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# No lasting legacy: no change in reporting of women's sports in the British print media with the London 2012 Olympics and Paralympics 

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#### Abstract

Background The proportion of media sports coverage devoted to women is reported at between 1 and $6 \%$. Our survey examines and compares reporting patterns before and after the 2012 Olympics and Paralympics.

Methods We collected data on sports coverage in six national newspapers on 3 weekend days in February and March 2012, and in February 2013; ~5 months before the opening of the 2012 Olympic Games and 5 months after the closing of the Paralympic Games.

Results In 2012, 39 of 876 articles in national newspapers (4.5\%) related to women's sports, compared with 22 of 755 (2.9\%) in 2013; a nonsignificant reduction in coverage [difference $1.54 \%, 95 \%$ confidence interval (CI) -0.28 to 3.36 ). In 2012, 24 of 647 pictures ( $3.7 \%$ ) related to women's activities, compared with 10 of $738(1.4 \%)$ in 2013; a significant reduction in coverage (difference $2.35 \% ; 95 \% \mathrm{Cl} 0.68-4.03$ ). The median area per article was significantly greater for men in both years.

Conclusions We found a continuing bias towards men's sport in the media analysed and no evidence of improvement either before or after the 2012 Olympics and Paralympics. Increased support of women's sport in the print media could benefit individuals and influence the health of the population.


Keywords gender bias, mass media, physical activity, sports, women

## Introduction

A lack of physical activity is estimated to be the fourth leading risk factor of mortality worldwide, with 3.2 million deaths attributed to it. ${ }^{1,2}$ Regular physical activity reduces the risk of developing hypertension, coronary heart disease, stroke and depression, contributes to bone health and function, and plays a role in the prevention and reduction of obesity. ${ }^{1}$ Globally women are less physically active than men, with $34 \%$ of women being physically inactive compared with $28 \%$ of men. ${ }^{2}$ Locally, the 2008 Health Survey for England found that $39 \%$ of men met the weekly recommended physical activity: 30 min or more of moderate or vigorous activity on at least 5 days per week, compared with only $29 \%$ of women. ${ }^{3}$ The proportion of active adults drops with increasing age and
with reducing household income. The proportion of adults in England meeting recommended activity levels has increased since 1997 from $32 \%$ of men and $21 \%$ of women. ${ }^{3}$ In

[^0]England men continue to participate in sports after finishing school to a greater degree than women. In 2010/11, Sport England estimated that 4.245 million males ( $20.6 \%$ of men aged 16 and over) were sufficiently physically active for health, defined as at least 30 min of moderate exercise at least once a week, compared with only 2.682 million women ( $12.4 \%$ ). ${ }^{4}$

Although organized sports is only one contributor to an individual's level of physical activity, because of its visibility in the media it is potentially a very important one. Sports reporting may be the only visible sign of women's physical activity in some communities, and increased reporting may boost participation in sports.

Many personal, practical, social and cultural barriers have been recognized as contributors to the gender differences in physical activity, including female 'invisibility' in the media and the scarcity of female sporting role models. ${ }^{5}$ Harris and Clayton ${ }^{6}$ examined 22 consecutive days of sports coverage from two tabloid newspapers in England and found eight dominant themes within their reporting relating to how femininity, masculinity and physicality were represented. The authors' first theme is the invisibility of female athletes. They argue that the 'absence of women athletes from the public eye is an explicit reminder that sport is a male domain'. The media portrays sports as a normal activity for men at the same time as giving less credit and respect to female athletes and sportswomen; as Harris says 'the paucity of coverage afforded to women's sport stems from the widely held belief that sport is just for men, ${ }^{7}$ Harris and Clayton found that women, when they were represented, tended to be demonstrated in non-active roles, or feature 'female-appropriate' sports; and that much of the commentary of female athletes was irrelevant to their sporting role and was 'a major contributor to the trivialization of sportswomen's accomplishments'; another of the authors' eight dominant themes. ${ }^{6}$

Added to this is the inappropriate glamourization and sexualization of some media coverage as well as, at the other end of the scale, the portrayal of some sportswomen as overly masculine. ${ }^{8}$ Textual analysis of 6 weeks of televised sports coverage in Los Angeles found a 'considerable proportion' of the sparse coverage of women's sports was dedicated to 'humorous feature stories on non-serious sports', and to 'the often humorous sexual objectification of athlete women and non-athlete women'. ${ }^{3}$ Krane ${ }^{10,11}$ explored the conflict between being athletic and muscular, and feminine in the USA and argues that one of the consequences of nonconformity to the normal view of femininity is sexist and heterosexist discrimination.

There have also been a number of scandals and controversies around women officiating and participating in sports.

These include the absence of female nominees for the UK's BBC Sports Personality of the year 2011 and the sexist remarks made by two members of the Sky Sports presenting team in 2010. ${ }^{12,13}$

The coverage of women's sports in national newspapers in the UK has been surveyed on several occasions, each reporting an extremely low proportion of articles ( $5.9 \%$ in 2000; $2 \%$ in 2008), space ( $3.3 \%$ in 2003; $4.8 \%$ in 2006 and $1.1 \%$ in 2008) and words devoted to female participation. ${ }^{6,14,15}$ However, the coverage of female athletes in reporting from two national newspapers in the UK during Olympics Games from 1948 to 2004 is notably higher at between 15 and $43 \%$, and increasing. ${ }^{16}$ Surveys from the USA, Canada and Australia have found similar disproportionate reporting in newspapers, magazines and television. ${ }^{17-19}$ Notable exceptions are the English and French language student-led sports publications at the University of Ottawa in Canada, which were examined over 3 academic years from 2004 to $2007 .{ }^{20}$ The authors found that $50 \%$ of text and $51 \%$ of photos were devoted to women's sport compared with 39 and $37 \%$, respectively, for men's sport, although $79 \%$ of cover photos were of men's sport.

We believe that, although reviews of the effectiveness of mass media campaigns on increasing physical activity have found few long-term effects on levels of physical activity, the impact of repeated low-level messages delivered daily over many years that women cannot expect equal representation must have an impact on the aspirations and behaviour of girls and women. ${ }^{21,22}$ The low level of representation in national newspapers is important as, although the effectiveness of role models in increasing physical activity is not certain; role models, champions and peer supporters are thought to have some impact on changing behaviour. ${ }^{23,24}$ The portrayal of women's sports and activity by the media will also contribute to girls' and women's views about their ongoing and future participation in physical activity and sports. ${ }^{25}$

The hosting of the 2012 Olympic and Paralympic Games in London was an opportunity to explore whether the level of print media coverage of women's sports increased in the build-up and was sustained afterwards. The 2012 Games had more female competitors than previous Games and were the first Games where every national team had at least one female athlete. There were also more medals for female athletes to win than ever before. The team from Great Britain and Northern Ireland (Team GB) were represented by more women than at previous Games with $48 \%$ of the team being female. Women athletes won a third of the sex-specific medals won by Team GB.

Although we recognize that the societal context of women's participation in sports and the reporting of women's
sports are important; in this study we aimed only to quantitatively compare the media coverage of women's sport in February and March 2012 in the lead up to the 2012 Olympic Games in London with reporting in February 2013. By adopting some of the methods used in previous surveys by the Women's Sport and Fitness Foundation (WSFF) our findings will be comparable with previous audits. ${ }^{15}$

## Methods

We undertook two cross-sectional studies a year apart to collect information on the relative coverage of women's sport in UK national newspapers. We chose the same newspapers as those used by the WSFF sample in 2008 which included a range of mainstream British newspapers. These spanned the 'populars'-The Sun and The Mirror; 'mid markets'-The Express and The Daily Mail and 'qualities'-The Times and The Telegraph. We collected data on separate weekend days over two 3 -week periods. One $\sim 5$ months before the opening ceremony of the 2012 Olympic Games and the second $\sim 5$ months after the closing ceremony of the Paralympic Games: Friday, 17 February; Saturday, 25 February and Sunday, 4 March in 2012; and Friday, 1 February; Saturday, 9 February and Sunday, 17 February in 2013. It was not possible to find a 3-week period that did not clash with a major sporting event and as a result one of the dates chosen in each year coincided with major home nation clashes of the men's Rugby Six Nations Championship (Saturday, 25 February 2012 and Saturday, 9 February 2013). We undertook a pilot data collection with discussion of contentious articles between data abstractors and the development of categorization and recording rules prior to each year's data collection (Table 1).

We used SPSS Statistics version 19 (IBM, New York, USA) for the calculation of Mann-Whitney $U$-tests and OpenEpi version 2.3.1 for the calculation of $95 \%$ confidence intervals $(95 \% \mathrm{CI})$ around proportions using the modified Wald method. ${ }^{26}$

## Results

In 2012, of the 876 sports articles published, 39 (4.5\%) related to women's activities or sports, compared with 22 out of 755 articles $(2.9 \%)$ in 2013; a non-significant reduction in coverage (difference between proportions $1.6 \%, 95 \%$ CI -0.3 to 3.4). Similarly, of the 647 sports pictures in 2012, $24(3.7 \%)$ were of women or women's activities or sports, compared with 10 out of 738 pictures ( $1.4 \%$ ) in 2013; a significant reduction in coverage (difference $2.4 \%$; 95\% CI $0.7-$ 4.0); Fig. 1.

Table 1 Data collection and categorization of newspaper coverage.

Data recorded
Number of articles dedicated to women's, men's and gender neutral sport.
Total column area ( $\mathrm{cm}^{2}$ ) dedicated to women's, men's and gender neutral sport.
Number of pictures dedicated to women's, men's and gender neutral sport.
Total area ( $\mathrm{cm}^{2}$ ) of pictures dedicated to women's, men's and gender neutral sport.
Categorization and recording
Pull-outs and any sports-related articles outside the designated sport section of the paper were excluded to prevent repetition.
Sub-articles were counted as separate articles as they could contain a different gender of sport.
Fixtures and results tables were excluded.
All sports were included.
All content related to a gender of sport was counted as that gender, e.g. articles featuring male managers of women's teams were classed as women's sport.
Pictures included within an article were excluded from the calculated area of the article unless the picture was smaller than two-by-two centimetre.
Irregular pictures were measured as a square using the maximum measurements of width and length.
All measurements were made to the nearest 0.5 cm .
Titles were included in the area of articles.


Fig. 1 Per cent of total sports coverage for women's activities and sports in national newspapers, 2012 and 2013.

The number of articles and pictures devoted to women's sports varied depending on the type of newspaper with the 'quality' papers in both years giving more attention. There were statistically significantly more articles in 'qualities' versus 'populars' in 2012, and more pictures in 'qualities' versus 'mid-markets' in 2013 than the other newspaper categories.

Table 2 Proportion of sports articles and pictures relating to women's sport by newspaper category in 2012 and 2013.

|  | Article number (\%) |  | Article area (\%) |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2012 | 2013 | 2012 | 2013 |
| Populars | 2.6 | 2.4 | 1.5 | 0.4 |
| Mid-market | 3.7 | 2.0 | 2.0 | 1.0 |
| Qualities | 8.0 | 4.3 | 4.8 | 3.2 |
| All national newspapers | 4.5 (95\% CI 3.3-6.0\%) | 2.9 (95\% CI 1.9-4.4\%) | 3.0 (95\% Cl 2.9-3.0) | 1.9 (95\% CI 1.8-2.0\%) |
|  | Picture number (\%) |  | Picture area (\%) |  |
|  | 2012 | 2013 | 2012 | 2013 |
| Populars | 1.4 | 0.4 | 1.4 | 0.1 |
| Mid-market | 3.8 | 1.2 | 3.6 | 0.5 |
| Qualities | 7.1 | 2.7 | 7.4 | 1.0 |
| All national newspapers | 3.7 (95\% CI $2.5-5.5$ ) | 1.4 (95\% CI 0.7-2.5\%) | 4.4 (95\% Cl $4.2-4.5 \%)$ | 0.6 (95\% CI 0.5-0.6\%) |

However, the greatest proportion devoted to women's sport was just under $8 \%$ (for articles in the 'qualities' in 2012) and all newspaper groups reduced their percentage coverage between 2012 and 2013 (Table 2).

In 2012 of the $223446.3 \mathrm{~cm}^{2}$ total coverage given to sports articles and pictures, $7823.3 \mathrm{~cm}^{2}(3.5 \%)$ was devoted to women's sport, compared witho $2814.85 \mathrm{~cm}^{2}$ out of 215 $840.55 \mathrm{~cm}^{2}(1.3 \%)$ in 2013; a significant reduction in coverage (difference $2.2 \%$; 95\% CI $2.1-2.3$ ). Again the 'quality' newspapers devoted more space to women's sport than the other categories of papers. This was statistically significant for the area of articles between 'qualities' and both other types of newspapers in both 2012 and 2013 (Table 2).

Over all categories of newspapers the median area of text per article for men was significantly larger at $99.0 \mathrm{~cm}^{2}$ in 2012 and $110 \mathrm{~cm}^{2}$ in 2013 compared with $28.0 \mathrm{~cm}^{2}$ in 2012 and $41.5 \mathrm{~cm}^{2}$ in 2013 for women (men versus women 2012, Mann-Whitney $U=20540, P<0.001$; men versus women 2013, Mann-Whitney $U=9800, P=0.023$ ). The median area per picture was not significantly different at $49.0 \mathrm{~cm}^{2}$ in 2012 and $39.0 \mathrm{~cm}^{2}$ in 2013 for men, and $46.5 \mathrm{~cm}^{2}$ in 2012 and $37.5 \mathrm{~cm}^{2}$ in 2013 for women. The interquartile range and maximum area of pictures depicting women's sports decreased from 2012 to 2013 (Fig. 2).

In 2012 the majority of articles about women's sport focused on interviews with individual athletes about upcoming events. Of the 24 pictures of sportswomen and athletes, all but one showed these women competing. In 2013 most pictures were of female athletes competing in their sports with the corresponding article reporting results, rather than interviews with the athletes.

## Discussion

## Main findings of this study

We found no evidence that in the build up to the 2012 Games women's sports were any better represented in newspapers in the UK than they have been in the audits in 2000, 2003, 2006 and 2008. We also found no evidence that hosting the 2012 Games has improved the representation of women's sports in newspapers; indeed the coverage of women's sport in newspapers declined between our surveys. Although we cannot know the specific contribution of the current level of media portrayal of women's sport on the physical activities undertaken by individuals, the implications on a population level and therefore on population health are likely to be of consequence. Our study mirrors previous studies demonstrating a gross imbalance in the reporting of women's sports and activities in the UK: for every article reporting women's sports there were 20 reporting men's sports, and for every picture featuring women and women's sports there were 25 relating to men. Although the 'quality' papers devoted more space and pictures to women's sport it was a marginal difference at best. When articles are written about women's sport the area used per article is smaller than that used to report men's sport.

We found that the median size of pictures of sportswomen and women's sports were almost equal to that of men; the only instance of women's sports being on a level.

## What is already known on this topic

Our findings show a similar proportion of articles and space given to women's sports in Great Britain to that found in the studies of 2003, 2006 and 2008, but a reduced proportion to


Fig. 2 Median, range and interquartile range of areas of articles and pictures by gender and year.
that found in $2000 .{ }^{14,15}$ This steady state of representation in the media does not equate directly with the increase in women who met the physical activity recommendations between 1997 and 2008. We did find an increased proportion of pictures of sportswomen and athletes at $3.7 \%$ in 2012 when compared with the $1.4 \%$ found in the 2008 audit; but this had reduced to $1.4 \%$ by $2013 .{ }^{15}$ Our finding that the 'popular' newspapers had fewer articles, pictures and overall space for women's sports than the 'quality' papers was similar to that found in 2008.

The UK Government and Games organizers placed great importance on developing a lasting legacy from the 2012 Olympics and Paralympics. Given what is already known about the lack of evidence of impact of international elite sporting events on population physical activity, and health related and economic outcomes, perhaps it was unrealistic to expect the 2012. Games to solve the gender bias in sports reporting. ${ }^{27,28}$ The slight increase in the representation of women's sports before the 2012 Olympics may have been due to an increase in pressure on the media for gender equality following the success of many female British athletes in qualifying. Perhaps in the period following the Olympics and Paralympics, this pressure was removed and normal habits of reporting resumed.

## What this study adds

It is unfortunate that we have not been able to add anything more positive to the data available on the coverage of women's sports in national newspapers. The gender
imbalance in reporting and its potentially negative impact on women's participation in physical activity continues, despite a high profile gender neutral event such as the Olympics and Paralympics. This is an important concern as the health benefits from increasing physical activity, including an increase in physical and mental well-being, as well as the wider social benefits of participation in organized sports, are not being realized by a significant proportion of our population.

Although it is difficult to know or predict how influential the media is on an individual's participation in sports and other physical activities, given the media's role in the creation and reinforcement of social values and norms in other areas of life, it is probable that it is a contributory factor to the gender differences in behaviour. There are many, largely historic arguments put forward against aiming for a 50:50 reporting of women's sporting activities in the media including for example, that women are not interested in reading or listening to sports (whether male or female athletes), that women's sports are somehow inferior to the male equivalent, that there is not the same amount of top-level sporting activity to report, or that revenues from advertisements and sponsorships will be reduced. ${ }^{29-31}$ These arguments have been rebutted by The Commission on the Future of Women's Sport, which brought together surveys of sponsorship deals and audience figures, and set out the business case for investment in women's sport. ${ }^{30,31}$ Findings from sociological analyses of the representation of women's sport in the media point, however, to a bigger issue, that of a society's views of masculinity and femininity. Dominant
views of masculinity and femininity appear at odds with many of the attributes required by successful sportswomen and athletes including muscularity, assertiveness, aggression and success. Our view is that none of these arguments can excuse the real evidence of bias against sporting women in the print media. We do acknowledge that these ideas and opinions, probably not fully comprehended by sports editors and other commentators, will need open discussion before real progress is made.

Increasing the coverage of women's participation in traditionally well reported and male dominated sports, e.g. football (soccer), rugby and cricket would be a good start in changing how women's sport is viewed. However, a constant media diet of football and cricket (whether male or female teams) may be as off-putting to women as it is to some men, and the inclusion of other sports (whether male or female athletes) such as gymnastics, equestrian events, ice skating and skiing may increase interest and broaden readership. Once women's sport is better represented then the debacle around the BBC's Sports Personality of Year in 2011 should not happen. The public would be given the chance to read about, discuss and therefore nominate sportswomen and athletes 'whose actions have most captured the public's imagination' in the same way as they can now do for men. ${ }^{32}$ Any resulting increase in physical activity would have benefits to individuals and to the health of the population as a whole.

## Limitations of this study

It could be argued that the six national newspapers used in our study over such a short-time period may not be a fair representation of the UK's media coverage of sport. Our opinion is that if there was a concerted attempt at fair reporting of women's sports in any type of media, this would have been reflected in the sources and days we selected.

Although we had undertaken a pilot to standardize the collection and categorization of data, there may still have been some residual inter-observer differences. Occasionally, it was difficult to categorize an article or picture, for example, in horse racing there could be both male and female jockeys.

Our study could only take account of the sporting events happening that day. It tells us nothing about whether a sporting event is more likely to be reported because it is a men's event or whether there were fewer equivalent women's events on those days. We therefore do not strictly know if our results are a true representation of the amount of equivalent women's events on a day or if there is a genuine discrepancy in reporting.

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