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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 self-esteem, body 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 work has tended to explore the negative aspects of exclusion from what is considered to be ‘male-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, for example, class, age, body, geography, economics and race. Consequently, many investigations into gender in physical activity, although beneficial to sport and all girls excluded, which is obviously not the case.

In recent report, conducted for the World Health Organization, it was found that there is an international consensus that participation in physical activity can have a major role in improving health. The physical activity can influence the health of individuals, communities and national health systems. However, the evidence also suggested that from an early age, differences in gender-based attitudes towards sports and physical activities can have a significant influence on children’s participation. This may, in turn, affect later involvement in physical activity and the level of physical and health benefits that may result from participation. This review offers a summary of this research into girls’ participation in physical activities. It does so by focusing upon the question of gender issues 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 potentially affect the causes of diseases during childhood and youth, including diabetes and high blood pressure (Malina, 1983; Sallis and Owen, 1999). Second, physical activity can reduce the risk of chronic diseases in later life (Sallis, et al., 2004). A number of conditions appear to affect girls in adolescence, such as osteoporosis, cancer, diabetes and coronary heart disease, have their origins in adolescence and can be aided by regular physical activity in the early years (Treadwell, et al., 2000).

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). Adolescents are particularly at risk (Nolen-Hoeksema and Girgus, 1994).

Regular physical activity can have positive effects on 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 psychopathology (Brown and Treasure, 1996).

Intelectual Development

A range of evidence suggests that for many girls, physical activities are positive features of their academic aspirations and performances. There is evidence that girls who participate in sports and physical activities have found improvements in many children’s 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
college: female athletes from ethnic minority groups reported better school grades and greater participation in extracurricular activities than non-athletes, and in some cases are considerably less likely to drop-out from school. Other studies have suggested that sports participation is heavily dependent on traditional gender stereotyping in terms of academic aptitude, by demonstrating an association between sports and improved performance in science and mathematics (Boskonion and Kunst, 1996).

How active are girls?

International guidelines on physical activity as children's health benefit 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 last for at least 60 minutes per day (Comstock and Pomerat, 1998, Health Canada, 2006). Whilst many girls do achieve these targets, there is considerable evidence from around the world suggesting that most do not (Savas, et al, 2003; Trout, 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 boys and girls in past year physical activity (Schwartz and Martin, 1994).

Since sedentary lifestyles are associated with obesity, type 2 diabetes and especially (deleterious) effects on childhood and in later life, these figures are cause for concern.

What influences girls' physical activity?

Girls' participation in 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, 1993). In many cases, it seems to be the father who plays the major role in influencing their child's participation in physical activities (Lesko, and Greenfelder, 1997). Opportunities for physical activity during the early years are heavily dependent on parental 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, mostly by providing gender-based sports and encouraging and girls to engage in gender stereotyped activities, usually with boys encouraged to play vigorously and girls quietly (Kriger, 1999).

Friends

Physical activities are usually social events for children, and even 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. Specifically, boys view friendships as a key factor in which girls engage in and sustain physical activities is whether they have a same-sex friend with whom to participate (Flinn and Scarf, 2001). For girls, many physical activities often become less important in their lives as they grow older and are experienced through their peer group to seek out activities associated with their preferred perceptions of femininity (Biddle, 1996).

Physical Education lessons

Being the main institution with responsibility for promoting physical activity in young people, schools play a potential to be a powerful force against sedentary lifestyles. Especially important, in the view of Taylor and Biddle (2002) in the Primary phase of school, which has the advantages of relatively high engagement in physical education lessons, and students are curious about their bodies and receptive to health information (Harris and Ellsor, 1997). Hence, 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 activity which are likely to positively contribute to health.

What might be the reason that physical education lessons do not necessarily promote physical activity in children. Indeed, there is evidence that inappropriateappropriateness for physical activities, practices, facilitate regular physical activity, and are supportive of positive sporting experiences, and for consideration: 1. Girls do enjoy engaging in physical activity. 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 achievements;

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 everyday lifestyle. Any strategies concerned with raising participation among young people need to remember that neither girls nor boys 'do the same' things, rather, the difficulties 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.

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 functioning settings and facilities are easily accessible and safe.

NOTE

There is a large version of this review, with more comprehensive references, available at the Centre for Physical Education Research's website: http://physed.co.uk

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BIBLIOGRAPHY

Geraci, A., Norton, B., Meny, M., Conklin, C., Pen-

nor, N. and Rons, D. (1995) Gender and Developmental Differences in Exercise Behaviors among Youth and Pro-


Gu, B., Bapna, P. and Yan, Z. (2004) Exercise Inter-


dependence for Prevention of Obesity, and Related to Disorders in Youths. Qure, 56, 120-141.