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Girls and Physical Activities: a summary review

Physical activity has the potential to provide considerable benefits to young people, not only in terms of the obvious health aspects, but also in terms of greater self-esteem, bodily empowerment and enjoyment.

However, there is still a tendency for many young people, especially girls, to be excluded. There has been a lot of research into girls' participation in sports, although much of this writing has tended to explore the negative aspects of exclusion from what is considered a male arena of sport. Although important and relevant, this position has often resulted in a plethora of descriptive accounts of women's exclusion which could be seen as maintaining gender divisions without taking into consideration other social factors such as, for instance, age, the body, geography, economics and race. Consequently, many investigations into gender in sport have, ultimately, positioned all boys as benefiting from sport and all girls excluded, which is obviously not the case.

In our recent report, conducted for the World Health Organization, it was found that there is an international consensus that participation in physical activities can offer a great deal to individuals, communities and nations.

However, the evidence also suggested that from an early age, differences in gender-based attitudes towards and opportunities for sports and physical activities can have a significant influence on children's participation. This may, in turn, affect later involvement in physically active lifestyles, and the social and health benefits that may result for them.

This article offers a summary of this research into girls' participation in physical activities. It does so by focussing upon the questions which emerged during this exploration.

In what ways do girls benefit from participation in physical activities?

Numerous benefits are claimed on

behalf of children's participation in physical activities. In this discussion, we will consider these benefits under the following headings:

- Physical Health
- Reproductive Health
- Mental Health
- Intellectual Development

Physical Health

The physical health benefits of regular physical activity are well-established. Regular participation in such activities is associated with a longer and better quality of life, reduced risks of a variety of diseases and many psychological and emotional benefits (Sallis and Owen, 1999). There is also a large body of literature showing that inactivity is one of the most significant causes of death, disability and reduced quality of life in the developed world (US Department of Health and Human Services, 1996).

Physical activity may influence the physical health of girls in two ways. First, it can positively affect the causes of disease during childhood and youth, including diabetes and high blood pressure (Malina, et al, 2004). Second, physical activity could reduce the risk of chronic diseases in later life (Sabo, et al, 2004). A number of conditions appearing in adulthood, such as osteoporosis, cancer, diabetes and coronary heart disease, have their origins in childhood, and can be aided by regular physical activity in the early years (Freedman, et al, 2001).

Obesity deserves special mention. There seems to be a general trend towards increased childhood obesity in many countries, and girls in urbanised areas appear to be especially vulnerable (World Health Organisation, 1997). Physical activity can be an important feature of a weight control programme for girls, increasing calorific expenditure and promoting fat reduction (Gutin, Barbeau and Yin, 2004).

Reproductive Health

Adolescent pregnancy and sexual ill-health are major social problems around

the world. Although there is a shortage of research in this area, early studies conducted in the US have found that adolescent girls who participate in sports tend to become sexually active later in life, have fewer partners, and, when sexually active, make greater use of contraception than non-sporting girls (Sabo, et al, 1999). Projects are currently underway in the developing world that use sports participation as a strategy for empowering girls to avoid high-risk sexual behaviour (Reijer, et al, 2002).

Mental Health

There has been evidence of disturbingly high rates of mental ill-health among children and young people in recent years. These conditions range from low-self-esteem, anxiety and depression to eating disorders, substance abuse and suicide (Sallis and Owen, 1999), and adolescent girls are particularly vulnerable (Nolen-Hoeksema and Girgus, 1994). Regular physical activity can have a positive effect upon girls' psychological well-being. Specifically, activity can contribute to the reduction of problematic levels of anxiety and depression. A position statement of the International Society of Sport Psychology drew out numerous mental health benefits of physical activity from the research literature, including reduced state anxiety, neuroticism and anxiety, mild to moderate depression, and various kinds of stress (Singer, 1992).

Intellectual Development

A range of evidence suggests that for many girls, physical activities are positive features of their academic aspirations and achievement. School-based studies have found improvements for many children in academic performance when time for physical activity is increased in their school day (Sallis, et al, 1999).

There is also evidence of a positive relationship between girls' participation in sports and positive attitudes to school. For example, girls who participate in sports are more likely to achieve academic success than those who do not play sports; female high school athletes expressed a greater interest in graduating from both high school and

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college; female athletes from ethnic minority groups reported better school grades and greater involvement in extra-curricular activities than non-athletes, and in some cases are considerably less likely to drop-out from school. Other studies have suggested that sports participation can help undermine traditional gender stereotyping in terms of academic aptitude, by demonstrating an association between girls' engagement in sports and improved performance in science and mathematics (Hanson and Kraus, 1998).

How active are girls?

International guidelines on physical activity in childhood and youth suggest that all young people should take part in sports or other physical activities, be physically active on all or most days, and engage in activity that is of at least moderate intensity, and lasting about an hour (Corbin and Pangrazi, 1998; Health Education Authority, 1998). Whilst many girls do achieve these targets, there is considerable evidence from around the world suggesting that most do not (Saxena, et al, 2002; Trost, et al, 2002). Also, and perhaps more worrying, research shows a clear trend of decreasing levels of physical activity as girls get older, and a widening difference between girls' and boys' levels of physical activity (Bailey and Martin, 1994). Since sedentary lifestyles are associated with increased risk of ill-health, both during childhood and in later life, these figures are cause for concern.

What influences girls' physical activity?

Girls physical activity is mediated by a host of factors, including:

- Family
- Friends
- Physical Education lessons
- Perceived barriers
- Independent mobility

Family

Active parents have more active children (Moore, et al, 1991). In many cases, it seems to be the father who plays the main role in influencing children's participation in physical activities (Lewko, and Greendorfer, 1978). Opportunities for physical activity during the early years are heavily dependent on parents' beliefs, and many of these beliefs relate to gender. So, from an early age, many parents treat boys and girls differently and encourage different styles of physical activity play, most commonly by providing gender-based toys and encouraging boys and girls to engage in gender stereotyped activities, usually with boys encouraged to play vigorously and girls quietly (Rogers, 1999).

Friends

Physical activities are usually social events for children. Similarly, physically active adolescents tend to socialise with friends who are also active (Wold and

Hendry, 1998). There is evidence that boys and girls view friendships in different ways. Studies suggest that a key factor in whether girls engage in and sustain physical activities is whether they have a same-sex friend with whom to participate (Flintoff and Scraton, 2001). For girls, many physical activities often become less important in their lives as they are encouraged by pressure from their peer group to seek other activities associated with their preferred perceptions of femininity (Hargreaves, 1994).

Physical Education lessons

Being the main institution with responsibility for promoting physical activity in young people, school physical education has the potential to be a powerful force against sedentary lifestyles. Especially important, in this regard, is the Primary phase of schooling, which has the advantages of relatively high engagement in physical education lessons, and students who are curious about their bodies and receptive to health information (Harris and Elbourn, 1997). Whilst the amount of actual activity experienced during physical education lessons is usually inadequate to deliver health outcomes, physical education is well placed to facilitate the development of a foundation of movement skills and positive attitudes towards physical activities (Shepherd and Trudeau, 2000), which are likely to positively contribute to health.

It ought to be stressed that physical education lessons do not necessarily promote physical activity in children. Indeed, there is evidence that inappropriate provision can disaffect some girls (Flintoff and Scraton, 2001). Many girls reject an overly competitive teaching climate, even the very able and physically active, and prefer individual, creative or co-operative activities (Kay, 1995). The outcome is often that, whilst positive physical education experiences are highly supportive of lifelong physical activity habits, inappropriate provision can actually harm such healthy practices.

Perceived barriers

A recent review found perceived barriers to be the factor most consistently related to inactivity in children (Sallis, et al, 2000). Girls' desire to do other things with their time is a frequent explanation for non-participation (Tappe, et al, 1990). Other explanations for inactivity include unsuitable weather, school pressures, dissatisfaction with school physical education classes, reluctance to get sweaty or dishevelled, and inaccessibility or inconvenience of sporting provision (Garcia, et al, 1995). So, it appears that many girls are not just developing adult patterns of inactivity, but also adult ways of excuses for being active (Sallis and Owen, 1999).

Independent mobility

Parents' fears and concerns regarding safety can be a powerful constraint on

children's time and access to opportunities for physical activity (Tudor-Locke, et al, 2001). Hillman's now classic study of independent mobility found a connection between restrictions placed on children's freedom to be away from home and participation in both organised and unorganised sports and physical activities (Hillman, et al, 1990). A number of studies have shown significant gender differences in independent mobility, with boys experiencing far more freedom than girls to be active (Matthews, 1987). Nevertheless, many girls do take part in out-of-doors physical activities, especially if opportunities are convenient. The finding that the more places that are available in which girls can be active, the more they are active Sallis, et al, 1993), is salutary.

What can we do?

The benefits of participation in physical activities are great, and the potential costs of inactivity can be severe. Many girls are not currently able to take advantage of the benefits of regular physical activities due to inequitable access and opportunities. Therefore, a central challenge facing governments, schools, sports groups and communities is to develop forms of physical activity that are sensitive to girls' needs and interests. Some have called for the promotion of 'girl-friendly' sports and activities (Kirk, et al, 2000). We disagree. We suggest that we should be looking for ways to make sports and other physical activities more 'child-friendly' and 'youth-friendly'. Our reading of the research suggests a number of strategies that promote such 'child-friendly' practices, facilitate regular physical activity, and are supportive of positive sporting experiences. We offer them for consideration.

1. Girls do enjoy engaging in physical activities. Strategies should be implemented which build upon this enjoyment, and allow them to participate as fully as possible, in forms that offer them satisfaction and opportunities for achievement.

2. Practices should be established which recognise the importance of fun, health and social interaction in sports participation.

3. School physical education is a foundation of life-long physical activity. Fundamental movement skills need to be developed from an early age, for all children, with the emphasis on the individual body, rather than sporting outcomes.

4. Some girls regularly engage in sports and physical activities, as an integral part of their lifestyle. Any strategies concerned with raising participation among young people need to remember that neither girls nor boys are 'the problem'; rather, the difficulty lies with the ways in which physical activities are constructed and presented.

5. It is important to examine and highlight the practices inherent within sports which might deter children from participating. Sports provision may need to be adapted to encourage and accommodate all

young people.

6. The more opportunities that are available for girls to be physically active, the more they are active. Strategies need to be put in place that ensure activities, settings and facilities are easily accessible and safe.

NOTE

A longer version of this review, with more comprehensive references, is available at the Centre for Physical Education Research's website: <http://physed.cant.ac.uk>.

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