

The value of physical education and sport in schools

Budget restraints and pressure to meet academic targets can cause policy makers and schools to cut back on physical education and sport, with the aim of improving academic performance. However, advocates of school-based physical activity have suggested that physical education, physical activity and sport may contribute to the enhancement of academic performance either directly or through the achievement of wider social outcomes which, in turn, may impact on academic achievement.

This short paper based on a recent review of research conducted by Loughborough University evidences the value of physical education and sport in schools.

ATTAINMENT

- Well-controlled longitudinal studies suggest that academic achievement is maintained or enhanced by increased physical education, physical activity or sport. When using physical education as an intervention several studies have found either no decline in academic achievement or an improvement in arithmetic and reading scores even when this additional physical education replaced academic subject lesson time.
- When a substantial proportion of curricular time (up to an extra hour per day) is allocated to physical education, physical activity or sport, learning seems to proceed more rapidly per unit of classroom time. Accelerated psychomotor development has been shown in children who received additional physical education which could be the mechanism for accelerated learning.

COGNITIVE FUNCTION

- A positive relationship exists between physical activity and cognition; perceptual skills, attention and concentration are all improved by a bout of physical activity. Primary and middle-school age children appear to gain the most benefit in terms of enhanced cognitive function.
- Prior exercise may be beneficial for cognitive function in both the morning and the afternoon as studies have shown an improvement in adolescents' performance on visual search and attention tests in the morning and on children's performance in mathematics after an afternoon walk.

BEHAVIOUR

- Extensive research reviews conclude that physical activity has a positive effect on classroom behaviour. As little as 10 minutes of additional organised physical activity in or outside the classroom improves classroom behaviour, and consequently may enhance academic performance. In one study the most disruptive children showed greater behavioural improvements.
- Studies from the World Health Organisation and German researchers found that young individuals who participate in organised sport demonstrate lower rates of anti-social behaviour which may result in less disaffection from school and thus enhanced academic performance.



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ATTENDANCE

- Large cross-sectional studies have shown a positive relationship between participation in sports programmes and school attendance and between physical fitness and school attendance.
- The evaluation of school sport partnerships indicated that the increased opportunities to participate in physical education, activity and sport provided increased motivation for young people to attend school.
- For targeted groups researchers believe that physical activity provides social capital for participants which may indirectly enhance school attendance. School connectedness and school satisfaction, two outcomes linked with successful school sport and physical education programmes, are known to prevent drop-out from school and positive improvements in school attendance.
- To impact on whole school attendance, physical education and school sport programmes should be innovative, engage the whole school in daily or weekly activity programmes and, importantly, be fully integrated within a multi-dimensional school aim of improving attendance, increasing attainment, and changing attitudes to learning.

MENTAL HEALTH

- The positive impacts of physical activity on anxiety, depression, mood, and wellbeing are not disputed and longitudinal studies have also reported a positive association between physical activity and several components of mental health including increased self-esteem, emotive well-being, spirituality and future expectations.
- There is also a wealth of literature suggesting 'knock-on' effects of increased self-esteem which benefit all aspects of school life, including improved classroom behaviour and academic performance. The influence of physical activity on self-esteem may be influenced by the activity mode undertaken, although positive cognitive behavioural modifications have been observed across aerobic, strength, dance, and flexibility activities.
- There is also evidence to suggest that taking part in sport and physical activity programmes can improve confidence by giving an opportunity 'to be good at something'; young people involved in this research identified how this confidence had transferred to other aspects of school life.

WIDER SOCIAL OUTCOMES

- The World Health Organisation suggests that physical activity participation assists social development of young people by promoting self-expression, social interaction, and social integration.
- Physical education, physical activity and sport have been shown to positively impact the following:
 - Feeling connected to their school: This may be due to greater attention directed towards young people who participate, and the increased amount of interactions with significant adults that extracurricular physical activities entail.
 - Aspirations of young people: Researchers suggested that participation in sport promotes identification with the school, and a commitment to school-related values which consequently benefit both academic and non-academic outcomes.
 - The extent to which positive social behaviours exist within school: Whilst there is an acknowledgement that physical education and sport programmes are not 'miracle cures' some researchers believe it to be an appropriate environment for socio-moral development and is most effective when combined with programmes that seek to address wider personal and social development.

The full literature review can be downloaded from the Youth Sport Trust School Sport Xchange website or requested by emailing impactandresearch@youthsporttrust.org