER STATEMENT** 

This work is made available according to the conditions of the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0) licence. Full details of this licence are available at: https://creativecommons.org/licenses/by-nc-nd/4.0/

LICENCE

CC BY-NC-ND 4.0

REPOSITORY RECORD

Cale, Lorraine, Ashley Casey, and Josephine P. Harris. 2019. "An Advocacy Paper for Physical Education and School Sport". figshare. https://hdl.handle.net/2134/21871.

## An Advocacy Paper for Physical Education and School Sport

Below is a brief summary of the research evidence which highlights the importance of and benefits of physical activity, physical education and sport in schools. We feel this provides a compelling argument for the need for all schools to afford quality time to and provide quality physical activity, physical education and sporting experiences to all pupils.

The importance of leading a physically active lifestyle is well recognised and physical activity in children and young people has been found to have clear physical and psychological benefits (see for example, reviews of these benefits by Janssen and LeBlanc, 2010; National Institute of Clinical Excellence, 2007; Stensel et al., 2008).

Despite this, there are ongoing concerns over the physical activity levels of many youngsters. For example, the most recent World Health Organisation's Health-Behaviour in School-aged Children (HBSC) Survey reported less than half of young people to be meeting current physical activity recommendations (of one hour of or more of at least moderate activity each day) (Currie et al, 2008). Closer to home, the Health Survey for England (2012) revealed that only 21% of boys and 16% of girls aged 5-15 years meet the physical activity for health recommendation. There is also growing evidence that, for many young people, the school environment is the predominant source of their physical activity. For example, only 28% of pupils are members of out-of-school clubs and only 16% of girls compete in a non-school context (Future Foundation, 2015). This suggests that, for many pupils (especially girls), school physical education is their only or main source of regular physical activity.

If young people are to be able to enjoy and benefit from a physically active lifestyle, then physical education needs to provide them with the knowledge, skills, competence and confidence to be able to do so.

Studies and reviews on the effectiveness of school-based physical activity and physical education programmes over the years have revealed that physical education can provide a number of positive outcomes for young people, such as increased physical activity and fitness levels and improved knowledge of and attitudes towards physical activity (see for example, reviews by Cale and Harris, 2005; 2006; De Meester et al., 2009; Demetriou & Honer, 2011; Dobbins et al., 2009; 2013; Kahn et al., 2002; Kriemler, 2011; Stone et al., 1998; van Sluijs et al., 2007).

One famous Canadian study conducted in the 1970s, has also provided evidence that physical education can have long-term effects. Over 20 years later, students involved in a physical education intervention showed better motor fitness, reported better health and more positive attitudes towards physical activity, plus more of the women reported to be regularly and strenuously physically active (Shephard and Trudeau, 2008).

An academic review of the educational benefits of physical education and school sport (PESS) by Bailey et al., (2009) reported evidence to suggest that PESS has the potential to make contributions to young people's development in four broad domains: the physical, social, affective and cognitive.

Specifically they reported that:

- There is suggestive evidence of a distinctive role for PESS in the acquisition and development of children's movement skills and physical competence;
- There is sufficient evidence to support claims of positive benefits for young people in the social domain;

Lorraine Cale, Ashley Casey and Jo Harris, November, 2015.

- In the affective domain, engagement in physical activity has been positively associated with numerous dimensions of psychological and emotional development;
- There is some persuasive evidence to suggest that physical activity can improve children's concentration and arousal, which might indirectly benefit academic performance.

Other reviews have also been published on the benefits of physical activity on young people's academic or cognitive performance, though the conclusions drawn from these have been equivocal (see for example, Fedewa & Ahn, 2011; Hillman et al., 2008; Keeley and Fox, 2009; Taras, 2005; Tomporowski et al., 2008). The two most recent of these reported the following:

- Positive but weak associations between physical activity (and physical fitness) and academic achievement and between fitness and elements of cognitive function (Keeley and Fox, 2009).
- That there is insufficient evidence to conclude that additional physical education time increases academic achievement, however there is no evidence that it is detrimental (Keeley and Fox, 2009).
- Physical activity to have a significant and positive impact on cognitive outcomes and academic achievement, with aerobic exercise having the greatest effect (Fedewa & Ahn, 2011).

## **Key References**

Andersen, L.B., Wedderkopp, N., Hansen, A.R., Cooper, A.R. & Froberg, K. (2003) Biological cardiovascular risk factors cluster in Danish children and adolescents: The European Youth Heart Study, Preventive Medicine, 37, 363-367.

Bailey R., Armour K., Kirk, D. Jess M, Ian Pickup, I, Sandford R. & BERA Physical Education and Sport Pedagogy Special Interest Group (2009). The educational benefits claimed for physical education and school sport: an academic review, Research Papers in Education, 24:1, 1-27, DOI: 10.1080/02671520701809817

Cale, L. & Harris, J. (2005) (Eds), Exercise and Young People. Issues, Implications and Initiatives (Basingstoke, Palgrave Macmillan).

Cale, L. & Harris, J. (2006). School based physical activity interventions – effectiveness, trends, issues, implications and recommendations for practice, Sport, Education and Society, 11(4), 401-420.

Currie C., Gabhainn, S., Godeau, E., Roberts, C., Smith, R., Currie, D., Picket, W., Richter, M., Morgan, A. & Barnekow, V. (Eds) (2008) Inequalities in Young People's Health: International Report from the HBSC 2005/06 Survey. WHO Policy Series: Health Policy for Children and Adolescents Issue 5, WHO Regional Office for Europe, Copenhagen.

De Meester, F., van Lenthe, J.J, Spittaels, H., Lien, N. & De Bourdeauhuij, I. (2009) Interventions for promoting physical activity among European teenagers: a systematic review, International Journal of Behavioural Nutrition and Physical Activity, 6(82), 1-11.

Demetriou, Y. & Honer, O. (2012) Physical activity interventions in the school setting: a systematic review, Psychology of Sport and Exercise, 13, 186-196.

Lorraine Cale, Ashley Casey and Jo Harris, November, 2015.

Dobbins, M., DeCorby, K., Robeson, P. et al., (2009) School-based physical activity programs for promoting physical activity and fitness in children and adolescents aged 6 to 18, Cochrane Database of Systematic Reviews, Issue 1.

Dobbins, M., Husson, H., DeCorby, K. & La Rocca, R.L. (2013) School-based physical activity programs for promoting physical activity and fitness in children and adolescents aged 6 to 18, Cochrane Database of Systematic Reviews, Issue 2.

Fairclough, S. & Stratton, G. (2005) Physical education makes you fit and healthy: physical education 's contribution to young people's physical activity levels, Health Education Research, 20(1), 14-23.

Fedewa, A.L. & Ahn, S. (2011) The effects of physical activity and physical fitness on children's achievement and cognitive outcomes, Research Quarterly for Exercise and Sport, 82(3), 521-535.

Future Foundation (2015). The Class of 2035. Promoting a Brighter and More Active Future for the Youth of Tomorrow. London: Future Foundation.

Health and Social Care Information Centre (2012). The Health Survey for England 2012. Available at: <a href="https://www.hscic.gov.uk/pubs/hse2012">www.hscic.gov.uk/pubs/hse2012</a>

Hillman, C.H., Erikson, K.I. & Kramer, A.F. (2008) Be smart, exercise your heart: exercise effects on brain and cognition, Nature Reviews Neuroscience, 9, 58-65.

Janssen, L. & LeBlanc, A.G. (2010) Systematic review of the health benefits of physical activity and fitness in school-aged children and youth, International Journal of Behavioural Nutrition and Physical Activity, 7, 7-40.

Kahn, E.B., Ramsey, L.T., Brownson, R.C., Health, G.W., Howze, E.H. & Powell, K.E. (2002) The effectiveness of interventions to increase physical activity, American Journal of Preventive Medicine, 22(4S), 73-107.

Keeley, T.J.H. & Fox, K. (2009) The impact of physical activity and fitness on academic achievement and cognitive performance in children, International Review of Sport and Exercise Psychology, 2(2), 198-214.

National Institute for Health and Clinical Excellence (NICE). (2007) Physical Activity and Children. Review 1: Descriptive Epidemiology, NICE Public Health Collaborating Centre: <a href="https://www.nice.org.uk">www.nice.org.uk</a>

Shephard, R.J. & Trudeau, F. (2000) The legacy of physical education: influences on adult lifestyle, Pediatric Exercise Science, 12, 34-50.

Stensel, D.J., Gorely, T. & Biddle, S.J.H (2008) Youth health outcomes, in: Smith, A.L. & Biddle, S.J.H (Eds), Youth Physical Activity and Sedentary Behaviour: Challenges and Solutions (Human Kinetics, Champaign, Illinois), 31-57.

Stone, E.J., McKenzie, T.L., Welk, G.J. & Booth, M.L. (1998) Effects of physical activity interventions in youth: Review and synthesis, American Journal of Preventive Medicine, 15(4), 298-315.

Taras, H. (2008) Physical activity and student performance at school, Journal of School Health, 75(6), 214-218.

Lorraine Cale, Ashley Casey and Jo Harris, November, 2015.

Tomporowski, P. D., Davis, C.L., Miller, P.H.& Naglieri, J.A. (2008) Exercise and children's intelligence, cognition and academic achievement, Educational Psychology Review, 20(2), 111-131.

Van Sluijs, E.M.F, McMinn, A.M. & Griffin, S.J. (2007) Effectiveness of interventions to promote physical activity in children and adolescents: systematic review of controlled trials, British Medical Journal, 335, 703.