Introduction

There is an international consensus that participation in physical activities can offer a great deal to individuals, communities and nations. Evidence suggests 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 report offers a summary of research into girls’ participation in sports and physical activities. It focuses upon the following themes:

- Benefits of Sports and Physical Activities;
- Patterns of Girls’ Participation in Sports and Physical Activities;
- Influences on Girls’ Participation;
- Examples of Innovative Practices;
- Recommendations.

To make the paper as useful as possible for readers from different backgrounds, and to keep the main paper of a manageable size, we have appended some additional information, including some suggestions for future research in the area of gender and physical activity, further reading, and details of relevant organisations.

Benefits of Sports and Physical Activities

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. 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.

Physical activity may influence the physical health of girls in two ways. First, it can affect the causes of disease during childhood and youth. Evidence suggests a positive relationship between physical activity and a host of factors affecting girls’ physical health, including diabetes, blood pressure and the ability to use fat for energy. Second, physical activity could reduce the risk of chronic diseases in later life. A number of ‘adult’ conditions, such as cancer, diabetes and coronary heart disease, have their origins in childhood, and can be aided, in part, by regular physical activity in the early years. Also, regular activity beginning in childhood helps to improve bone health, thus preventing osteoporosis, which predominantly affects females.

Obesity deserves special mention. There seems to be a general trend towards increased childhood obesity in a large number of countries, and this increase seems to be particularly prevalent in girls from highly urbanised areas, some ethnic minorities and the disabled. Obesity in childhood is known to have significant impact on both physical and mental health, including hyperlipidemia, hypertension and abnormal glucose tolerance. Physical activity can be an important feature of a weight control programme for girls, increasing calorific expenditure and promoting fat reduction. Indeed, recent systematic reviews on both the prevention and treatment of childhood obesity recommend strategies for increasing physical activity.

Mental Health

In recent years, there has been evidence of disturbingly high rates of mental ill-health among adolescents and even younger children, ranging from low-self-esteem, anxiety and depression to eating disorders, substance abuse and suicide. Adolescent girls are particularly vulnerable to anxiety and depressive disorders: by 15 years, girls are twice as likely as boys to have experienced a major depressive episode; girls are also significantly more likely than boys to have seriously considered suicide.

Research suggests two ways in which physical activities can contribute to mental health in girls. Firstly, there is fairly consistent evidence that regular activity can have a positive effect upon girls’ psychological well-being; indeed, some studies indicate that girls may respond more strongly than boys in terms of short-term benefits. Secondly, research
has indicated that physical activity can contribute to the reduction of problematic levels of anxiety and depression. Evidence is beginning to be gathered for exercise as a treatment for clinical depression, with studies finding that physical activity is as effective a treatment as anti-depressants\textsuperscript{xxv}, and psychotherapy\textsuperscript{xxvi}. Similarly, a variety of non-clinical studies have found that higher levels of activity were related to lower rates of depression\textsuperscript{xxvii}. A position statement of the International Society of Sport Psychology\textsuperscript{xxviii} 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.

**Educational and Intellectual Development**

A range of evidence suggests that for many girls, sports and physical activities are positive features of their academic aspirations and achievement. The classic study of the relationship between physical activity and school performance was carried out in France in the early 1950s, in Vanves\textsuperscript{xxx}. Researchers reduced ‘academic’ curriculum time by 26\%, replacing it with physical activities, yet academic results did not worsen, there were fewer discipline problems, greater attentiveness and less absenteeism. More recent studies have found improvements for many children in academic performance when time for physical activity is increased in their school day\textsuperscript{xxix}. A report of three longitudinal studies emphasises that ‘academic performance is maintained or even enhanced by an increase in a student’s level of habitual physical activity, despite a reduction in curriculum or free time for the study of academic material\textsuperscript{xxx}. There is considerable evidence of a positive relationship between girls’ participation in sports and pro-educational values, although, at present, it is difficult to distinguish between correlation and causation. Studies from the United States\textsuperscript{xxx} report a host of encouraging findings including: 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 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\textsuperscript{xxxi}. "A range of evidence suggests that for many girls, sports and physical activities are positive features of their academic aspirations and achievement. The classic study of the relationship between physical activity and school performance was carried out in France in the early 1950s, in Vanves\textsuperscript{xxx}. Researchers reduced ‘academic’ curriculum time by 26\%, replacing it with physical activities, yet academic results did not worsen, there were fewer discipline problems, greater attentiveness and less absenteeism. More recent studies have found improvements for many children in academic performance when time for physical activity is increased in their school day\textsuperscript{xxix}. A report of three longitudinal studies emphasises that ‘academic performance is maintained or even enhanced by an increase in a student’s level of habitual physical activity, despite a reduction in curriculum or free time for the study of academic material\textsuperscript{xxx}. There is considerable evidence of a positive relationship between girls’ participation in sports and pro-educational values, although, at present, it is difficult to distinguish between correlation and causation. Studies from the United States\textsuperscript{xxx} report a host of encouraging findings including: 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 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\textsuperscript{xxxi}."

**Reproductive Health**

Adolescent pregnancy and sexual ill-health are major social problems across the globe\textsuperscript{xxii}. 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\textsuperscript{xxii}. Projects are currently underway in the developing world that use sports participation as a strategy for empowering girls to avoid high risk sexual behaviour\textsuperscript{xxiii}. "Adolescent pregnancy and sexual ill-health are major social problems across the globe\textsuperscript{xxii}. 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\textsuperscript{xxii}. Projects are currently underway in the developing world that use sports participation as a strategy for empowering girls to avoid high risk sexual behaviour\textsuperscript{xxiii}."

**Social Inclusion**

Combating social exclusion, or ‘the multiple and changing factors resulting in people being excluded from the normal exchanges, practices and rights of modern society\textsuperscript{xxiii}, has become a focus of attention for governments and non-government organisations in recent years\textsuperscript{xxiv}. Some writers have argued that sports not only reflect but can also contribute to girls’ social exclusion in sports and wider society\textsuperscript{xxv}. Certainly, the dominance of sports as culturally valued physical activities, and the close identification of sports with masculinity, means that other, non-masculine groups can become pushed to the margins. However, positive sports experiences do seem to have the potential to, at least, contribute to the process of inclusion by: bringing individuals from a variety of social and economic background together in a shared interest in activities that are inherently valuable; offering a sense of belonging, to a team, a club or a programme; providing opportunities for the development of valued capabilities and competencies; and increasing ‘community capital’, by developing social networks, community cohesion and civic pride\textsuperscript{xxvi}. "Combating social exclusion, or ‘the multiple and changing factors resulting in people being excluded from the normal exchanges, practices and rights of modern society\textsuperscript{xxiii}, has become a focus of attention for governments and non-government organisations in recent years\textsuperscript{xxiv}. Some writers have argued that sports not only reflect but can also contribute to girls’ social exclusion in sports and wider society\textsuperscript{xxv}. Certainly, the dominance of sports as culturally valued physical activities, and the close identification of sports with masculinity, means that other, non-masculine groups can become pushed to the margins. However, positive sports experiences do seem to have the potential to, at least, contribute to the process of inclusion by: bringing individuals from a variety of social and economic background together in a shared interest in activities that are inherently valuable; offering a sense of belonging, to a team, a club or a programme; providing opportunities for the development of valued capabilities and competencies; and increasing ‘community capital’, by developing social networks, community cohesion and civic pride\textsuperscript{xxvi}."

Studies of women’s experiences of sports participation have suggested that they can contribute to a more generalised feeling of empowerment\textsuperscript{xxvii}. In many settings, adolescents may be encouraged to view their bodies as sexual and reproductive resources for men, rather than sources of strength for themselves\textsuperscript{xxviii}. Physical activities may help them develop a sense of ownership of their bodies and access the types of activity experiences traditionally enjoyed by boys\textsuperscript{xxix}. This may be because participation augments girls’ self-esteem\textsuperscript{xxv}, or because being an athlete carries with it a strong public identity\textsuperscript{xxx}. Some female athletes report having a stronger sense of identity and self-direction – what Talbot calls ‘being herself through sport’\textsuperscript{xxx}. Whatever the reasons, increasing the numbers of girls’ participating in sports and physical activities does seem to open up routes through which they can acquire new community affiliations and begin to operate more openly and equally in community life. In doing so, girls’ participation can challenge and change social norms about their roles and capabilities\textsuperscript{xxxi}. "Studies of women’s experiences of sports participation have suggested that they can contribute to a more generalised feeling of empowerment\textsuperscript{xxvii}. In many settings, adolescents may be encouraged to view their bodies as sexual and reproductive resources for men, rather than sources of strength for themselves\textsuperscript{xxviii}. Physical activities may help them develop a sense of ownership of their bodies and access the types of activity experiences traditionally enjoyed by boys\textsuperscript{xxix}. This may be because participation augments girls’ self-esteem\textsuperscript{xxv}, or because being an athlete carries with it a strong public identity\textsuperscript{xxx}. Some female athletes report having a stronger sense of identity and self-direction – what Talbot calls ‘being herself through sport’\textsuperscript{xxx}. Whatever the reasons, increasing the numbers of girls’ participating in sports and physical activities does seem to open up routes through which they can acquire new community affiliations and begin to operate more openly and equally in community life. In doing so, girls’ participation can challenge and change social norms about their roles and capabilities\textsuperscript{xxxi}."

**Patterns of Girls’ Participation in Sports and Physical Activities**

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\textsuperscript{iii}. Whilst girls in many contexts do achieve these targets\textsuperscript{iv}, there is considerable evidence from around the world suggesting that most do not\textsuperscript{v}.

Tables 1 and 2 (below) summarise a range of empirical research into girls’ participation in sports and physical activities. These and other studies report a clear trend of decreasing levels of activity as girls get older, and a widening disparity between girls’ and boys’ physical activity behaviours\textsuperscript{vi}. For example, one US study estimated that the decline in physical activity during secondary schooling is 7.4% for girls, compared with 2.7% for boys\textsuperscript{vii}. Another report suggested that Australian female adolescents were approximately 20% less active than their male peers\textsuperscript{viii}. Since sedentary lifestyles are associated with increased risk of ill-health, both during childhood and in later life, these figures are cause for concern.

<table>
<thead>
<tr>
<th>Source</th>
<th>Country</th>
<th>Sample</th>
<th>Method</th>
<th>Key Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefice, et al (2001)</td>
<td>Senegal</td>
<td>40 girls</td>
<td>Accelerometry</td>
<td>Estimated levels of activity high, but clear decline during three years of</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(13±0.5)</td>
<td></td>
<td>study. Girls attending school less active than non-attenders.</td>
</tr>
<tr>
<td>Bungum &amp; Vincent</td>
<td>US</td>
<td>852 girls (14-18</td>
<td>7-day recall &amp;</td>
<td>Ethnic group (white girls more active) and age (younger more active)</td>
</tr>
<tr>
<td>(1997)\textsuperscript{ix}</td>
<td></td>
<td>years)</td>
<td>survey</td>
<td>significant influences on physical activity. Parental (especially father)</td>
</tr>
<tr>
<td>Cale (1996)\textsuperscript{x}</td>
<td>UK</td>
<td>103 girls (11-14</td>
<td>Interview &amp;</td>
<td>Physical activity levels reported generally low: 45% of sample engaged in</td>
</tr>
<tr>
<td></td>
<td></td>
<td>years)</td>
<td>Questionnaire</td>
<td>no vigorous activity over 4 days; 30% did less than 20 minutes activity a</td>
</tr>
<tr>
<td>Saxena, et al (2002)\textsuperscript{xi}</td>
<td>US</td>
<td>305 girls (12-21</td>
<td>Survey</td>
<td>Low levels of activity in majority of girls. Factors associated with regular</td>
</tr>
<tr>
<td></td>
<td></td>
<td>years)</td>
<td></td>
<td>vigorous activity: friends exercising, involvement in sports team, trying to</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>lose weight, believing in importance of exercise, and being under 17 years</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>of age. Time constraints and laziness most common reasons given for</td>
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<td></td>
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<td>inactivity.</td>
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Table 1: Selection of studies examining girls’ participation in sports and physical activities

<table>
<thead>
<tr>
<th>Source</th>
<th>Country</th>
<th>Sample</th>
<th>Method</th>
<th>Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aaron, et al (1993)</td>
<td>US</td>
<td>604 girls &amp; 641 boys (12-16 years)</td>
<td>Questionnaire</td>
<td>Boys considerably more active than girls on all measures, and boys spent more time vigorously exercising and competing in competitive sports than girls.</td>
</tr>
<tr>
<td>Australian Bureau of Statistics (2002)\textsuperscript{xii}</td>
<td>Australia</td>
<td>22,325 (5-65+)</td>
<td>Interview</td>
<td>Males had higher participation in every age group, with the difference most evident in the 12-14 &amp; 15-19 age groups.</td>
</tr>
<tr>
<td>C. Fitness &amp; Lifestyle Research Institute (2004)</td>
<td>Canada</td>
<td>5,303 adults (15 years +)</td>
<td>Telephone interviews</td>
<td>Teenage boys twice as likely as teenage girls to meet international guidance on physical activity.</td>
</tr>
<tr>
<td>Guerra, et al (2001)\textsuperscript{ix}</td>
<td>Portugal</td>
<td>232 girls &amp; 22 boys (8-13 years)</td>
<td>Interview</td>
<td>Physical activity decreased significantly for all groups. Boys reported significantly more activities, except in 8-9 age group.</td>
</tr>
<tr>
<td>Lasheras, et al (2001)</td>
<td>Spain</td>
<td>1,358 children (6-15 years)</td>
<td>Reanalysis of survey data</td>
<td>Percentage of active boys higher than that of girls in all age categories.</td>
</tr>
<tr>
<td>Raudsepp &amp; Päll (1999)</td>
<td>Estonia</td>
<td>91 girls / 83 boys (7-9 years)</td>
<td>Parental 7-day recall &amp;</td>
<td>Significant decrease of activity with age in both sexes. Total physical weekly activity significantly higher in boys than girls in 7- and 8-year groups, but not at 9-years. Boys' mean daily levels of moderate-to-vigorous activity significantly higher than girls in age groups.</td>
</tr>
</tbody>
</table>

\textsuperscript{1} ‘Country’ refers to the setting of the research, rather than that of the author’s home institution.
Singapore Sports Council (2001) Singapore 817 (15-19 years) Interview Rate of sports participation higher among males than females. With exception of walking, participation rates for girls lower in all most popular activities.

Telama, et al (2002) Belgium, Czech Republic, Estonia, Finland, Germany & Hungary 3270 girls / 3209 boys (12-15 years) Questionnaire Boys more active than girls in all countries studied, although variation between countries. Gender difference greatest in organised sports, although participation of girls has increased.


Table 2: Selection of studies comparing girls’ and boys’ participation in sports and physical activities

Influences on Girls’ Participation

It has been suggested that there is a genetic predisposition towards being more or less physically active. However, any such predisposition is mediated by a host of factors, some of which are outlined in Table 3 (the discussion that follows will, necessarily, be selective, but further detail is available in the indicated references).

<table>
<thead>
<tr>
<th>Personal Factors</th>
<th>Environmental Factors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biological</td>
<td>Social</td>
</tr>
<tr>
<td>Hereditary</td>
<td>Peer group</td>
</tr>
<tr>
<td>Age</td>
<td>Family</td>
</tr>
<tr>
<td>Obesity</td>
<td>Culture</td>
</tr>
<tr>
<td>Fitness level</td>
<td>Role models</td>
</tr>
<tr>
<td>Psychological</td>
<td>Environmental</td>
</tr>
<tr>
<td>Hereditary</td>
<td>Access</td>
</tr>
<tr>
<td>Perceived barriers</td>
<td>Type of activity</td>
</tr>
<tr>
<td>Perceived competence</td>
<td>School</td>
</tr>
<tr>
<td>Attitudes</td>
<td>Independent mobility</td>
</tr>
</tbody>
</table>

Table 3: Factors influencing girls’ participation (adapted from Sallis)

Age

Age is the dominant biological determinant of physical activity in girls. Overall, levels of activity steadily decline from about 6 years of age until adolescence, when activity levels drop more steeply. Whether this decline ought to be understood solely in terms of biological influences is dubious, and it is, perhaps, noteworthy that the decline in sporting or physical activities among girls around 11 or 12 years occurs almost simultaneously with the period when gender ideology sharply interacts with socialisation influences.

Perceived barriers

A recent review of 108 published studies addressing correlates of physical activity identified perceived barriers as the most consistent negative psychological correlate of physical activity. Studies specifically focused upon girls’ perceived barriers to physical activity are still relatively rare, and predominantly come from the US, but themes are beginning to emerge. Both qualitative and quantitative studies have identified girls’ wish to do other things with their time as a frequent explanation for non-participation. 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. Summarising this data, Sallis and Owen state that, ‘It appears that adolescents are not just acquiring adult patterns of sedentary habits, they are also acquiring adult ways of thinking about exercise, including reasons (or excuses) for not being active.

Peers

Sports and physical activities are usually social events for children. Similarly, physically active adolescents tend to socialise with friends who are also active. Whilst a peer group can act as powerful enforcer of norms and behaviours for both boys and girls, there is evidence that they use and view friendships in different ways. Studies suggest that a key factor in whether girls engage in and sustain physical activities was whether they had a same-sex friend with whom to participate. This may, in part, be due to the support structure such shared experiences can offer, especially during adolescence, when many girls consider reducing their commitment to physical activities that they are most anxious about being rejected or excluded from same-sex friendships. For girls, physical activities often become less important in their lives as they, encouraged by pressure from their peer group to seek other activities associated with their preferred perceptions of femininity.
Family
Numerous studies have emphasised the influence of the family on childhood physical activity levels\textsuperscript{1xxxiii}. Active parents have been shown to have more active pre-school children, older children and adolescents\textsuperscript{1xxxv}; activity levels are further supported with an active sibling\textsuperscript{1xxxvii}. Studies generally identify fathers as playing the primary role in influencing children’s participation in sports and physical activities\textsuperscript{1xxxvii}. It is noteworthy, then, that fathers have also often been reported to be the primary socialisation agent for gender role development\textsuperscript{1xxxvii}. The nature and extent of physical play opportunities depend greatly on the set of beliefs and expectations held by the parents, and these beliefs are particularly significant in relation to gender\textsuperscript{1xxxvii}. Some writers have argued that involvement in physical activities is a product of a cultural belief system that values certain activities and skills for one sex and not for the other\textsuperscript{1xxxvi}. From an early age, many parents, in a range of cultures, treat boys and girls differently and encourage different styles of play in physical activity contexts\textsuperscript{1xxxviii}, 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.

Role Models
The role models who influence children’s physical activity participation change over time\textsuperscript{1xxxiv}. In early childhood, primary role models are parents, with friends and teachers becoming more significant as they enter school, and sports players, coaches and celebrities gaining in influence in adolescence\textsuperscript{1xxxviii}. Boys and girls tend to attribute role models differently, with girls being more likely to name parents as models, while boys more often named public figures, such as sports stars\textsuperscript{1xxxviii}. This difference may be due, in part, to the evident lack of female sporting role models available to girls\textsuperscript{1xxxviii}. This is not necessarily as serious as it might seem, since studies have emphasised the importance of learners’ self-efficacy in this process: similarity to models in terms of gender, age and ability enhances self-efficacy and motivates performance. ‘Stars’ are most likely to inspire imitation when they are perceived by observers as having some connection with their lives\textsuperscript{1xxxiv}, and when their success seemed attainable. So, effective role models need not be the most outstanding sporting individuals, but rather, may come from within the school (other pupils or teachers) or at home (parents or siblings)\textsuperscript{1xxxviii}.

Physical Education
Being the primary societal institution with responsibility for promoting physical activity in young people, school physical education has the potential to be a powerful force against sedentary lifestyles: ‘The potential of PE to reach virtually all children makes it a uniquely important resource’\textsuperscript{1xxxvi}. Studies generally identify fathers as playing the primary role in influencing children’s participation in sports and physical activities\textsuperscript{1xxxvi}. It is noteworthy, then, that fathers have also often been reported to be the primary socialisation agent for gender role development\textsuperscript{1xxxvi}. The nature and extent of physical play opportunities depend greatly on the set of beliefs and expectations held by the parents, and these beliefs are particularly significant in relation to gender\textsuperscript{1xxxvi}. Some writers have argued that involvement in physical activities is a product of a cultural belief system that values certain activities and skills for one sex and not for the other\textsuperscript{1xxxvi}. From an early age, many parents, in a range of cultures, treat boys and girls differently and encourage different styles of play in physical activity contexts\textsuperscript{1xxxviii}, 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.

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 students, especially girls\textsuperscript{1xxxvii}. In many settings, a narrow curriculum, dominated too heavily by competitive team games, fails to address the needs and interests of the whole school population, and does not transfer well to out-of-school and adult sporting participation\textsuperscript{1xxxvii}. Many girls reject an overly competitive teaching climate, even the very able and physically active, and prefer individual, creative or co-operative activities\textsuperscript{1xxxvii}. 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\textsuperscript{1xxxvii}. Nevertheless, it needs to be acknowledged that schools and, especially physical education, continue to be vital factors potentially supportive of sporting and physical activities. Evidence from many countries around the world of reduced curriculum time and facilities, therefore, is serious cause for concern\textsuperscript{1xxxvii}.

Type of activity
Although boys are generally more physically active than girls, little is known about possible explanations for this. It may be that boys spend more time in activity-enhancing environments than girls, particularly out-of-doors\textsuperscript{1xxxvii}. Also, boys and girls often engage in different types of activities\textsuperscript{1xxxvii}, although it is not clear always why this would be the case. In many contexts, boys and girls are offered distinct activities on the basis of their gender\textsuperscript{1xxxvii}, and even when they are presented with nominally the same curriculum content, boys tend to dominate in many sports. So, it may be that many girls’ unwillingness to engage with sports and physical activities can be attributed as much to the terms of their participation as the activities, themselves\textsuperscript{1xxxvii}.

Independent mobility
Parents’ fears and concerns regarding safety can be a powerful constraint on children's time and access to opportunities for physical activity\textsuperscript{1xxxvii}. The now classic study of independent mobility\textsuperscript{1xxxvii} 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. A number of studies have shown significant gender differences in independent mobility, with boys experiencing far more freedom than girls to be active\textsuperscript{1xxxvii}. Very often girls’ freedoms to move are
curtailed by cultural norms and conditions that determine where it is safe or appropriate for them to go. 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, is salutary.

Examples of Innovative Practices

GoGirlGo! Women’s Sports Foundation, USA
http://www.womenssportsfoundation.org/cgi-bin/iowa/index.html
This three-year initiative organised by the Women’s Sports Foundation aims to get one million inactive girls to participate in regular physical activity and keep another one million currently active girls between the ages of 8-18 from dropping out of physical activity. The national education and awareness campaign arms adults and girls with tools to enable girls to live an active lifestyle and educate others about physical activity. The programme includes an education and awareness campaign, community-based activation, a grant programme and peer-to-peer and adult-to-youth-mentoring.

Integrated girl-child education through sports, Maslandapur Sarada Sevashram, India
http://www.sportsbiz.bz/womensportinternational/advocacy/women_sports_india.doc
This programme has been set up by grass root community based Non-Government Organisations of West Bengal State of India to integrate ‘girl-child’ education through sports. The programme identifies the ‘girl-child’ as illiterate and a school drop out and provides basic education through the establishment of pre-primary schools in the communities. Basic infrastructures of ‘community sports’ are developed for the mental, physical and physiological development of the ‘girl-child’. The programme also includes women’s training and the involvement of community school children. It is hoped that in time the community sports programme will also run in different rural and urban communities through NGOs and school networks.

Junior Girls Cricket Squad, Illawarra Academy of Sport, Australia
The Illawarra Academy of Sport introduced a junior female cricket development squad in 1996. It was the first of its kind in Australia and was developed because organisers felt talented junior girls were leaving the sport prematurely owing to the lack of a formal women’s competition in the Illawarra region. In setting up the squad, the academy identified a number of potential elite-level cricketers playing in the school system, in indoor cricket sides and in male competitions.

Letting Girls Play, The Mathare Youth Sports Association, Kenya
http://www.popcouncil.org/pdfs/girlsplay.pdf
Evaluated by the Population Council, this case study documents a remarkable effort in Kenya that has helped to create spaces for girls that draw them into sports and community service. It describes the experience of the Mathare Youth Sports Association, a non-governmental organisation based in an impoverished urban setting, and its efforts to integrate girls into a community-based, large-scale youth programme.

On the Move, Canadian Association for the Advancement of Women and Sport and Physical Activity, Canada
www.caaws.ca/onthemove/index.htm
On the Move is a national initiative designed to increase the participation of non-active girls and women (ages 9-18) in recreational sports and physical activities. It is an innovative programming concept that advocates for female-only, participant-driven, community-specific programs, and questions traditional models of service delivery. On The Move is also a national network of professionals involved in female-only programming, and individuals and organisations concerned with the health and well-being of girls and young women. The network is a resource for information about the importance of increasing girls’ and young women’s participation, and shares programme successes and challenges.

Women Active Project, Ministry of Education, Culture, Sport, Science and Technology, Japan
http://www.jws.or.jp/eng/index.html
This project aimed to explore the factors that prevent women from participating in physical activity and has been presented in a document entitled ‘Data on Women and Sport’. The research focused upon the development and progress of women’s sports, competition and lifelong activity. The project consisted of a survey that attempted to explore women’s participation in ‘sports to play’ and ‘sport to view’. It also investigated factors in relation to consumer behaviour and childcare, particularly the condition of child care and toilet facilities in both public and private sports institutions.
Recommendations

The benefits of participation in physical activities are great, and the potential costs of inactivity can be severe. Many girls around the world are not currently able to take advantage of the benefits of regular sports and physical activities due to inequitable access and opportunities\textsuperscript{ci}. 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. But rather than focusing on ‘girl-friendly’ sports\textsuperscript{cii}, 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.

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, \textit{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. It is necessary to listen to voices from outside mainstream sports, for example, dance, mixed ability, non-competitive and co-operative activities.

7. Sports programme should reflect local cultural needs if they are to engage and sustain girls participation.

8. The organisation of sports groups and programmes should be include women in key roles, such as coaching and mentors, and role models drawn from within local communities and schools. These should reflect differences in perspectives and interests, and develop close links with schools and communities, to ensure continuity of engagement in sports and physical activities throughout life.

9. More research is needed to explore sports and physical activities in the lives of young people, and this needs to reflect the diversity of experiences around the world, acknowledging both developed and developing countries.

10. 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.
Bibliography


Biskup and Pfister (1999) op cit


Appendix 1: Discussion Paper: Ways Forward: Theorising Gender and Physical Activity

If sexual discrimination is objectionable in most other areas of our lives, why should it be acceptable within sports?2(ciii)

Introduction

Much of the writing on girls' and physical activity has tended to explore the negative aspects of exclusion from what is considered a male arena of sport3(cii). Although important and relevant, this position has often resulted in a plethora of descriptive accounts of women's exclusion which could be seen as surreptitiously consolidating existing gender divisions or binaries4(ciii) without taking into consideration other social factors such as, for instance, age, the body, geography, economics and race5(civ). 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.

The social interpretation of biological sex does, however, continue to influence the way physical education and physical activity is constructed for girls and women6(cvi). Historically, physical assertion was considered as being harmful to girls’ overall development and the social understanding of ‘motherhood’ dictated that girls were seen as passive carers rather than as active providers. Evidence tends to suggest that many of these values are still supported and it is the early experiences of girls which often provide the foundation for future participation7(cix).

Early experiences of physical activity

It is important to recognise the significance of girls’ early experiences of physical activity and it is often within the context of school physical education lessons where understanding of individual sporting identity is developed. It is interesting to note that what were initially regarded as lesser concerns for school governing bodies, such as specific uniforms for physical education lessons and the standards of showering facilities, were found to be significant aspects in girls’ actual enjoyment of school sports8(cxi). Recognition of individual experience of the body has often been overlooked in favour of broader policy driven issues relating to health and educational provision. Particularly in sports, there are many occasions where the body is literally displayed and this has the potential for the individual to be exposed to negative emotional experiences of shame and bodily embarrassment9(cxii). In consequence, sport has the potential to be a source of embarrassment by way of being an activity where the body is fore-grounded. Uniforms can often be revealing and communal showers can be the source of unwanted displays of the naked body, particularly at a time when girls are becoming more acutely aware of the social female body. The recognition of the body as a contributory factor in shame is equally significant for boys and highlights the importance of incorporating this aspect within any study of youth sports.

Studies have also highlighted a greater emphasis upon discipline in physical education compared to other aspects of the curriculum. For instance, Scraton10(cxi) incorporates sociological explanations, which describe the influence of everyday knowledge and language in the regulation of bodies, and demonstrates how they can be applied to particular practices found in physical education. Additional emphasis on discipline in the context of physical education lessons suggests that distinctions are being made between cerebral pursuits of academic study and corporeal activities and that differing forms of regulation are required.

By the time students enter secondary school, they have developed clear activity preferences11(cxii). For instance, dance and gymnastics is shown to be either loved or hated by students by the time they reach secondary school. In gymnastics, it was found that enjoyment was closely related to personal ability whereas those who disliked it found the experience humiliating. Similarly, in dance there were opportunities for creativity and expression which were seen as positive. However, the teaching approaches and presence of boys were cited as reasons for not liking it. What becomes apparent is that bodily performances play an important role in the experience of physical education, not only in terms of bio-mechanical dexterity but more in the way that social bodily performances become central to whether a sport is enjoyed or not. Lack of ability is a contributory factor, but there are many other social situations which emerge which have the potential to cause humiliation. Elements considered essential to the performance of a sport, such as competition, bodily performances, display of ability, winning or losing are often overlooked in terms of how these impact upon individual self-esteem.

Geographical and physical aspects can contribute to the positive or negative experience of school sports on the individual body. Some ways to combat the negative experience of sport which many school children face include the provision of a broader curriculum, more practical applications of uniform policy and teaching strategies which enhance rather than diminish self-esteem. However, one of the solutions offered is to focus upon ways in which girls can have access to the same range of activities as boys. This is problematic, as it does not take into consideration one of the main areas causing negative experience, chiefly, the elements within the practices involved in school sports which contribute to the experience of them in terms of shame and humiliation. These are not areas which are the sole
reserve of girls, but are equally experienced by boys who do not conform to those same expectations which restrict the girls. Thus, work which incorporates the acknowledgement of a range of subordinated masculinities within the context of sport needs to be applied.

Looking beyond established physical education theory

Physical education lessons present an important arena for construction and consolidation of dominant and subordinate masculinities and femininities. The sites where physical education is located, such as the gym, sports hall or playing field function as the context for displays of hegemonic forms of heterosexual masculinities and the subordination of others or alternatives.

The ideal types of bodily usage expected within physical education can be regarded as generally located in traditional understandings of male and female sports. Therefore, the different bodily usages encouraged by secondary school physical education, both permit and support the development of particular masculinities and femininities:

In secondary schools in particular, physical education lessons are an important arena for the displaying and acting out of masculinity and femininity, particularly those forms which could be described as hypermasculine and hyperfeminine.

According to this argument, much of physical education remains gender-segregated and a place where specific gendered performances are expected and encouraged. This is particularly the case for young men and women where there is more uncertainty about what constitutes correct or appropriate performances. For some theorists, sport (school sports in particular) operates as a means of presenting broader social constructions of gender and identity. Physical education, therefore, provides an important arena for boys to act out hypermasculinity. Consequently, the relationship of girls and femininity to physical education is more complex, partly because the agenda is set by the boys and interest in sports is excluded for girls by their male peer group.

Expressions of femininity are often demonstrated by resistance to physical education and sports in a similar way that expressions of masculinity are demonstrated through sporting prowess and resistance to ‘passive’ academic work in the classroom. School sports continue to reinforce gender binaries which position the activities of girls as subordinate to boys:

The dominance of competitive sport [in popular culture, though less than heretofore in the official PE curriculum (Department for Education and Employment, 1999)] and monadic, surface-focused fitness practices discourage the development and use of open, communicative bodily practices and forms.

Many theoretically focused studies do not always provide any concrete solutions or ways forward, but what is clear is that methods are required which can cut through and break the stranglehold that gender stereotypes have on traditional forms of physical education and sports. Theoretical debates surrounding the gendered practices evident within physical education and school sports are informative as they offer support to claims that studies within this area need to include consideration of the body and broader academic approaches. Particular issues emerge which need to be considered in any further investigations of girls and school sports. These are:

1. Recognition/awareness of the gendered constructions and binary divisions which operate within (and external to) current physical education practices;
2. Influence of hegemonic masculine constructions of bodily performances which invariably restrict girls’ participation in physical education and school sports.

Key Themes

Drawing upon a broader theoretical base is important and it is by incorporating theories from other disciplines, that further investigations into the experiences of young people in sports should be made. Consequently, the following are areas we consider relevant in any further research into gender and sports. These are:

1. The Body;
2. Competence and Ability;
3. The relationship between school physical education and sports performance;
4. Cultural change;
5. Diversity/Global perspectives;
The Body

The influence of the body within the area of physical activities is becoming increasingly apparent and may provide a way of addressing some of the problems associated with gender specific investigations. For instance, it has been suggested that acknowledging the role of the body in shaping the way society constructs an understanding of individual and social identity is vital. To do this, one needs to draw upon a broad range of concepts, but apply them in terms of the body. Thus, if we are to explore the experience of a young person in school based physical education we must identify a range of biological and social factors which ultimately influence future participation. Thus, biological factors which determine the type of body, such as gender, height, weight or coordination have to be understood in terms of an individual's social perspective, such as economic background, religion, and sexuality. Therefore, in this way, the physical make up of a boy or girl as small in comparison to others, combined with a social understanding of the body as weak (or feminine) establish an entirely different perspective on entering a sport to another boy or girl. Consequently, the social experiences of the individual vary depending upon the social and physical. For example, through this process, a boy can learn to see sports as an alien environment in the same way that many girls do because of early experiences of the body as feminine, for instance, being told that he ‘throws like a girl’.

Therefore, recognising the social and physical factors which are apparent within the arena of sport provides a way in which we can evaluate current practices and mount a challenge to those which exclude particular bodies. For example, a cold, muddy pitch, or hot, dusty field can be experienced physically by the body in many different ways, whilst, at the same time, culturally derived expectations of ‘how to behave’ in such conditions contribute as well.

Other disciplines have already set out to challenge many taken for granted assumptions. Particularly within feminist theory, and more recently in Queer Theory, there have been attempts to subvert some of the traditional practices found in broader society, but these, too, can equally be applied to sports, especially in terms of social factors such as gender, age and ability.

Competence and Ability

The relationship of competence as a factor in taking part in many forms of organised sports is often overlooked. This applies to sporting participation on a number of levels, whether within the context of a school physical education lesson or as an initial entry requirement for joining an amateur sports club.

General thinking about ability has been a notable absence, particularly within education settings and organised sports practice. Often the focus upon is upon acquiring sporting competence and derived health benefits rather than the specific bodily practices which are required for participation.

Consequently, in schools, more support is given to those who display talent in the form of physical ability and expertise in the sports played. This can often lead to many sports ultimately favouring boys in mixed schools.

School Physical Education and Sport Performance

School based sport is an important area for study, as it is sometimes the only experience of physical activity gained by young girls (and boys). Related indirectly to the issues of competence and ability discussed above is the importance of recognising the relationship between school physical education and sport performance. Traditional ways of thinking about physical education and sports performance are problematic and exclusionary. This is because much traditional thinking is based on ‘pyramid’ models. These take on similar assumptions, namely that there should be a broad base of foundation skills participation, with increasingly higher levels of performance participated in by decreasing numbers of people. Typically, the assumption is made that foundation skills are learnt through physical education and in this mode of thinking, physical education forms the base of the structure whilst elite sports competition is at the top.

An alternative to this model, which, as the pyramid grows, discards more and more people, an ‘inclusive’ model which has four components:

1. Clearly articulated pathways;
2. Modified games and sports;
3. Teacher and coach education;
4. Coordination through intelligent policy development.

They cite the Queensland model which operates in Australia as one approach which is explicitly inclusive of all levels of performance and ages. This model, they believe, provides a convincing argument as it does address the varying levels of performance within a range of age groups. However, a criticism may be made at the continued lack of acknowledgement of the cultural capital or status placed upon elite performances which can ultimately detract or deter others from continuing in the sport. Often the way in which clubs, schools, physical education teachers and coaches focus upon elite performers as preferred goal can indirectly present participation as futile or unrealistic for many.
Australia has appeared to take the lead in many policy related issues within the area of school sports and in particular girls’ participation. The Australian Sports Commission produced one such document detailing strategies devised to encourage women and girls to take a more active part in sport. Part of that provision was the recognition of the role of schools within this process, as the only organisations that can ensure the provision of sport for the majority of young people.

In this document they listed a series of strategies to help achieve this principle within the school setting: Although these strategies cover a broad range of issues and may be difficult to accommodate in all cases, putting down on paper a series of objectives provides the opportunity to move towards particular goals and ideally, these goals can be adapted and revised as needs be. The formulation of a series of strategies also helps identify further issues of potential conflict. For instance, one of the problems highlighted within their list is the apparent assumption that all boys experience sports in the same way. Thus the point about single sex competition providing a better way to for all to have a ‘fair go’ does not sufficiently address the differing versions of masculinities and femininities. Equally, the strategy to provide private changing facilities for girls assumes that boys are less conscious about their bodies during adolescence than girls.

**Cultural change**

It is also important to recognise shifts in social patterns of leisure consumption. For instance, there is the suggestion that a pronounced feature of adolescence is a flight from sports when they complete full time education. However, it follows that much physical education rhetoric fails to (a) acknowledge the actual participatory trends in sports and physical activity (such as swimming and cycling), (b) view young people’s lives in the ‘round’ – or take into consideration the broader dimensions of young people’s lives for their participation rates and styles and (c) identify an appropriate way to monitor participation if taking into account (a) and (b).

Recent research has highlighted increased levels of participation in sports and physical activity among young people, particularly in non-competitive, recreationally oriented sports. This is particularly evident in the participation rates for swimming and cycling which may, in turn, provide another reason for the apparent lack of relevance of many traditional school based sports for young people.

**Diversity**

A recent study by the Youth Sports Trust in the United Kingdom draws upon some of the ideas mentioned above, although there is less emphasis upon broader theoretical issues. However, it is able to highlight some useful points. For instance, it suggests that,

If the social construction of gender is ‘the problem’, then this means that our efforts need to focus on girls and boys, women and men. We need to trouble dominant and stereotypical notions of femininity and masculinity. We need to develop a pedagogy in physical education that is anti-sexist and that aims to change deeply held sexist beliefs and values.

Part of this process is to challenge so-called ‘traditional’ forms of physical education characterised by:

- A reliance on command style teaching that is strong on group management and short on meeting the individual needs;
- The dominance of competitive sports, particularly team sports;
- A concern with the detail of technique development; and
- Biological and mechanical functionalism that objectifies the body and in so doing often loses sight of the whole person.

**Human Rights**

Lastly, and most importantly, the issue of human rights should be a central concern within any legitimate study of sport and physical education. The Beijing Declaration states that it is important to, Recognize that the status of women has advanced in some important respects in the past decade but that progress has been uneven, inequalities between men and women have persisted and major obstacle remain, with serious consequences for all people.

Initiatives to counter inequalities in sports, such as ‘Sports for All’, become meaningless if they do not take into account the rights of all human beings. Consequently, all the above themes directly feed into the central premise that every individual should have the right to enjoy their bodies through physical activities. Philosophical and ethical questions will help us reflect upon the role of physical activity in the lives of, not only women, but of all individuals, regardless of body type.
What next?

It is apparent that there is still scope for much more informed research within the area of gender and sports. The ‘Western’ focus of this discussion paper is a clear indication that further research needs to be generated from other areas of the world. The absence of women’s voices from, in particular, South America, Africa and Asia is relevant. Research from these areas would provide a valuable contribution to the increasing amount of material already being generated within the ‘West’.

At the same time, it is important to adopt methodological strategies which enable researchers to ‘listen’ effectively to women’s voices. Incorporating inter-disciplinary approaches to research enables the analysis of the issues highlighted above. For instance, Schneider adopts a philosophical approach to the issues concerning women and sports. She suggests that research should:

1. Ask the ‘woman’ question. Remain constantly aware of the many ‘facts’ about female ‘nature’ in order to counter many of the taken for granted assumptions about women’s participation in physical activities. Often the practices in sport are misshaped by gender bias;
2. Raise consciousness by finding out more about the lives and experiences of women in sport. These shared feelings may help promote awareness about specific issues relating not only to women, but many others excluded from participating in sport and, ultimately, enjoying their bodies;
3. Remain aware that the practice of ethics requires communication, corroboration and collaboration.
Appendix 2: Further Reading


Appendix 3: Girls / women’s participation in PE, physical activity and sport

Canadian Association for the Advancement of Women and Sport and Physical Activity
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K1N 6N5
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www.caaws.ca/girlsatplay/index.htm

International Association of Physical Education for Girls and Women
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http://www.udel.edu/HESC/bkelly/organization.html

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National Association for Girls and Women in Sport (NAGWS)
American Alliance for Health, Physical Education, Recreation & Dance
1900 Association Dr.
Reston, VA 20191-1598
TEL: 703-476-3400
TEL: 1-800-213-7193-453
www.aahperd.org/nagws/template.cfm?template=main.html

On The Move
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