



FROM BARRIERS TO BENEFITS

THE ECONOMIC BENEFITS
OF WOMEN AND GIRLS
PARTICIPATING IN SPORT

A REPORT WRITTEN
AND RESEARCHED FOR
WOMEN IN SPORT

ABOUT THE YOUNG FOUNDATION

This report was researched for Women in Sport by Freya Johnson Ross, Hannah Kitcher and Victoria Boelman with Charlotte Heales and Muriel Kahane.

The Young Foundation takes its name from the social entrepreneur, activist and pioneer, Michael Young. For over 60 years, Michael brought together collaborations of the brightest, the best and the most innovative to solve social problems.

Today we harness the power of social innovation to address the structural causes of inequality. We believe that current levels of inequality are not inevitable and that we collectively have the power to shape the societies and communities we want to live in. Our work is based on research, partnerships and practical problem solving. We work with civil society organisations, business and the state to achieve change.

This report for Women in Sport builds on our previous experience developing research and projects on physical activity and gender. This includes Designed to Move, an international collaboration of Experts and advocates. As part of our work we have produced a number of reports related to sport and physical activity, including: Move it: increasing young people's participation in sport (2012), Keeping up and running: make the case for investment in community sports hubs (2015), Tackling Physical Inactivity – A Coordinated Approach. Report of the All-Party Parliamentary Commission on Physical Activity (2014), and Unequal Nation: The case for social innovation to work for a gender equal future (2015). All these reports are available at

www.youngfoundation.org.



TABLE OF CONTENTS

About The Young Foundation

Executive summary

1. Introduction 8

The gender gap in sports

Our approach to this research

A holistic perspective

Structure of the report and key definitions

2. The individual benefit of women's participation in sport 11

The gender gap in participation

Academic achievement

Employment

Health and wellbeing

Influence on surrounding family and community

3. The economic benefits of women's participation in sport 16

Healthcare

Employment

The sports industry

4. Conclusion 27

EXECUTIVE SUMMARY

As a nation we aspire to equality between women and men in all areas of life. This means getting a great education, receiving fair pay at work, having equal representation in politics, the boardroom, and the home, and being free from discrimination. We think it also means women and men should have the same chance to enjoy the benefits of participation in sport and physical activity.

We want women and girls to be equally able to experience the joy of playing in a team or achieving a personal best, the boost to physical and emotional wellbeing from staying active, and the associated benefits for their academic achievement, careers and family life. However, as we set out in this report, we also know that getting more women and girls participating in sport and physical activity will have wider benefits too for our communities and society, and the economy.

Yet starting in primary school and throughout the life-course, fewer women and girls than men and boys take part in enough sport and exercise to keep them healthy. Among many others, Women in Sport has conducted research which has documented these important arguments as well as uncovering many of the behavioural drivers underpinning women and girls' lower level of participation.

Despite this, we know that women themselves would like to be more active – with Sport England finding that 13 million report wanting to participate more in sport and physical activity. That is a great deal of untapped potential to be grasped and the potential economic benefits are significant – from reducing the burden on the NHS to boosting returns in the workplace, and increasing the contribution of the sports industry itself would also make a greater economic contribution with increased female participation leading to a rise in consumer spending and employment.

- Although some work has quantified the economic value of sports in England overall, there has been little work focused on the gender dimensions of this. Our findings suggest a sound economic case for investing in women and girls' participation in sport.

- The potential savings to the NHS and social care budgets are significant, particularly in reducing the burden of diseases which women are particularly susceptible to including osteoporosis, mental health problems such as depression, certain cancers, obesity-related illness, and Type-2 diabetes.
- The labour market and employers would also benefit significantly by seeing an increase in levels of productivity and a reduction of levels in absenteeism. As women's participation in the workforce continues to grow, the future benefits will be even greater. Female participation in sport is linked to longer-term labour market participation, and gender equality in the labour market is associated with a positive impact on countries' GDPs.
- The sports industry itself would also make a greater contribution to the economy through a rise in consumer spending, increased direct employment to meet demand, and increased output of goods and services.
- There is a need for further research and data disaggregated by gender in order to more fully understand and capitalise on the economic benefits of women and girls' participation in sport and physical activity. We propose this should be taken forward particularly in relation to macro-economic analysis, employment, and the sports industry.

We argue that investing in women's participation in sport has a key role to play in developing a cycle of positive social and economic outcomes. The economic benefits of investing in women's participation is one piece of a broader picture. Investing in increasing participation at a grass-roots level impacts on individual women, those around them, and the extent to which they engage with the sports industry. Investing at the intermediate and elite levels of women's sport also works to build interest and engagement with sports more broadly. This has the potential to contribute to a positive spiral of higher participation – with valuable returns at the individual, community and industrial levels.

1. INTRODUCTION

The gender gap in sports

In the UK, and globally, there remains persistent inequality between the rates of participation in sport and physical activity for women and men throughout the life-course, as well as a huge disparity in terms of the financial investment in each. So why does it matter that women and girls are less likely to be active and take part in sports?

The individual benefits of taking part in sport and physical activity are well known and well evidenced, and this is certainly true for women and girls. Participating in sports promotes health and mental wellbeing: we know being physically active helps to prevent a range of serious conditions, such as type-2 diabetes and obesity. There is also a growing body of evidence to show that physical activity can aid academic learning and the development of other important social, emotional and life skills, as well as successful employment. This means there are huge gains to be made by raising the level of participation in sport and physical activity amongst women and girls.

In addition to the benefits to individual women and girls, it is also important to consider the broader economic benefits at a societal level which stem from increasing their participation in sport and physical activity – yet to date this has received relatively little attention.

This report takes the first steps towards addressing this knowledge gap – gathering and synthesising existing research which considers the economic dimensions of women’s participation in sports.

OUR APPROACH TO THIS RESEARCH

We began with several broad premises based on existing research: that women and girls participate less in sport and are less physically active than men and boys; that there are a range of individual and collective benefits to participation in sport and physical activity; and that there are also wider economic and social benefits gained from increased participation. There has already been considerable work done by Women in Sport, Sport England, and others, to draw together and build this evidence base. However, there is undoubtedly further work needed in order to further substantiate this from a gendered perspective.

From this broad starting point, we undertook a literature review to focus on women and girls and with the aim of answering a key question yet to be fully addressed: what are the economic benefits of women’s participation in sports?

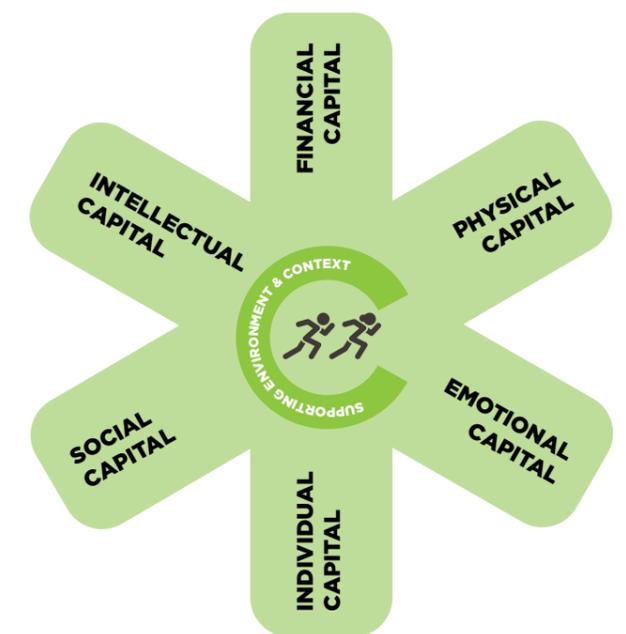
We searched for sources of research across academia, the third sector, state and business using relevant databases and search engines. We also issued a call for evidence to contacts engaged in sport and physical activity research. Literature was prioritised for inclusion using the following criteria:

- Work addressing the economic impact of women’s participation in sport, as opposed to just the individual
- Work with a clear analysis of gender
- Work which focuses on quantifiable benefits rather than qualitative insights
- Work of a high quality and methodologically sound
- Work with a focus on the UK (particularly with regard to economic benefits)
- Work published since 2005

Due to the limitations of time and the scope of this review, research which met some but not all of the criteria was also included, particularly where little evidence appeared to be available. For example, we have included several sources of high-quality research from the USA, as equivalent work has not yet taken place in the UK or EU. All sources were categorised and the most relevant summarised for inclusion.

A holistic approach

In developing this report we drew on the Human Capital Model. Developed by the Designed to Move project, it illustrates the different dimensions of potential benefits to be gained from participation in sport and physical activity: financial, physical, emotional, individual, social and intellectual capital.¹



The model represents both the individual and collective benefits of physical exercise, and the way in which these are interrelated. It is important to note that although in this report we focus on the wider, collective benefits of participation in sport and physical activity, these are interdependent with the individual ones.

Structure of the report and key definitions

The first section of this report introduces the key background evidence informing our starting assumptions; looking at the disparity between women and men's physical activity, and taking a holistic view of the individual benefits which accrue from their participation.

The next three sections look at the main areas where we can explore the broader economic benefits of women's participation – healthcare, employment, and the sports industry itself.

Finally, the last section draws together conclusions and makes recommendations for further research and action going forward.

¹ <https://designedtomove.org/> Accessed 25.8.15. Funded by Nike, Inc. 2012. The research underpinnings for this model can be found in: Bailey, R., Hillman, C., Arent, S., and Petitpas, A. (2013). Physical Activity: An Underestimated Investment in Human Capital? *Journal of Physical Activity and Health*, 10, 289-308

Throughout this report we refer to 'sport and physical activity' – in recognition of the broad range of individual and group pursuits that can contribute to people's healthy activity levels.

We refer to 'women and girls', in order to acknowledge the breadth of the target audience being considered, and encapsulate the significance of sport and physical activity throughout the life-course.

We use 'gender' to describe the social and cultural associations of masculinity and femininity, in contrast to 'sex' which describes the biological ascription of male or female.

2. THE INDIVIDUAL BENEFITS OF WOMEN'S PARTICIPATION IN SPORT

The gender gap in participation

Research shows that women participate in sport less than men do – in England there are 2 million fewer women who regularly play sports, and only 31% of women play 30 minutes of moderate sport once a week, compared to 41% of men.²

Differences between women and men's participation in sport and physical activity starts early. In England participation is highest for women and girls when they are young – after that the numbers of women engaging in sport and physical activity decreases.³ Nevertheless there are striking differences: only 38% of 7 year old girls achieve the daily recommended amount of physical activity, compared to 63% of boys in the UK.⁴

Barriers to women and girl's participation in sport and physical activity are multiple, and particularly acute for women who face multiple forms of disadvantage, including disability, social-economic class and minority status. The cost of participating in sports, lack of childcare, lack of role models, body image issues and concerns about cultural appropriateness can all exacerbate women's lower levels of participation. For example, over 60% of girls report avoiding particular activities because they feel bad about their looks.⁵ Data from the most recent Active People Survey shows that the number of women doing sufficient exercise to have a positive impact on their health varies by ethnicity.⁶ For example, 23% of women of mixed ethnicity, compared with 18% of Asian ethnicity. The effects of this lack of exercise are echoed in the findings of the Health Survey for England that noted that greater levels of ill health are reported amongst (some) ethnic minorities.⁷

Academic achievement

The relationship between physical activity and academic achievement has been widely discussed. Evidence shows that participation in sports is linked to better academic performance,^{8,9,10,11} although not all work in this area shows a causal relationship. Research has found a causal link between motor skills and cognitive and behavioural development in childhood,¹² and that sport and physical activity impact on wellbeing and positive social relations within a school.¹³ An evidence review carried out by Loughborough University found that the benefits of physical education and sport in school include cognitive function, behaviour, attendance and academic outcomes.¹⁴

- ² Sport England (2015) Active People Survey 9, Question 2.
- ³ Sport England (2015) Go Where Women Are: Insight on engaging women and girls in sport and exercise.
- ⁴ Lucy J Griffiths et al, (2013) How active are our children? Findings from the Millennium Cohort Study. *Epidemiology*, Vol. 3, No. 8.
- ⁵ Dove (2010) The Real Truth about Beauty: Revisited, Global Study commissioned by Dove.
- ⁶ Sport England (2015) Active People Survey 9, Question 2.
- ⁷ Government Statistical Services, Health Survey for England, The Health of Minority Ethnic Groups, (NHS Health and Social Care Information Centre, Public Health Statistics, 2005).
- ⁸ Charlotte Cabane & Andrew E. Clark, (2013). Childhood Sporting Activities and Adult Labour-Market Outcomes. PSE Working Papers halshs-00875305, HAL.
- ⁹ Designed to Move: A Physical Activity Action Agenda (2013).
- ¹⁰ Bailey, R., Wellard, I., & Dismore, H. (2005) Girls' participation in physical activities and sports: benefits, patterns, influences and ways forward. World Health Organisation.
- ¹¹ Stead, R & Nevill, M (2010) The impact of physical education and sport on education outcomes: a review of literature. Institute of Youth Sport.

Regardless of causality – whether participation in sports leads to better academic outcomes, or whether high academic achievers have a tendency to participate in sports – the reality is that there is a relation between academic performance and sport for girls and young women.^{15,16,17} Studies show that girls may have more to gain from participating in physical education: for example a study in the US shows that girls exposed to the highest levels of physical education (defined as 70 – 300 minutes/week) had better academic results than those that did least exercise (0 – 35 minutes/week). The study found no such effect on boys, leading to the conclusion that given that boys are generally more fit than girls¹⁸ the physiological effects of exercise had less (or no impact) on their performance.¹⁹

There is also evidence that participating in sports can help undermine negative gender stereotyping over academic aptitude in Science, Technology, Engineering, and Mathematics (STEM fields).²⁰ Another US study found that a 10% increase in girls' participation in sport led to a 1% increase in university application and a 1 to 2% point increase in participation in the labour workforce, and particularly in male-dominated industries and high skill occupations.²¹

There is also evidence which suggests that people who attend or engage in culture and play in or attend sports events are more likely to be adult learners.^{22,23}

- ¹² Hansen, K., Joshi, H. and Dex, S. (eds.) (2010) *Children of the 21st Century: the First Five Years*. UK Millennium Cohort Study Series, 2. Bristol: Policy Press.
- ¹³ Stead, R. & Neville, M. (2010) The impact of physical education and sport on education outcomes: a review of literature, Loughborough: Institute of Youth Sport.
- ¹⁴ Ibid.
- ¹⁵ Sabo, D., Melnick, M., Vanfossen, B. (1989) *The Women's Sports Foundation Report: minorities in sports*. East Meadow, US: Women's Sports Foundation.
- Fejgin, N. (1994) Participation in High School Competitive Sports: a subversion of school mission or contribution to academic goals? *Sociology of Sport Journal*, 11, pp. 211-230.
- ¹⁶ Marsh, H. and Kleitman, S. (2003) School Athletic Participation: mostly gain with little pain. *Journal of Sport and Exercise Psychology*, 25, pp. 205-228.
- ¹⁷ Fejgin, N. (1994) Participation in High School Competitive Sports: a subversion of school mission or contribution to academic goals? *Sociology of Sport Journal*, 11, pp. 211-230.
- ¹⁸ Pate RR, Wang CY, Dowda M, Farrell SW, O'Neill JR (2006) Cardiorespiratory fitness levels among US youth 12 to 19 years of age: findings from the 1999–2002 National Health and Nutrition Examination Survey. *Arch Pediatr Adolesc Med*. 160:1005–1012.
- ¹⁹ Susan Carlson et al., (2008) Physical Education and Academic Achievement in Elementary School: Data From the Early Childhood Longitudinal Study, *Am J Public Health*. April; 98(4): 721–727.
- ²⁰ Hanson, S. and Kraus, R. (1998) Women, Sports and Science: do female athletes have an advantage? *Sociology of Education*, 71, pp. 93-110; Hanson, S. and Kraus, R. (1999) Women in Male Domains: sport and science. *Sociology of Sport Journal*, 16, pp. 91-110.
- ²¹ Stevenson, B. (2010) Beyond The Classroom: Using Title Ix To Measure The Return To High School Sports, National Bureau Of Economic Research, Working Paper 15728.
- ²² Fujiwara, D., Kudrna, L. & Dolan, P. (2014) Quantifying the social impacts of Culture and Sport. Department for Media Culture & Sport, London.
- ²³ Sargent, N, and Aldridge F. (2002) Adult Learning and Social Division: a Persistent Pattern. Vol. 1. NIACE Leicester. <http://www.niace.org.uk/sites/default/files/documents/publications/5.33-Adult-learning-and-social-division-Vol-1.pdf>

This means the educational benefits of participation in sports can stretch through the life-course from childhood to adulthood.

Educational achievement, although primarily benefiting the individual, also contributes to women's incorporation into the workforce. This benefits productivity and economic development – areas that both have positive macroeconomic implications.²⁴

There is also evidence for better outcomes in relation to employment and higher levels of productivity for those more physically active. Research suggests this occurs through both physical and psychological mechanisms.²⁵ For example, being more physically active can help concentration, and develop useful skills like team-work, communication, motivation and resilience.²⁶ Increased participation in school sports has been shown to lead to higher earnings and job quality.^{27,28,29} This has also been evidenced in relation to participation in university sports.³⁰ This is also true specifically for women and girls. For example, there is research which suggests participation in sport can help to develop girls' confidence and leadership skills – a valuable asset in the workplace.³¹ Research carried out by Ernst & Young also found an association between level of participation in sport and undertaking senior management roles for women.³² Women at higher levels of management were more likely to have participated in sport during their working life than those at lower levels.

In the UK we continue to have gender inequality within the labour force. The pay gap between women and men is still 19%. This means sport and physical activity could offer a positive opportunity to support women's position and achievement in the labour market. If more women and girls were supported to become physically active, could this have a positive impact on the labour market? International evidence shows that increasing gender equality in the labour market has a positive impact on a country's GDP.³³

Health and wellbeing

It is well established that physical and mental health and wellbeing are important benefits of participating in sport and physical activity at an individual level for women and girls. Improved physical health, as well as preventative benefits for conditions such as osteoporosis have been researched.^{34,35,36} Recent research by the Department for Media, Culture and Sport also found that people who do sport are 14% more likely to report good health.³⁷

²⁴ The World Bank (2012) World Development Report 2012: Gender Equality and Development.

²⁵ Rooth, D. (2010) Work Out or Out of Work: The Labor Market Return to Physical Fitness and Leisure Sport Activities. IZA DP No. 4684.

²⁶ BUSC (2013) The Impact of Engagement in Sport on Graduate Employability

²⁷ Lechner, M. (2008) Jogging for the money? Long term labour market effects of individual sports activities. University of St Gallen.

²⁸ Cabane, C. and Clark, A. (2013) Childhood Sporting Activities and Adult Labour-Market Outcomes.

²⁹ Kniffin, K, Wansink, B. & Shimizu, M. (2014) Sports at Work: Anticipated and Persistent Correlates of Participation in High School Athletics.

³⁰ BUSC (2013) The Impact of Engagement in Sport on Graduate Employability

³¹ Kotschwar, B. (2014) Women, Sports, and Development: Does It Pay to Let Girls Play? Peterson Institute of International Economics.

³² Ernst & Young (2013) Women Athletes Global Leadership Network.

³³ Elborgh-Woytek, K. et al (2013) Women, Work, and the Economy: Macroeconomic Gains from Gender Equity. IMF

There are also important psychological benefits and protections gained through participation in sport and physical activity, such as improved concentration, mood and sleep. There is evidence that focuses particularly on these benefits for women and girls.³⁸ For example research suggests girls who play more sport have lower self-objectification and body image concerns.³⁹ In the USA, the Women's Sport Foundation found that girls who play sports report better body image and an overall higher quality of life, compared to girls who don't play sports. Only 35% of female non-athletes reported having high body esteem, compared to 43% of girls moderately involved in sports and 54% of girls highly involved in sports.⁴⁰

Influence on surrounding family and community

Alongside the benefits to individual women, the benefits of participation in sport and physical activity also accrue to those around them, including their family, friends and children.

Although it is not the primary focus of this review to consider the wider economic benefits of this, it is nonetheless important to recognise it as a source of value. For example, regular exercise during pregnancy has been found to stimulate brain development in offspring.⁴¹ Later, research has found that active parents have more active children,⁴² and particularly that mothers have a greater influence on their children their fathers in this regard.⁴³

Women in Sport has previously carried out detailed research, evidencing the way influence works to encourage more women and girls to participate in sport and physical activity.⁴⁴

This found that influencers don't just have to be role-models, but can be those immediately within an individual's social circle. Given the importance of different influencers in encouraging participation in sport and physical activity, girls in particular can be influenced by having a sporty mum.⁴⁵

Looking beyond immediate family, it has also been shown that there are benefits to those surrounding active women. An evaluation of Sport England's Active Women programme found that 57% of women took a friend or family member along to a project with them.⁴⁶

- ³⁴ Bailey, R., Wellard, I., & Dismore, H. (2005) Girls' participation in physical activities and sports: benefits, patterns, influences and ways forward. World Health Organisation.
- ³⁵ Warburton, D, Nicol, C. & Bredin, S. (2006) Health benefits of physical activity: the evidence. CMAJ 174(6).
- ³⁶ Bailey, R & Reeves, M (2013) Research into the social and economic benefits of sport and physical activity. UNESCO.
- ³⁷ Quantifying the social impacts of culture and sport (2014) Department for media culture and sport.
- ³⁸ Bailey, R., Wellard, I., & Dismore, H. (2005) Girls' participation in physical activities and sports: benefits, patterns, influences and ways forward. World Health Organisation.
- ³⁹ Slater, A. and Tiggemann, M (2011) Gender differences in adolescent sport participation, teasing, self-objectification and body image concerns. Journal of Adolescence. 34.
- ⁴⁰ Women's Sport Foundation (2008) Go Out and Play, Youth Sports in America.
- ⁴¹ UK Active (2014)
- ⁴² Bailey, R., Wellard, I., & Dismore, H. (2005) Girls' participation in physical activities and sports: benefits, patterns, influences and ways forward. World Health Organisation.
- ⁴³ Cleland et al (2013) Effectiveness of interventions to promote physical activity among socioeconomically disadvantaged women: a systematic review and meta-analysis. Obesity reviews 14, 197-212.
- ⁴⁴ Women in Sport (2015) What sways women to play sport?
- ⁴⁵ Sport England (2013) Women and Sport fact sheet.

Analysis carried out for the Department of Media Culture and Sport also found an association between an individual participating in any sport, and a £25 increase in their charitable donations over the previous year.⁴⁷ Although not analysed by gender, this adds another dimension to the potential economic benefits of increasing women's participation in sports.

Moving wider still to the level of community cohesion, there is also evidence of wider social benefits. For example young people participating in sport demonstrate lower rates of anti-social behaviour.⁴⁸ It is estimated that youth crime and anti-social behaviour cost the UK government at least £4 billion annually, making investments in increasing sports participation a cost effective way to address this.⁴⁹ Young women who are involved in sports are also less likely to engage in risky behaviour or become pregnant at an early age,⁵⁰ which again involves both social and financial costs.

All this evidence points to a significant multiplier effect to the value accrued to surrounding family and community as a result of women and girls participating in sport and physical activity. The social and economic networks surrounding an individual are also enriched. It is important to keep this in mind as we move on to explore the collective economic benefits of women's participation in sport and physical activity, particularly as the two areas are closely interrelated.

- ⁴⁶ Sport England (2012) Evaluation of the Active Women Programme - Interim Report.
- ⁴⁷ Fujiwara, Kudrna & Dolan (2014) Quantifying the Social Impacts of Culture and Sport. Department for Culture, Media and Sport.
- ⁴⁸ Jones-Palm, D (2011) Physical activity and its impact on health behaviour among youth. World Health Organisation.
- ⁴⁹ Laureus Sport for Good Foundation (2013) Teenage Kicks: the Value of Sport in Tackling Youth Crime.
- ⁵⁰ Kotschwar, B. (2014) Women, Sports, and Development: Does It Pay to Let Girls Play?

3. THE ECONOMIC BENEFITS OF WOMEN'S PARTICIPATION IN SPORTS

Where the previous section detailed the relatively well-known individual benefits to women and girls participating in sport and physical activity, this section examines research which can shed light on the broader economic value to be gained from this. It focuses on three main areas: healthcare, employment, and the sports industry.

Healthcare

Current landscapes and potential benefits

The NHS faces rising demand and finite resources. Currently NHS spending amounts to around 6.2% of GDP. The Department of Health estimates that, in Western nations, approximately 2.5% of healthcare costs are incurred as a result of physical inactivity.⁵¹ By reducing the costs associated with preventable or lifestyle related disease NHS resources could be used to improve quality of care and patient outcomes.

Across Europe it's estimated that 6.2% of all health spending is used to combat inactivity related health problems such as coronary heart disease, type-2 diabetes, colorectal and breast cancer.⁵² Bringing just 1 in 5 inactive people up to recommended daily activity levels would be estimated to save EUR16.1 billion.⁵³

The burden of physical inactivity across Europe is estimated to be greatest in the UK, costing the British healthcare system EUR1.9 billion in 2012⁵⁴ and with population obesity levels rising, the burden on the NHS is likely to increase. Some of the leading causes of ill-health in Britain could be tackled simply by increasing the number of people who regularly take part in sport or physical activity.

The health value of sport in Britain is put at approximately £11.2 billion per year.⁵⁵ People who take part in sport are 14% more likely to report good health⁵⁶. As women and girls are less likely to reach recommendations on physical activity, by focusing attention on this group, the potential to make savings is significant. The following sections detail research on key areas relating to women's healthcare costs: obesity, mental health, musculoskeletal health, type-2 diabetes, cardiovascular disease, and dementia.

⁵¹ Department of Health, Physical Activity, Health Improvement and Protection (2014) Start Active, Stay Active: A report on physical activity from the four home countries' Chief Medical Officers. Department of Health.

⁵² ISCA/Cebr (2015) The Economic Cost of Physical Activity in Europe.

⁵³ Ibid.

⁵⁴ Lee et.al (2012) Effect of physical inactivity on major non-communicable diseases worldwide: an analysis of burden of disease and life expectancy. The Lancet Volume 380, No. 9838, p219-229.

⁵⁵ Sport England (2013) The Economic Value of Sport in England.

⁵⁶ Quantifying the social impacts of culture and sport (2014) Department for media culture and sport.

Obesity

It has been predicted that if current trends continue, in 20 years' time, 70% of women in Britain will be overweight.⁵⁷ It is already the case that Britain has the highest percentage of overweight women in Europe. Whilst men are more likely to be overweight or obese, obese women are more likely to have sedentary lifestyles.⁵⁸ Where 41% of overweight men and 32% of obese men meet recommendations for physical activity, only 31% of overweight and 19% of obese women are meeting the recommendations.⁵⁹

Given that sedentary lifestyles appear to be a greater contributing factor to women's levels of obesity, tackling the low rates of physical activity among women has significant potential to improve lives, tackle obesity-related diseases and increase savings to the NHS.

The costs associated with obesity are significant. Whilst medical procedures to address this are a rising cost, there is also a huge cost from lifestyle related illnesses which can be caused or exacerbated by obesity such as type-2 diabetes and cardiovascular problems. In 2007 the direct cost of obesity to the NHS was estimated to be £2.3 billion.⁶⁰ This means participation in sport and physical activity is a vital way to reduce multiple stresses on the finite resources of the NHS.

Obesity is also predicted to rise over the next twenty years. A recent analysis of current trends projected that the medical costs associated with treating obesity related illnesses will be £648 million per year in 2020, rising to £1.9-2 billion per year in 2030. Given the already significant strain on NHS resources, reducing demand by tackling sedentary lifestyles – particularly among women – is likely to be an effective way to make economic savings and improving health outcomes.

⁵⁷ Women's Sport and Fitness Foundation (2010) Prime Time: The Case for Investment in women's Sport. Sport England

⁵⁸ Lifestyle statistics team, Health and Social Care Information Centre (2014) Statistics on Obesity and Physical Activity and Diet. Health and Social Care Information Centre.

⁵⁹ Ibid.

⁶⁰ NICE 61 World Health Organization. (2002). Department of Mental Health and Substance Dependence. Mental Health Evidence and Research (WHO). 62 Cyranowski, J. M., Frank, E., Young, E., & Shear, M. K. (2000). Adolescent onset of the gender difference in lifetime rates of major depression: a theoretical model. Archives of general psychiatry, 57(1), 21-27.

The costs, per year, of mental ill health to the UK economy are estimated to be £105.2 billion.⁶³ The cost to the NHS and social care is valued at over £21 billion, whilst the costs that result from sick leave absence and unemployment are thought to be as high as £30 billion.⁶⁴ So mental health problems present a significant loss to the UK economy as well as having a

Mental Health

Mental ill-health has proven to be a serious barrier to wellbeing in the UK and has also been difficult for the NHS to combat effectively. Women experience a higher incidence of depression and anxiety disorders,⁶¹ which are also among the most common forms of mental illness in the UK. Women are twice as likely as men to suffer from depression. Whilst depression rates are comparable among boys and girls in early childhood, by mid-adolescence girls are already twice as likely to have experienced major depression.⁶² Given the high prevalence of such illnesses among women, programmes which target and affect women's mental health are likely to have a significant impact on mental health needs in the UK and are likely to reduce the associated costs.

devastating impact on the wellbeing of millions of individuals and their families.

The best way to reduce these costs is through effective treatment and preventative measures. Exercise and physical activity have been shown to be clinically effective at combatting depression and anxiety disorders.^{65,66,67}

In some cases exercise has been shown to be as effective as other clinical treatments such as anti-depressants and cognitive behavioural therapy (CBT).⁶⁸

Exercise has also been shown to be an effective addition to a clinical approach to tackling mental health problems⁶⁹ and has yielded positive results in trials that have combined it with CBT⁷⁰. Exercise provides an approach to tackling mental health problems by seeking to elevate moods and create a sense of happiness and wellbeing.^{71,72} A number of studies indicate that participation in sport can foster feelings of self-worth,⁷³ self-efficacy and control over one's life.^{74,75} Adolescent girls who participate in organised sports report lower levels of depression. Suggested reasons for this have included greater levels of emotional support provided by peers and parents,⁷⁶ and greater levels of social acceptance.⁷⁷ Women who participate in sports are also less likely to have suicidal thoughts.⁷⁸

⁶³ Centre for Mental Health (2010) Economic and social costs of mental health problems in 2009/10. Centre for Mental Health

⁶⁴ Ibid.

⁶⁵ Herring MP, Jacob ML, Suveg C, O'Connor P. (2011) Effects of shortterm exercise training on signs and symptoms of generalized anxiety disorder. *Ment Health Phys Act.* 4(2):71-77.

⁶⁶ Herring MP, Jacob ML, Suveg C, Dishman RK, O'Connor PJ. (2012) Feasibility of exercise training for the short-term treatment of generalized anxiety disorder: a randomized controlled trial. *Psychother Psychosom.* 81(1):21-28.

⁶⁷ Rimer J, Dwan K, Lawlor DA, Greig CA, McMurdo M, Morley W, et al. (2012) Exercise for depression. *Cochrane Database Syst Rev.* 7:CD004366

⁶⁸ Ibid.

⁶⁹ Merom D, Phongsavan P, Wagner R, Chey T, Marnane C, Steel Z, et al. (2008) Promoting walking as an adjunct intervention to group cognitive behavioral therapy for anxiety disorders: a pilot group randomized trial. *J Anxiety Disord.* 22(6):959-968.

⁷⁰ Ibid. 71 Craft, L. L. (2005). Exercise and clinical depression: examining two psychological mechanisms. *Psychology of Sport and Exercise*, 6(2), 151-171 72 Cripps, F. (2008). Exercise your mind: Physical activity as a therapeutic technique for depression.

International journal of therapy and rehabilitation, 15(10), 460-465 73 Branscombe, N. R., & Wann, D. L. (1991). The positive social and self-concept consequences of sports team identification. *Journal of Sport & Social Issues*, 15(2), 115-127.

⁷⁴ Brown, W.J., Mishra, G., Lee, C. and Bauman, A. (2000) Leisure Time Physical Activity in Australian Women: Relationship with Well Being and Symptoms. *Research Quarterly for Exercise and Sport* 71, 206-216

⁷⁵ Fejgin, N. (1994). Participation in high school competitive sports: A subversion of school mission or contribution to academic goals? *Sociology of Sport Journal*, 11(3), 211- 230.

⁷⁶ Gore, S., Farrell, F., & Gordon, J. (2001). Sports involvement as protection against depressed mood. *Journal of Research on Adolescence*, 11(1), 119-130. 77 Boone, E. M., & Leadbeater, B. J. (2006). Game on: Diminishing risks for depressive symptoms in early adolescence through positive involvement in team sports. *Journal of Research on Adolescence*, 16(1), 79-90. 78 Sabo, D., Miller, K. E., Melnick, M. J., Farrell, M. P., & Barnes, G. M. (2005). High school athletic participation and adolescent suicide a nationwide US study. *International review for the sociology of sport*, 40(1), 5-23.

There are high costs associated with dealing with mental ill health, and a high proportion of women who suffer with this. Given what is known about the psychological benefits of participation in sport and physical activity, there is potential for investment in encouraging women's participation to bring both individual and health-economic benefits.

Musculoskeletal

Osteoporosis is a disorder that primarily affects women. Women aged over 45 spend more days in hospital due to osteoporosis than diabetes, heart attack or breast cancer.⁷⁹ Osteoporosis has a severe impact on quality of life, causing pain, loss of independence and, in some circumstances, death.⁸⁰

The cost to the NHS of osteoporosis is high and set against the backdrop of Britain's ageing population costs look set to rise.⁸¹ UK hip fracture rates are the highest in the EU,⁸² and treating hip fractures alone is estimated to cost the NHS £2bn per year.⁸³

Physical exercise is an important method for reducing the development of osteoporosis. Regular activity which is begun in childhood and maintained into adulthood has been demonstrated to improve bone health and prevent osteoporosis.⁸⁴ This means increasing women and girls' participation in sport and physical activity could contribute significantly to reducing the disease burden of osteoporosis for individuals and for the NHS.

Type-2 Diabetes

Treating type-2 diabetes and its complications is estimated to cost the NHS £8.8 billion per year.⁸⁵ That currently amounts to around 8% of the total NHS budget.⁸⁶ Given current trends in rates of type-2 diabetes this figure looks likely to rise over the coming years.

The relationship between type-2 diabetes and gender is complex. Although men may contract the disease at a lower weight than women, women tend to have poorer outcomes from the disease. For example, diabetes is a serious risk factor for heart attacks and heart and blood vessel diseases. The risk for fatal coronary heart disease associated with diabetes is 50% higher in women than it is in men.

A lack of physical activity is a major risk factor in the development of type-2 diabetes. Physically active people have a 33-50% lower risk of developing type-2 diabetes compared to inactive people.⁸⁷ This preventative effect is strong among those who are considered to be at particularly high risk of developing the disease. Among this group the impact of exercise is estimated to be as much as 64%.⁸⁸

- ⁷⁹ Kanis JA. (1997) Guidelines for Diagnosis and Management of Osteoporosis. *OJ*. 390–406
- ⁸⁰ Osteoporosis Facts and Figures. National Osteoporosis Society. Accessed 20/08/2015
- ⁸¹ BMS (2009) Osteoporosis in the UK at... Breaking Point. BMS
- ⁸² Ibid.
- ⁸³ National Osteoporosis Society Wales (2009) Protecting fragile bones. A strategy to reduce the impact of osteoporosis and fragility fractures in England. National Osteoporosis Society. 84 Bailey, R., Wellard, I., & Dismore, H. (2004). Girls' participation in physical activities and sports: Benefits, patterns, influences and ways forward. Centre for Physical Education and Sport Research. United Kingdom: Canterbury Christ Church University College.
- ⁸⁵ Hex N, Bartlett C, Wright D et al. (2012) Estimating the current and future costs of type 1 and type 2 diabetes in the UK, including direct health costs and indirect societal and productivity costs. *Diabetic Medicine* 29: 855–62
- ⁸⁶ Ibid.
- ⁸⁷ Department of Health (2004)

Given the relationship between inactivity and type-2 diabetes – increasing women and girls' participation in sport and physical activity could potentially contribute to reducing the prevalence and cost of this serious disease.

Cancer

The NHS spends around 5.4% of its expenditure on cancers and tumours, or 5.81 billion pounds.⁸⁹ It has been estimated that 1% of cancers in the UK, around 3,400 cases every year, are linked to people doing less than the government recommendations for physical activity each week.⁹⁰

Breast cancer is the most common cause of cancer among women,⁹¹ and breast cancer and uterine cancers accounted for 58,411 cases of cancer in the UK in 2011.⁹² The positive impact of physical activity varies depending on the type of cancer. In relation to colon cancer, research has found that those who do the most physical activity can cut their risk of developing colon cancer by about a quarter.^{93,94} Both breast and womb cancers have also been linked to physical inactivity. Research has found that for every 2 hours of physical activity a woman does, her risk of breast cancer falls by 5%.⁹⁵ Physical activity has also been shown to reduce the risk of uterine cancers, with active women being 30% less likely to develop endometrial cancer than inactive women.⁹⁶

Increasing women's participation in sports and physical activity presents a valuable opportunity to reduce the incidence of these cancers affecting women and related to physical inactivity. This would both reduce the suffering these diseases cause to individuals and could reduce the cost to the NHS.

Cardiovascular diseases

Cardiovascular disease is a huge problem in the UK. In England almost 10 million women and almost 8 million men are diagnosed in hospitals annually.⁹⁷ Cardiovascular disease (CVD) is estimated to cost the NHS and the wider economy £30 billion per year.^{98,99}

- ⁸⁸ Ibid.
- ⁸⁹ <http://www.nhshistory.net/parlymoney.pdf> Accessed 2.9.15
- ⁹⁰ Parkin, M., et al. (2011) The fraction of cancer attributable to lifestyle and environmental factors in the UK in 2010. *BJC*. 105(Supp 2): S38-S41
- ⁹¹ Cancer Research UK. Accessed at http://www.cancerresearchuk.org/sites/default/files/cstream-node/cs_inc_10common_female.pdf on 23/08/2015
- ⁹² Ibid.
- ⁹³ Wolin, K., et al.(2009) Physical activity and colon cancer prevention: a meta-analysis. *Br J Cancer*. 100(4): p. 611-6
- ⁹⁴ Robsahm, T.E., et al. Body mass index, physical activity, and colorectal cancer by anatomical subsites: a systematic review and meta-analysis of cohort studies. *Eur J Cancer Prev*, 2013
- ⁹⁵ Wu, Y., et al. (2013) Physical activity and risk of breast cancer: a meta-analysis of prospective studies. *Breast Cancer Res*. 137(3): p. 869-82
- ⁹⁶ Moore, S.C, et al. Physical activity, sedentary behaviours, and the prevention of endometrial cancer. *Br J Cancer* 2010. 103 (7): 933-8
- ⁹⁷ British Heart Foundation (2014) Cardiovascular disease statistics 2014. 98 NICE (2010) Prevention of cardiovascular disease at the population level. NICE public health guidance 25. NICE 99 Care Quality Commission (2009) National study – Closing the gap: tackling cardiovascular disease and health inequalities by prescribing statins and stop smoking services. London: CQC

Physical inactivity is a key risk factor for cardiovascular disease, contributing to risk factors such as high blood pressure, elevated triglycerides, low HDL, diabetes and obesity.¹⁰⁰ It has been clearly shown that physical activity can have a significant impact upon CVD, reducing the likelihood of deaths from CVD even among those people who have a high CVD risk profile or who have established CVD.¹⁰¹

Physically active people are estimated to have a 20-35% lower risk of cardiovascular disease, coronary heart disease and stroke.¹⁰² This clearly supports the potential individual and economic benefits of increasing women and girls' participation and physical activity.

Dementia

Dementia and Alzheimer's are the leading cause of death among women in England and Wales, and women are more likely to suffer from the disease than men.¹⁰³ The NHS currently spends approximately £4.3 billion on treating dementia, and around £10.3 billion is spent on related social care.¹⁰⁴

However physical activity is one of the most promising approaches for reducing the negative effects of dementia.¹⁰⁵ Research has shown that by impacting upon the risk of cardiovascular disease, obesity and by increasing 'good cholesterol' and glucose tolerance, exercise can have a positive effect on cognitive function.

There is also research which suggests that physical activity can reduce the risk of contracting dementia.¹⁰⁶ Although this research has not unpicked the specific or different benefits in relation to gender, we can nonetheless speculate that there would be benefits for women and girls.

Employment

The health of a workforce has a significant impact on its productivity. Evidence on absenteeism and productivity suggests that increasing participation in sport and physical activity of employees, of which women are almost half, could benefit businesses and the economy as a whole. Although only a small amount of the research in this area specifically addresses gender, as women constitute just under 50% of the UK labour market there is evidently potential for significant economic benefits to be accrued.

Productivity

There is some evidence to suggest that there are links between physical activity and productivity at work.¹⁰⁷ Research by Lancaster University and the Foundation

¹⁰⁰ British Heart Foundation (2014) Cardiovascular disease statistics 2014.

¹⁰¹ Public Health England (2013) The National Cardiovascular Intelligence Network Cardiovascular disease key facts. Public Health England.

¹⁰² Department of Health (2011)

¹⁰³ <http://www.ons.gov.uk/ons/rel/vsob1/mortality-statistics--deaths-registered-in-england-and-wales--series-dr-/2012/sty-causes-of-death.html> Accessed 2.9.15

¹⁰⁴ Prince, M, Knapp, M, Guerchet, M, McCrone, P, Prina, M, Comas-Herrera, A, Wittenberg, R, Adelaja, B, Hu, B, King, D, Rehill, A and Salimkumar, D (2014) Dementia UK Update. Dementia UK.

¹⁰⁵ Women's Sport Foundation (2015) Her life depends on it 3.

¹⁰⁶ Ashlskog et al (2011) Physical Exercise as a Preventive or Disease-Modifying Treatment of Dementia and Brain Aging. *Mayo Clin Proc.* Sep; 86(9): 876-884.

¹⁰⁷ Hashim et.al (2011). Does Involvement in Sports lead to a Productive Employee? 2011 International Conference on Social Science and Humanity.

for Chronic Disease Prevention in the Workplace indicated that the benefits of exercise included reduced stress, improved sleep quality and morale – which have important implications for the workplace.¹⁰⁸

There are also other traits beneficial to workplace employment that can be developed through sport and physical activity.¹⁰⁹ Whilst the evidence around physical activity and economic productivity is sparse, and particularly in relation to gender, there are some indications that physical activity does have a positive effect on productivity. In studies of workplace fitness programmes, subjects claimed their attention spans were longer and that their work performance improved.^{110,111,112,113} People who participate in sport are also 3% more likely to volunteer frequently,¹¹⁴ which represents another facet of increased productivity and value production.

Absences

Absences from work represent a real cost to the efficiency of businesses. The UK lost 131 million working days due to sickness absences in 2013.¹¹⁵ In 2011 the estimated economic costs of sickness and worklessness associated with working age ill-health were over £100 billion a year. This amounts to more than the total NHS budget.¹¹⁶ Solving some of the underlying causes of work absences has the potential to be hugely beneficial to the economy at large. On average women take more sick days than men (2.6% of working hours lost, compared to 1.6%).¹¹⁷

Employees participating in sport take sick leave significantly less often than their colleagues not participating, while their periods of sick leave are shorter, especially when their work is sedentary.¹¹⁸ Research conducted by the CBI has shown that mental health conditions, stress and back pain are major factors which give rise to long-term absences.¹¹⁹ All of these conditions can be prevented or alleviated through physical activity.¹²⁰

The benefits associated with workforce health are significant. The Health Work and Wellbeing Executive looked across a number of case studies and found that potential savings to business from reducing absenteeism were significant.¹²¹ One car manufacturer, for example, estimated gross cost savings of £11 million owing to a one percentage point reduction in absenteeism rates over a three year period.¹²²

¹⁰⁸ Lancaster University and the Foundation for Chronic Disease Prevention in the Workplace (2011)

¹⁰⁹ Rooth, D. (2010) Work Out or Out of Work: The Labor Market Return to Physical Fitness and Leisure Sport Activities. IZA DP No. 4684.

¹¹⁰ Rudman W. Do onsite health and fitness programs affect worker productivity. *Fitness in Business* 1987;2:2-8

¹¹¹ Robison JI, Rogers MA, Carlson JJ, Mavis BE, Stachinik T, Stoffelmayr B, Sprague HA, McGrew CR, & Van Huss WD (1992) Effects of a 6-month incentive-based exercise program on adherence and work capacity. *Medicine and Science in Sports and Exercise.* 24:85-93.

¹¹² Bernacki EJ, Baun WB. (1984) The relationship of job performance to exercise adherence in a corporate fitness program. *Journal of Occupational Medicine.* 26:529-531

¹¹³ Leutzinger J, Blanke D. (1991) The effect of a corporate fitness program on perceived worker productivity. *Health Values.* 15:20-29

¹¹⁴ Fujiwara, Kudrna & Dolan (2014) Quantifying the Social Impacts of Culture and Sport. Department for Culture, Media and Sport.

¹¹⁵ ONS (2014) Full Report: Sickness Absence in the Labour Market, February 2014.

¹¹⁶ Active Bristol (2011)

¹¹⁷ ONS (2014) Sickness Absence in the Labour Market, February 2014

¹¹⁸ Van den Heuvel, S. G., Boshuizen, H. C., Hildebrandt, V. H., Blatter, B. M., Ariëns, G. A., & Bongers, P. M. (2005). Effect of sporting activity on absenteeism in a working population. *British journal of sports medicine,* 39(3), e15-e15.

¹¹⁹ CBI (2013) Fit for Purpose: absence and workplace health survey 2013. CBI

¹²⁰ Ibid.

More research is needed to examine the gendered dimension of absences from work, and the interaction of this with sport and physical activity. However, it seems plausible to suggest that there could potentially be valuable economic benefits in this area to increasing women's physical activity, particularly given their higher incidence of absence from work.

Labour market benefits

As discussed earlier, women and girls who are more physically active have been found to be more likely to go into further education¹²³ and to earn higher wages.^{124,125,126} In one study it was found that being a high-school athlete was associated with 11-14% higher wages for women, even when controlling for demographic factors, family background and school characteristics.¹²⁷

Considering women specifically, their participation in sport has been linked to longer term participation in the labour market.¹²⁸ This is valuable in terms of building skills and experience. A positive correlation has been found for unemployed women (with at least three years' work experience), between their engagement in physical activity and finding employment.¹²⁹ This in turn is linked to greater productivity, as it indicates a relationship between physical activity and the creation of a larger talent pool. These pieces of evidence around employment, participation and human capital are important to consider in relation to international evidence which shows gender equality in the labour market is associated with a positive impact on countries' GDPs.¹³⁰

Overall, there is evidence to suggest there are economic benefits attached to ensuring workers are physically active – in terms of productivity, absenteeism and the richness of the labour market. Further research is needed to examine whether there are differences in the impact of physical activity on male and female employees.

The sports industry

In addition to the economic benefits to employers, the sports industry in particular has much to gain from increasing the participation of women and girls in physical activity. This is an area which encompasses the consumption of goods such as equipment, participation in events in person or via television, and the employment generated by this. This is relevant in terms of 1) consumer spending, 2) sport related output, and 3) sport related employment and volunteering.

such as equipment, participation in events in person or via television, and the employment generated by this. This is relevant in terms of 1) consumer spending, 2) sport related output, and 3) sport related employment and volunteering.

Consumer spending on sports in England alone is significant, with Sport England estimating expenditure on sports related broadcasting to be £2.3 billion in 2010, £3.9 billion on sports equipment, and £3.8 billion on sports clothing and footwear. Earlier this year, it was reported that the UK sportswear market grew by 9.5% in 2014.¹³¹ The total sports related gambling spend in 2010 was estimated at £4.9 billion.¹³² Similar calculations have been carried out in Northern Ireland,¹³³ Scotland,¹³⁴ and Wales¹³⁵ which estimate sport related spending to be around 2.5% of total expenditure.

These estimates are not analysed in relation to gender, however there is some research which has examined consumer spending in sport with a gender lens. Current evidence suggests men spend more on sports than women. However it is important to note this may be partly due to the fact that men generally have a higher disposable income than women,^{136,137,138} and are more likely to participate in sport. When we consider that women currently account for 48% of personal wealth in the UK (set to rise to 60% by 2020), and that 87% of consumer purchasing decisions are made by women,¹³⁹ the economic significance and potential of women as purchasers in this market is clear.

Previous research carried out by the Women's Sport and Fitness Foundation has analysed the commercial opportunity available in investing in this area.

At present this is not being fully exploited to maximise the benefits for individuals or investors.¹⁴⁰ Investing in women's elite sport, as well as encouraging participation lower down the spectrum contributes to a positive feedback loop; inspiring participation amongst women and girls at all levels, and building audiences for women's sport – all contributing to positive economic returns for the wider industry.

Sport related output has been calculated in England,¹⁴¹ Scotland¹⁴² and Wales¹⁴³ in recent years. This means the quantity of goods and services produced in a given time by the sports industry. In 2013 it was estimated sport and sport-related activity generated Gross Value Added (GVA) of £20.3 billion – 1.9% of the England total.

¹²¹ Price Waterhouse Building the case for wellness, PricewaterhouseCoopers.

¹²² Ibid.

¹²³ Fujiwara, Kudrna & Dolan (2014) Quantifying the Social Impacts of Culture and Sport. Department for Culture, Media and Sport.

¹²⁴ Ibid.

¹²⁵ Stevenson, B. (2010). Beyond the classroom: Using Title IX to measure the return to high school sports. *The Review of Economics and Statistics*, 92(2), 284-301.

¹²⁶ Stevenson, B. (2010). Beyond the classroom: Using Title IX to measure the return to high school sports. *The Review of Economics and Statistics*, 92(2), 284-301

¹²⁷ Ibid.

¹²⁸ Ibid.

¹²⁹ Cabane, C. (2014) "Unemployment duration and sport participation" *International Journal of Sport Finance* 9:3 261-280.

¹³⁰ Elborgh-Woytek, K. et al (2013) Women, Work, and the Economy: Macroeconomic Gains from Gender Equity. IMF

¹³¹ <https://www.keynote.co.uk/market-report/retail/sports-clothing-footwear-0> Accessed 2.9.15

¹³² Sport England (2013) The Economic Value of Sports in England.

¹³³ Sport Northern Ireland (2008) Economic Importance of Sport in Northern Ireland.

¹³⁴ Sport Scotland (2014) Economic Importance of Sport in Scotland.

¹³⁵ Sports Council Wales (2008) The Economic Importance of Sports in Wales.

¹³⁶ Lamb LL, Asturias LP, Roberts K, Brodie DA (1992) Sports participation—how much does it cost? *Leis Stud* 11(1):19–29)

¹³⁷ Breuer C, Hovemann G (2002) Individuelle Konsumausgaben als Finanzierungsquelle des Sports. In: Horch H-D, Heydel J, Sierau A (eds) *Finanzierung des Sports. Probleme und Perspektiven. Beiträge des 2. Kölner Sportökonomie-Kongresses*. Meyer and Meyer, Aachen, pp 61–79

¹³⁸ Lera-López F, Rapún-Gárate M (2005) The determinants of consumer expenditure on sports: a tobit model. In: Papanikos GT (ed) *International research on sports economics and production*. Athens Institute for Education and Research, Athens, pp 61–78

¹³⁹ Creating a Nation of Active Women

¹⁴⁰ Women's Sport and Fitness Foundation (2010) Prime Time.

¹⁴¹ Sport England (2013) The Economic Value of Sports in England.

¹⁴² Sport Scotland (2014) Economic Importance of Sport in Scotland.

¹⁴³ Sports Council Wales (2008) The Economic Importance of Sport in Wales

GVA means the difference between total income (based on wages and profits) and the cost of inputs used in the production process (i.e. raw materials and services). This means sport is within the top 15 industry sectors. At present a gendered analysis of this has not been carried out, yet given we know the economic returns of sport, it is right to ask what do and could women add to this?

Looking across the UK, sport and sport-related activity is estimated to support over 400,000 full-time equivalent jobs – 2.3% of all jobs in England.¹⁴⁴ In Wales employment in sport was 23,200 in 2004 compared to 19,400 in 1998, representing an increase of almost 20%. Employment in sport accounts for 1.8% of total employment in 2004 compared to 1.6% of total employment in 1998.¹⁴⁵ In Scotland sport and associated industries are estimated to account for 52,300 full time equivalent jobs in Scotland, corresponding to 2.5% of total employment (2012).¹⁴⁶

Akin to the figures which have been used to measure the gross value added of sport, a gendered analysis of the related employment has not been conducted – for example in terms of who does or could undertake such work, or how this relates to women's participation in or engagement with sport and physical activity. There is a need for further research to examine the gender dimensions of sport related employment, and how this relates to increases in participation.

The value of sport volunteering per annum is currently estimated at £2.7 billion, with 3.2 million people donating an hour to sport each week.¹⁴⁷ Volunteering in sport has also been found to have a range of

individual and community level benefits – from increasing people's happiness and wellbeing, to building the capacity for wider participation.¹⁴⁸ Although the available data is not disaggregated by gender, women as a whole are more likely to volunteer than men,¹⁴⁹ so we could speculate that investment in engaging women with sports would be more likely to lead to their contributing to this area through volunteering time and skills.

Sport England's Active Women Programme sought to increase the amount of activity undertaken by women living in disadvantaged areas and women caring for children under 16. 20 projects across England were tasked with creating activity sessions that would appeal to women in order to increase and sustain activity levels. Work carried out to evaluate the programme found that over time women's involvement in the programme increased the rate at which they volunteered – in the first year one in five (18%) had volunteered in some way, for example helping out with publicity or at an event, this increased to 25% of participants in the second year.¹⁵⁰ This arguably supports the hypothesis that engaging women in sports can increase the likelihood that they will volunteer in this arena.

¹⁴⁴ Sport England (2013) The Economic Value of Sports in England.

¹⁴⁵ Sports Council Wales (2008) The Economic Importance of Sports in Wales

¹⁴⁶ Sport Scotland (2014) Economic Importance of Sport in Scotland.

¹⁴⁷ Sport England (2013) The Economic Value of Sports in England.

¹⁴⁸ Hidden Diamonds: Uncovering the true value of sport volunteers (2015) Join In.

¹⁴⁹ NCVO <http://data.ncvo.org.uk/a/almanac13/who-volunteers-in-the-uk-2/> Accessed 25.8.15

¹⁵⁰ Sport England 'Evaluation of the Active Women Programme - Interim Report' (2012) and 'Evaluation... Year Two' (2013)

4. CONCLUSIONS

If we can engage more women and girls in sport and physical activity, there are many aspects of life in the UK that could look very different. From people's engagement and performance in school, to improved wellbeing and lower healthcare costs. From a more productive work-force with lower rates of absenteeism, to increased economic returns from the sports industry.

There is strong evidence of the cost burden on the NHS of treating disease and illness suffered by women, which could be significantly reduced by increasing levels of physical activity. In particular the rising costs of treating obesity-related conditions, mental health, and musculoskeletal problems, as well as cancer, type-2 diabetes, cardiovascular disease and dementia could be tackled.

There is also evidence of the benefit to the wider economy, with increased levels of physical activity associated with higher rates of productivity and a reduction in unplanned absences from work, benefitting all sectors. There are significant gaps in the research in this area in terms of examining possible differences between male and female employees but with women constituting almost 50% of the workforce the benefits are likely to be proportional to this, and as increased levels of activity are linked with improved employment outcomes for women, further benefits will accrue as the workforce includes more women in a wider range of roles.

One specific sector of the economy which already benefits from female participation is the sports industry, and the potential for further growth is clear. However, much of the work which has been carried out thus far does not consider gender. There has been some work examining consumer spending which suggests men are currently more likely than women to spend money on sport or sport related areas. If women were more engaged with sports there is the potential for them to become greater contributors in this area.

Going forward we propose several key priorities for research to better understand the economic dimensions of engaging more women and girls in sport and physical activity:

- Undertaking a re-analysis of the economic impact evaluation of sport in the UK, including gender disaggregated analysis. This will make clear the specific contribution made by women's participation, and the potential if this was increased.

- Undertake research to examine the relationship between workplace productivity, physical activity and gender. This would enable us to find out the specific benefits from and needs of women in relation to supporting their productivity and increasing their participation in the workforce.
- Undertake an analysis of the gendered dimensions of the sports industry. This would enable us to understand the gains, and potential gains in relation to consumption, employment and outputs of sport in the UK.
- Undertake more research into the wider socio-economic benefits of participation in sport and physical activity by gender, for example charitable giving, volunteering, and anti-social behaviour.

As Sport England's analysis of the Active People survey highlighted – there is a huge gap between men and women's activity, and the activity that women currently and would like to do. 13 million women say they would like to participate more in sport and physical activity, and just over 6 million of these are currently inactive.¹⁵¹ It's time to capitalise on this in order to create individual benefits but also economic savings and returns for the UK as a whole.

¹⁵¹ Sport England (2015) Go Where Women Are.

Women in Sport

womeninsport.org

General Enquiries
info@womeninsport.org

Registered charity no. 1060267



FUNDED BY:



***SPORT
ENGLAND***



**THE
YOUNG
FOUNDATION**