



**SPORTS PARTICIPATION CHANGES IN LONDON FOLLOWING *LONDON 2012*
WITH NATIONAL AND INTERNATIONAL COMPARISONS**

Prepared by:
James Skinner
Chris Gratton
Loughborough University in London
Institute for Sport Business

May 2015

Contents

EXECUTIVE SUMMARY	1
INTRODUCTION	2
METHODOLOGY	2
REPORT STRUCTURE.....	3
STAGE 1: SPORTS PARTICIPATION IN LONDON 2005-2014.....	3
STAGE 2: COMPARISONS WITH ENGLAND OVERALL, THE OTHER ENGLISH REGIONS & WITH THE OTHER LARGEST CITIES IN ENGLAND.....	11
STAGE 3: INTERNATIONAL COMPARISONS	17
CONCLUSIONS	22

List of Figures

Figure 1: London 1x30 sports participation 2005-2014	4
Figure 2: London 1x30 sports participation 2005-2014 (APS1 = 100)	4
Figure 3: London 3x30 sports participation 2005-2014	5
Figure 4: London 3x30 sports participation 2005-2014 (APS1 = 100)	6
Figure 5: London 1x30 sports participation by gender 2005-2014	7
Figure 6: London 3x30 sports participation by gender 2005-2014	7
Figure 7: London sports participation by the disabled 2005-2014	8
Figure 8: London sports participation in keepfit and gym activities 2005-2014	9
Figure 9: 1x30 sports participation by London sub-region.....	10
Figure 10: 3x30 sports participation by London sub-region.....	11
Figure 11: 1x30 sports participation for London and England	12
Figure 12: 1x30 sports participation for London and England (England = 100)	12
Figure 13: 3x30 sports participation for London and England	13
Figure 14: 3x30 sports participation for London and England (England = 100)	13
Figure 15: 1x30 sports participation for London and other English regions (2012/13)	14
Figure 16: 3x30 sports participation for London and other English regions (2012/13)	14
Figure 17: 1x30 sports participation for London and selected English cities (2012/13)	15
Figure 18: 3x30 sports participation for London and selected English cities (2012/13)	16
Figure 19: 1x30 sport participation for London sub-regions and selected English cities (2012/13)	16
Figure 20: 3x30 sport participation for London sub-regions and selected English cities (2012/13)	17
Figure 21: Once a week sports participation rates in Europe 2013	19
Figure 22: Once a week sports participation rates in Europe cf. London 2013	20
Figure 23: Three times a week sports participation rates in Europe	21
Figure 24: Three times a week sport participation rates in Europe cf. London 2013	21

Executive Summary

1. This report examines the impact of the London 2012 Olympic and Paralympic Games on grassroots sports participation in London and compares London's participation with England, other English regions, other English cities and other countries in Europe.
2. Participation data was taken from the Active People Survey. Two sport participation definitions were used:
 - a. 1x30: Participating at least once a week for at least 30 minutes.
 - b. 3x30: Participating at least three times per week for at least 30 minutes.

Stage 1: Sports participation in London 2005-2014

3. On both measures, sports participation grew for 2005/6 to 2008/9 before falling back in 2009/10 and 2010/11. It then grew strongly in 2011/12 and peaked in 2012/13 before falling back in 2013/14 but at a level still above that prior to the Olympics.
4. The Olympic effect on participation was greater for women than men, was particularly strong for those suffering a disability, and was mainly fuelled by keep fit and gym activities.
5. There is considerable diversity in the sports participation rate within London with London Central and London South having much higher rates than the other three sub-regions.

Stage 2: Comparisons of London participation rates with England as a whole, the other English regions and with the other largest cities in England

6. Overall London's sport participation rate is considerably higher than the average for England as whole and higher than in any of the other English regions.
7. This is not the case though when we look at the league table of participation rates across England's 20 largest cities (by population size). London is only fifth with Sheffield first and Leeds second.

Stage 3: International comparisons

8. When we compare London's sport participation rate internationally, it does not match the very high rates achieved in particular in the Nordic countries.
9. Although the data does not exist to make clear comparisons there is enough data to establish that cities such as Oslo, Stockholm, Helsinki and Copenhagen will have a much higher sports participation rates than London.

Introduction

This report examines the impact of the London 2012 Olympic and Paralympic Games on grassroots sports participation in London and compares London's participation with England, other English regions, other English cities and other countries in Europe. There is a long history of research attempting to explain patterns of sports participation and why they change over time. For England there is a well-established relationship of sports participation with key socioeconomic and demographic variables. Since the 1970s the pattern has remained broadly the same: men participate more than women; participation declines with age; and participation is higher the higher the socioeconomic group, the higher a person's and/or household's income, and the higher the level of educational achievement. The highest participation sub-group by far in England is university students since they are young, well-educated, and come disproportionately from the better off. Thus to explain differences in participation rates across different parts of England, the different socioeconomic and demographic compositions of the relevant populations will play a major though not comprehensive part.

Methodology

The research attempts to measure any Olympic effect on adult participation levels in sport and physical activity in London using a programme of desk research. This was facilitated by a time series analysis of participation rates of the adult population (aged 16 and over) between 2005 and 2014 using the Active People Survey (APS).

Two sport participation definitions were used:

- 1x30: Participating at least once a week for at least 30 minutes.
- 3x30: Participating at least three times per week for at least 30 minutes.

The analysis was conducted using Excel spreadsheets. Participation data was taken from APS 1 (2005/6) to APS 8 (2013/14). Each APS year runs from mid-October to mid-October (i.e. data for APS 8 was collected from October 2013 to October 2014). There was no APS for the 2006/7 period.

Methodological considerations taken into account for this investigation are outlined below:

1. Since we have a limited number of data points complex statistical modelling was not undertaken.

2. We have used alternative definitions of participation in sport (i.e. '3x30', '1x30') and identified variations in participation rates by gender, age, and disability.
3. We have provided comparisons of the London figures with the national average for England, the other English regions and selected cities in England.
4. We have provided a time series for the sub-regions of the London region since London South and London Central have considerably higher participation rates than England as a whole and other London sub-regions.
5. Data on International comparisons is limited but we have adopted a methodology to allow comparisons of London with the average for other countries.

Report Structure

The research findings are structured in the following order:

- Stage 1: Sports participation in London 2005-2014
- Stage 2: Comparisons with England overall, the other English regions and with the other largest cities in England
- Stage 3: International comparisons

Stage 1: Sports participation in London 2005-2014

This section looks at time trends in London's participation since 2005 and breaks this down by selected sub-groups of the population.

Figure 1 shows the trend in participation in London using the 1x30 measure. The participation rate peaked at 38.2% in 2012/13. There was strong growth in participation between 2005/6 and 2007/8 but then participation dropped back in 2008/9 and 2009/10. This reduction could be due to the economic crisis because there was a sharp drop in the most expensive sports (golf, skiing and sailing) following the global financial crisis in 2008. From 2010/11 participation recovered and then peaked in 2012/13. There was a small reduction of 0.5 percentage points in 2013/14 but that still left participation higher than pre-Olympics levels from 2005-2011.

Figure 1: London 1x30 sports participation 2005-2014

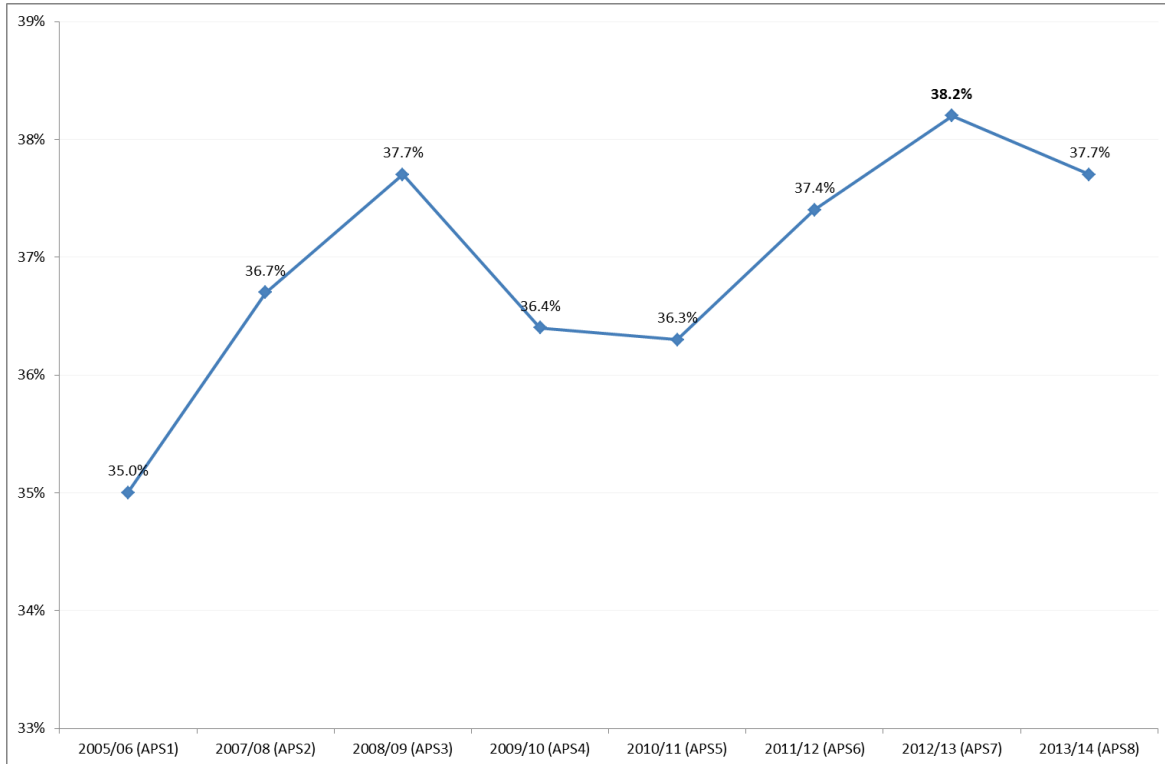


Figure 2 presents the same picture using 2005/6 as a baseline year with an index value of 100. All the other data is then directly comparable to this baseline. Thus the index figure for 2012/13 is 109.1 indicating that participation in that year is 9.1% higher than in 2005/6.

Figure 2: London 1x30 sports participation 2005-2014 (APS1 = 100)

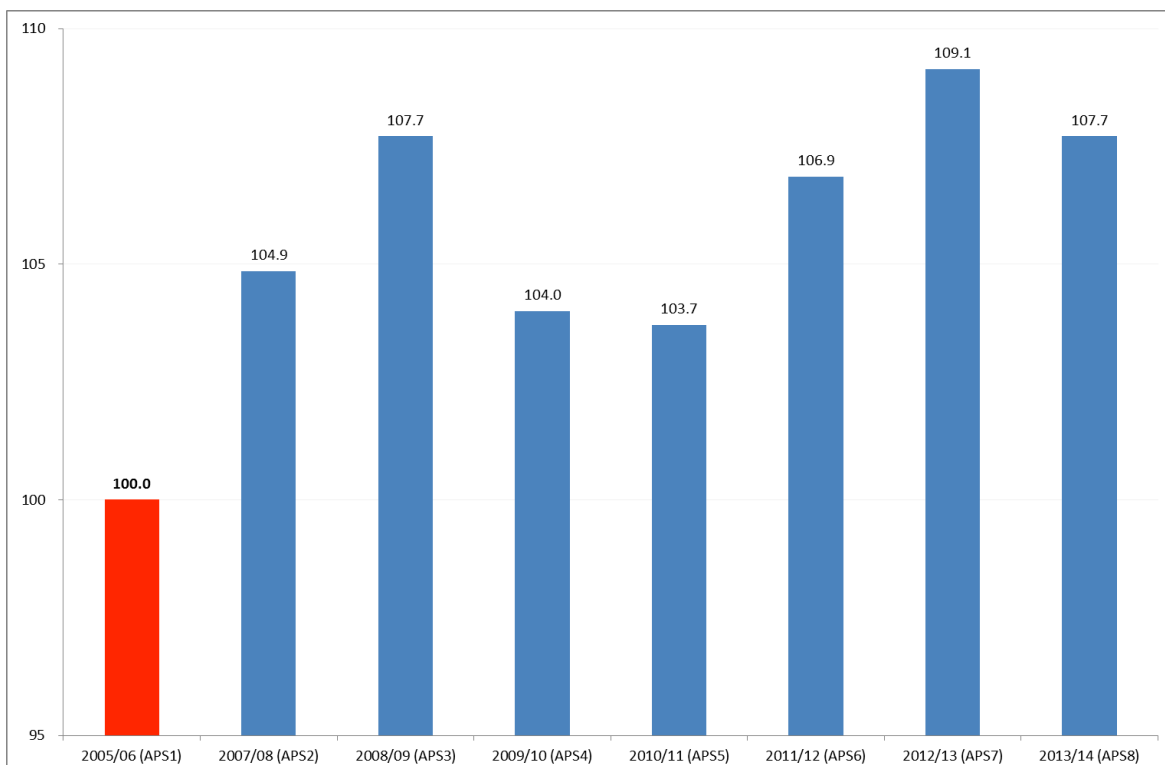
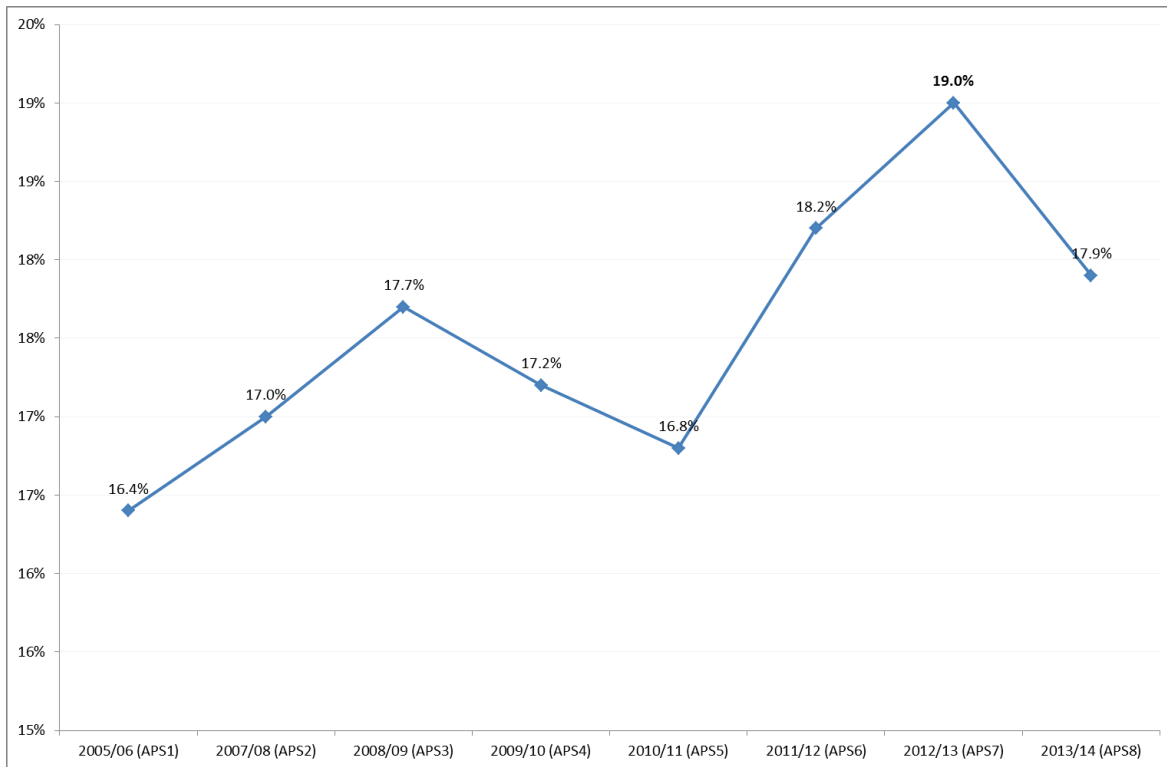


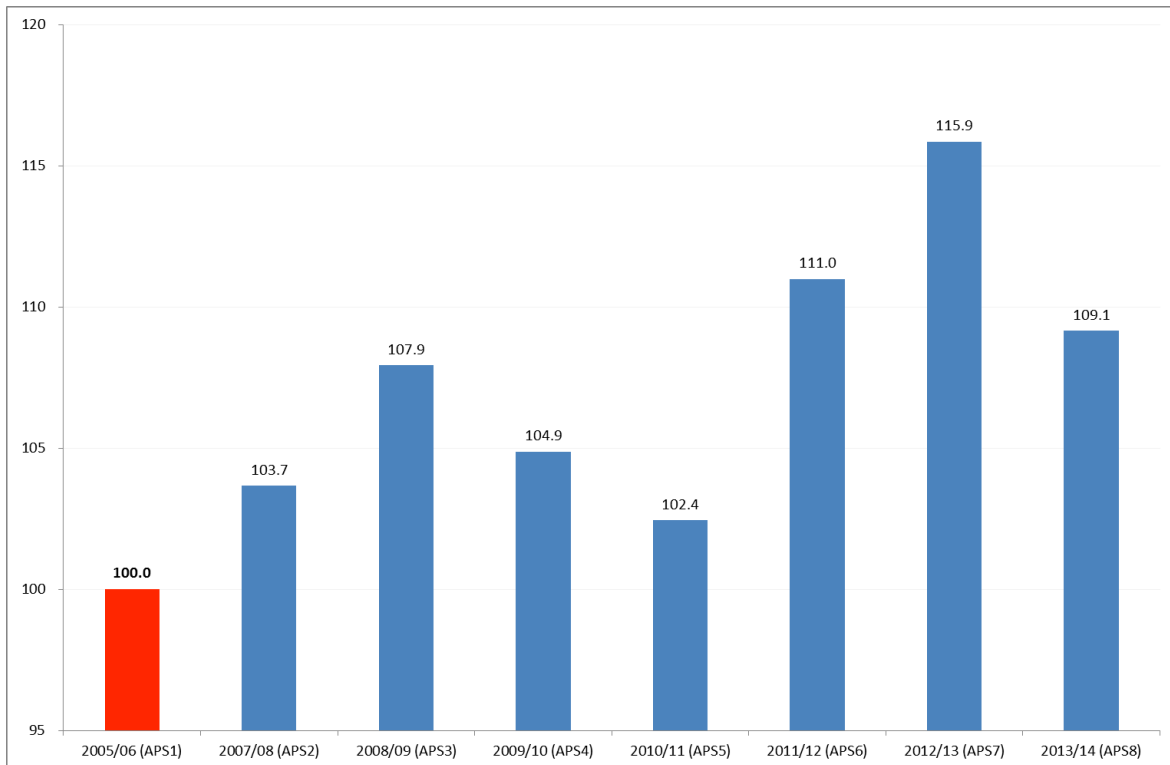
Figure 3 shows the trend in participation using the 3x30 measure.

Figure 3: London 3x30 sports participation 2005-2014



The level of participation on this measure is consistently less than half that for the 1x30 measure. Thus only 16.4% took part in sport at least three times a week compared to 35.0% that took part at least once a week in 2005/6. The pattern of participation from 2005 to 2014 though is similar to that for the 1x30 measure except that the growth from 2009/10 to 2012/13 is much stronger for the 3x30 measure. This is perhaps best illustrated using the index approach in Figure 4.

Figure 4: London 3x30 sports participation 2005-2014 (APS1 = 100)



In 2010/11 the 3x30 measure was only 2.4% above the 2005/6 level but by 2012/13 this had risen to be 15.9% above the 2005/6 level. The results for Figures 1 and 3 taken together suggest that the Olympics did encourage more people into sport (Figure 1) but that the main effect was to encourage those doing some sport already to participate more frequently (Figure 3).

Demographic and individual sport groups

If we split the sample into demographic sub-groups, most follow the same pattern as depicted in Figures 1 and 3 but there are some differences. When comparing males and females, the female participation data show a much more pronounced Olympic effect than the male data (see Figures 5 and 6).

On the 1x30 measure (Figure 5) the male participation rate is always above the female but the male rate peaks in 2008/9 at 43.6% and there is no real Olympic effect. The female data on the other hand replicates the pattern for London as a whole peaking in 2012/13 at 33.3% just 10% below the male rate, the smallest gap for any year since APS started.

Figure 5: London 1x30 sports participation by gender 2005-2014

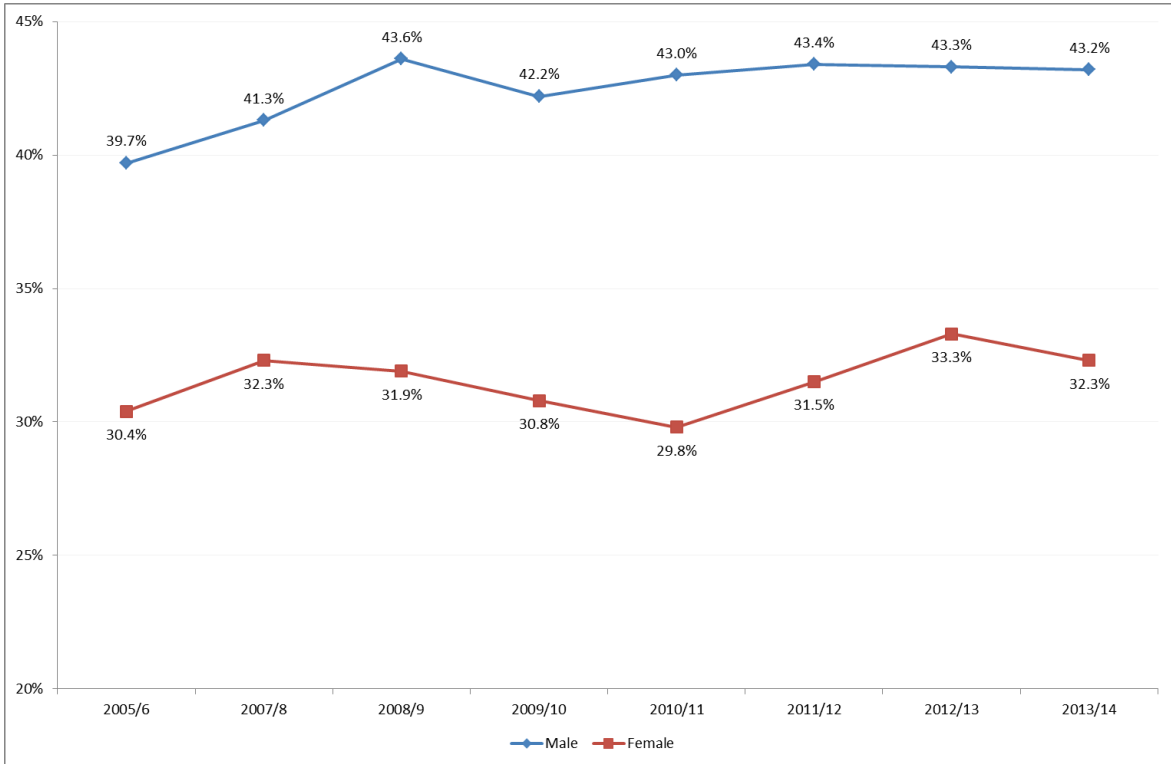
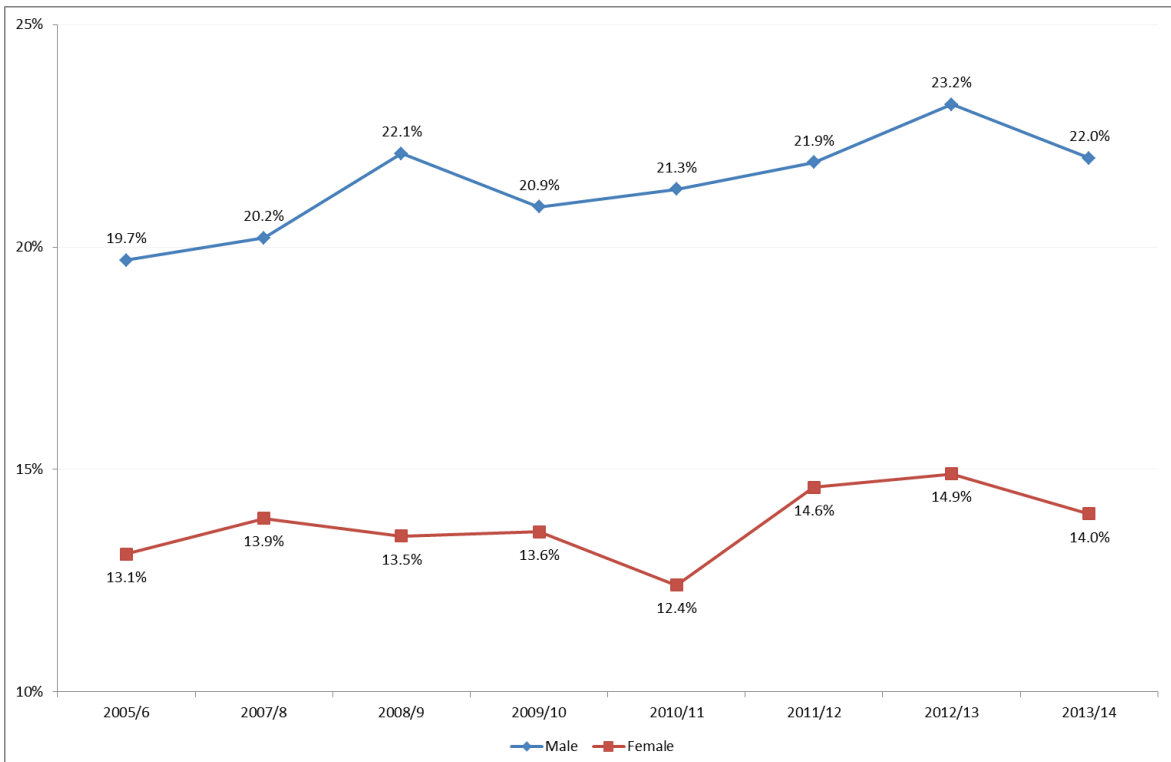


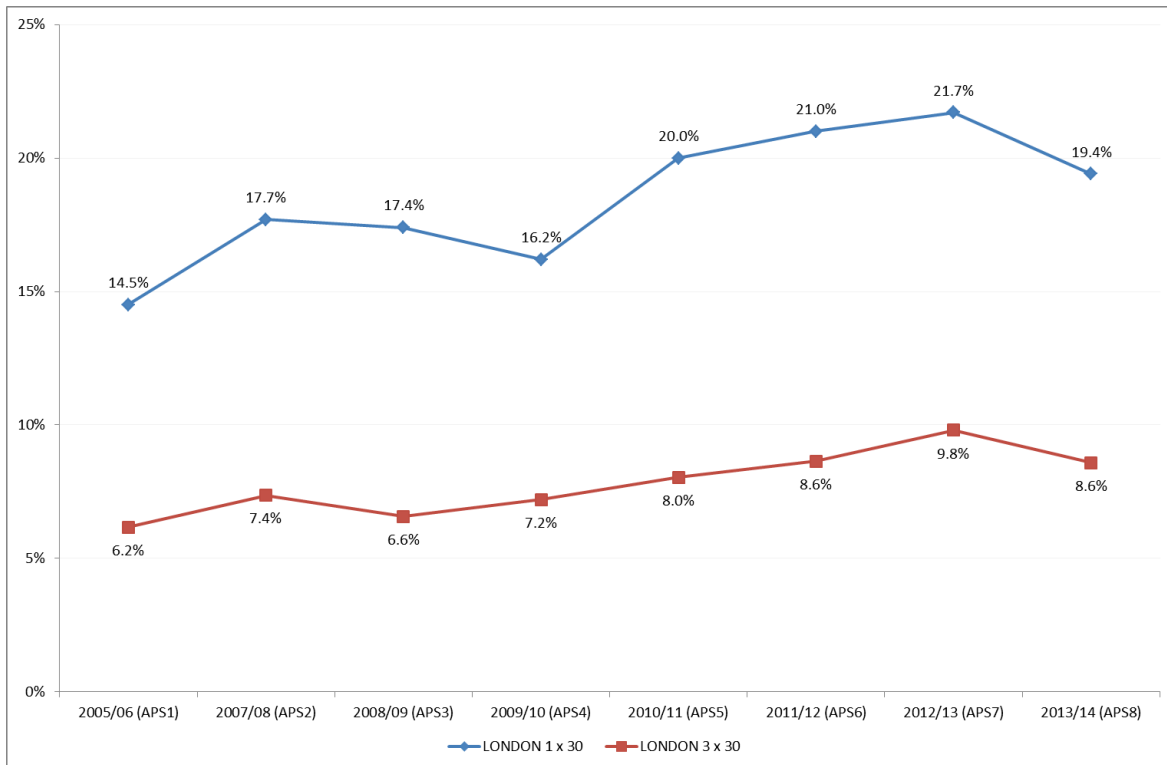
Figure 6: London 3x30 sports participation by gender 2005-2014



On the 3x30 measure, the pattern for London as a whole is repeated for males and females with both peaking in 2012/13 at 23.2% for males and 14.9% for females, a gap of 8.3%. This shows that for females the Olympics encouraged more into sport and also encouraged those already in sport to participate more intensively whereas for males only the latter was true.

One particularly striking result is the behaviour of participants with a long-standing limiting illness or disability including the following: blind or visual impairment; deaf or hard of hearing; learning disability or difficulty; mental health condition; autistic spectrum disorder; physical impairment; and other impairment (see Figure7).

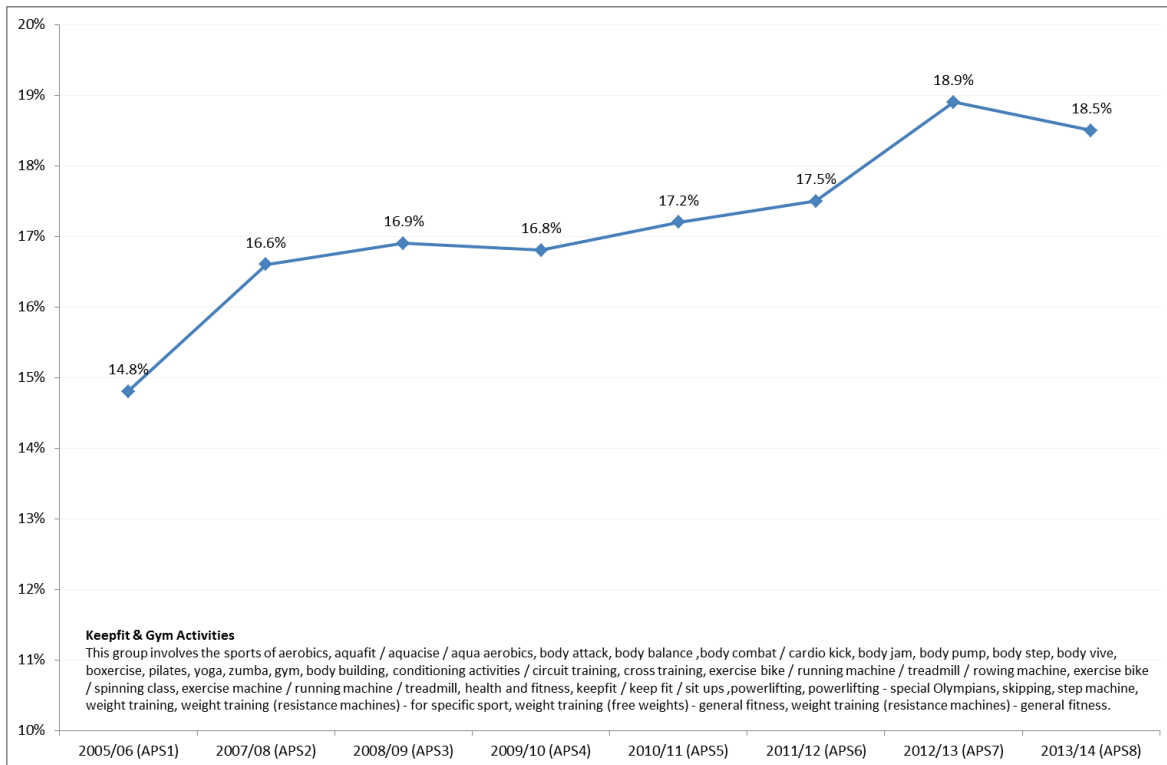
Figure 7: London sports participation by the disabled 2005-2014



Between 2005/6 and 2012/13, the 1x30 measure increased by 50% and the 3x30 measure by 58%. This is the largest Olympic effect by far for any sub-group of the London population.

Of all the individual sports looked at in this research one stands out as having had the largest Olympic effect which is 'keepfit and gym' (see Figure 8).

Figure 8: London sports participation in keepfit and gym activities 2005-2014



Between 2005/6 and 2012/13 participation in keepfit and gym activities increased from 14.8% to 18.9% an increase of 28%. The increased popularity of keepfit activities coincided with the expansion of the budget operators in the health and fitness industry (dominated by the chains 'Pure Gym' and 'The Gym'). In the UK the budget health and fitness clubs expanded threefold between 2011 and 2014¹, largely following the US model in offering very cheap monthly subscriptions. The underlying dynamic for such a development is the growing demand influenced by the London Olympic Games and the cheaper rents for commercial property following the recession. Even today, commercial property prices at out-of-town gyms are 30%-50% lower than before the financial crisis.²

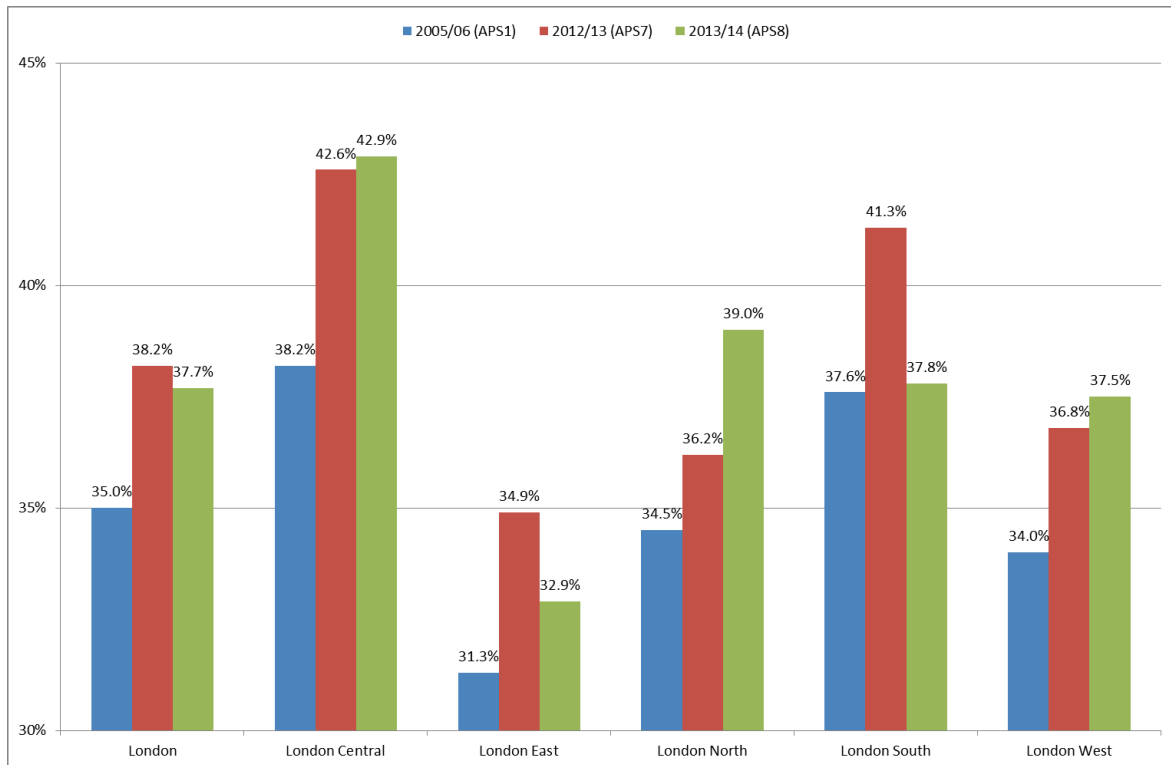
¹ Mintel, Health and Fitness Clubs, June 2014

² <http://www.ft.com/cms/s/0/f2b6e056-87ac-11e4-bc7c-00144feabdc0.html#axzz3Yh6sTpWV>

London sub-regions

Within London there is considerable diversity across the five sub-regions. Figure 9 looks at this diversity using the 1x30 measure.

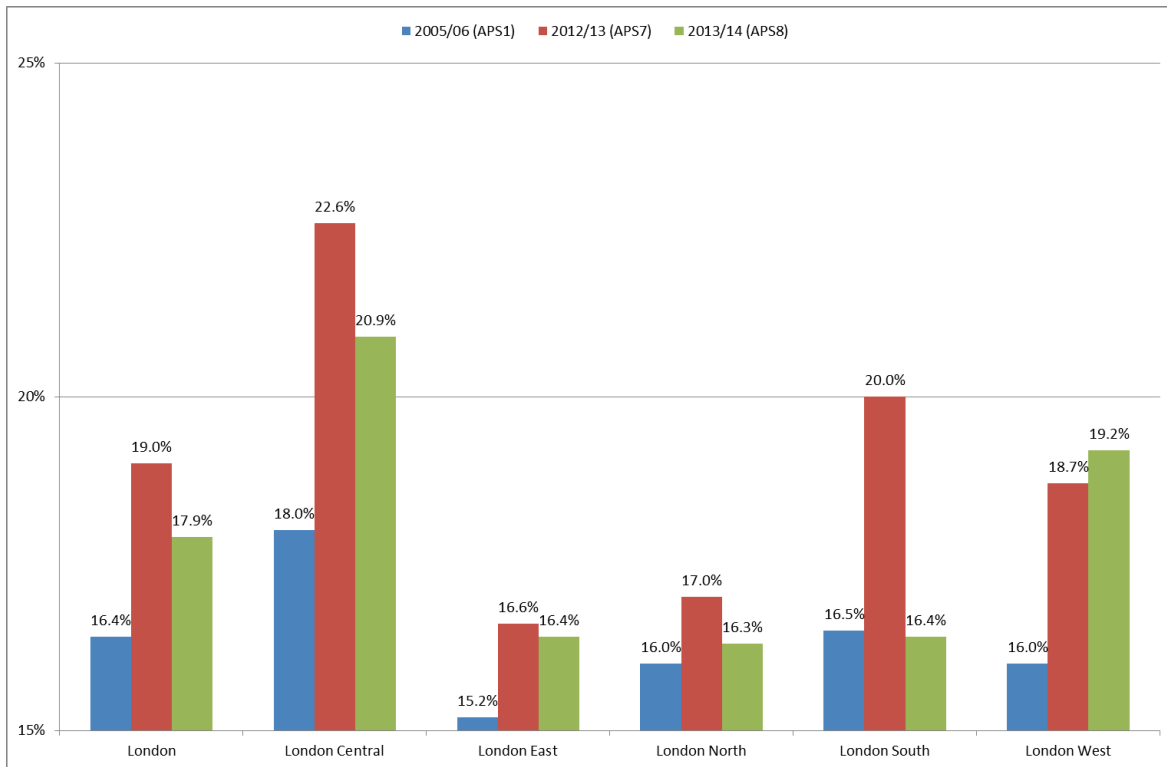
Figure 9: 1x30 sports participation by London sub-region



London Central and London South have consistently higher participation rates for all years than the average for London as a whole. London East, where the Olympics were held, has participation rates consistently below the London average. This is probably due to the socioeconomic characteristics of London East with lower average incomes and lower educational qualifications than other London sub-regions. London West and London North also have lower participation rates than London as a whole for 2005/6 and 2012/13 but their peak rates are in 2013/14 (as is London Central) when London North is above the London average and London West is just below it.

Figure 10 looks at the pattern for the 3x30 measure. For this measure the pattern returns to the London pattern of the peak participation occurring in 2012/13 and then falling back in 2013/14 except for London West where the peak is in 2013/14. The peak of 19.2% in 2013/14 for London West is above the London average by some margin and above all the other sub-regions except for London Central. On this measure London East participation rates are not so far behind some of the other sub-regions particularly for 2012/13 and 2013/14.

Figure 10: 3x30 sports participation by London sub-region



Stage 2: Comparisons with England overall, the other English regions and with the other largest cities in England

This section compares London sports participation to that in other parts of England. In particular it compares London to the average for England as a whole, to the other regions of England, and ranks London sport participation in the twenty largest English cities (by population size).

Figure 11 compares London to England on the 1x30 measure. London has a higher participation rate than England as a whole in every year but the gap is greatest in 2012/13 and 2013/14. This is clear from Figure 12 where for each year the England figure is taken as a baseline with an index of 100 and the figure for London is expressed in index term relative to this baseline. Thus in 2005/6 London's sport participation is 2.3% above England in 2012/13 it is 5.5% above and in 2013/14 it is 5.3% above. This is expected for a capital city that is likely to attract a younger, better educated, and overall higher income population than the average for the country as a whole.

Figure 11: 1x30 sports participation for London and England

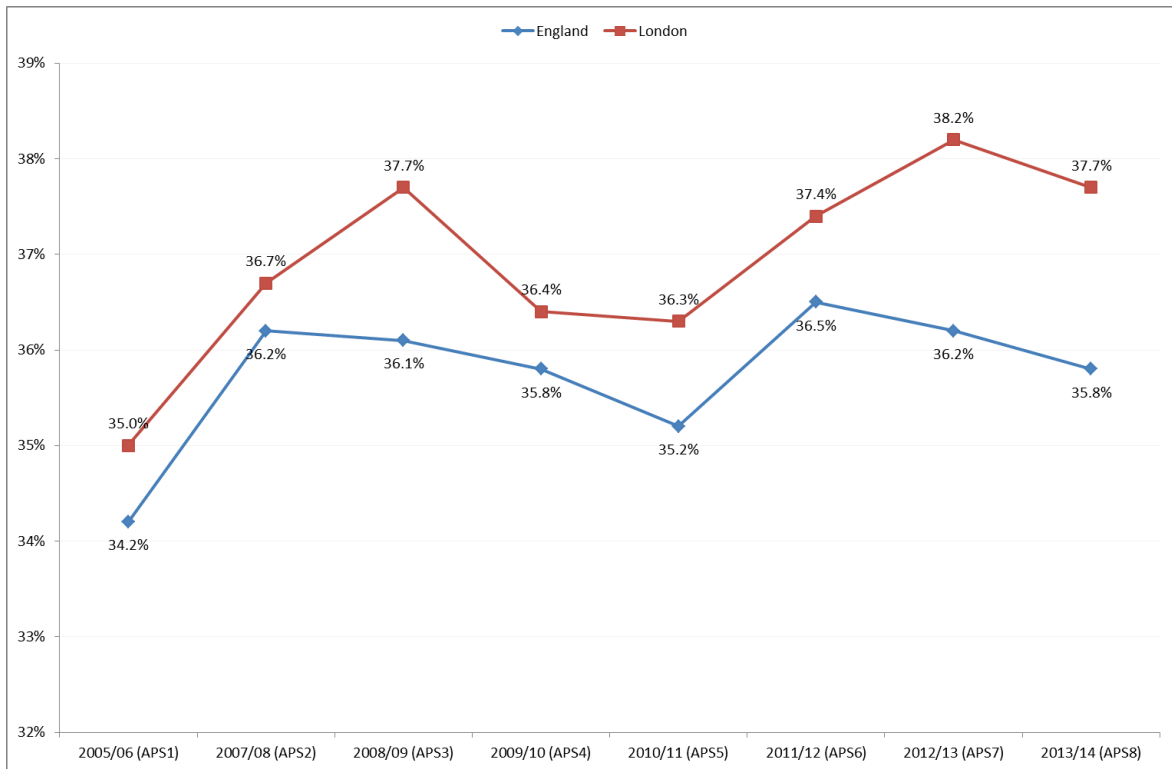
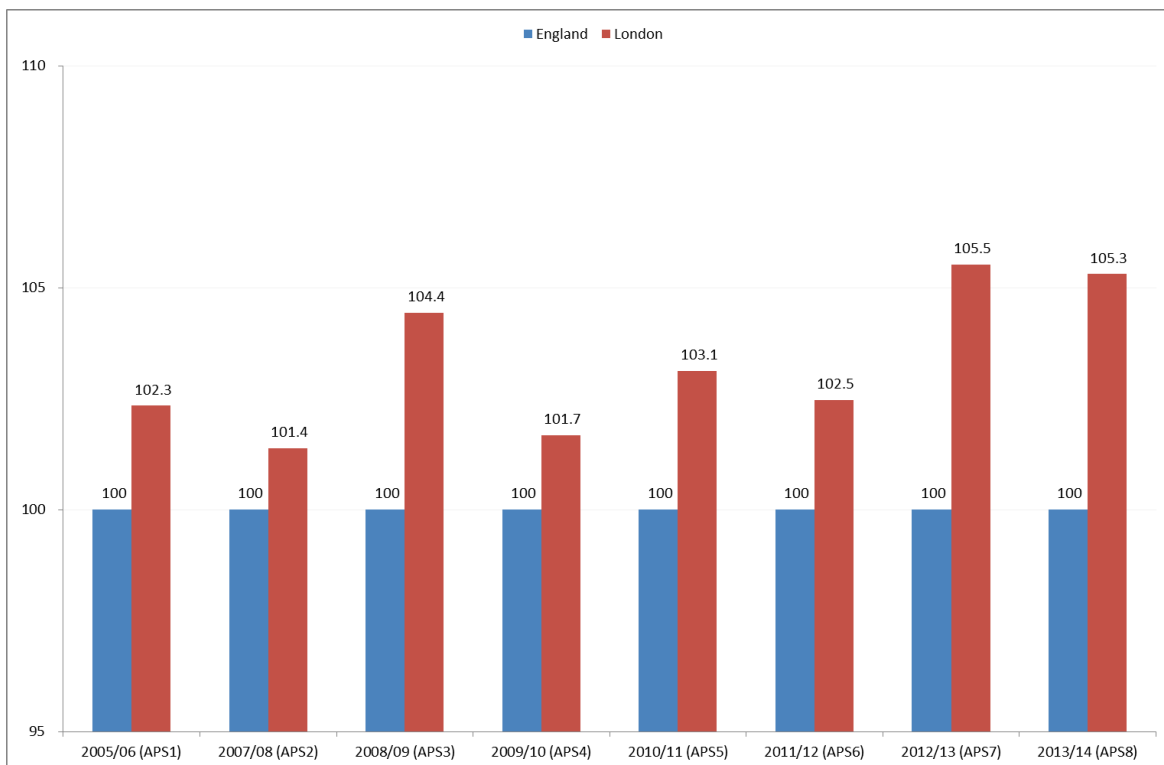


Figure 12: 1x30 sports participation for London and England (England = 100)



Figures 13 and 14 compares sports participation for London to England on the 3x30 measure.

Figure 13: 3x30 sports participation for London and England

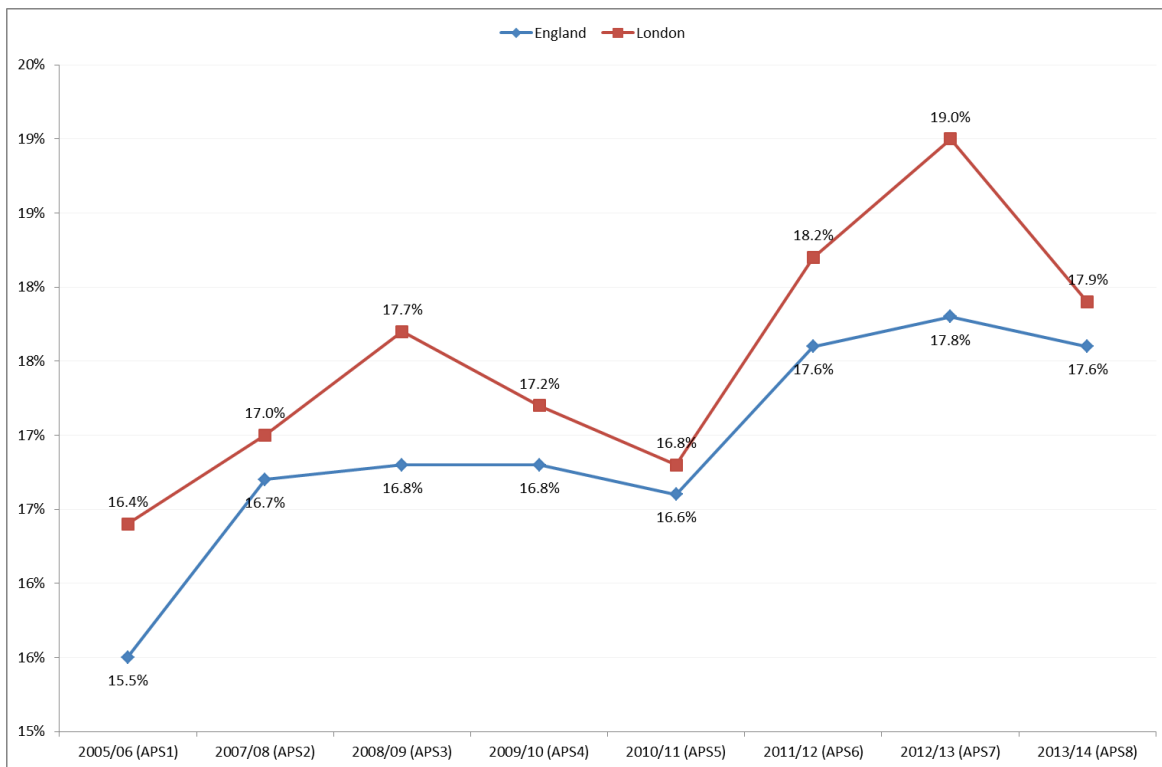
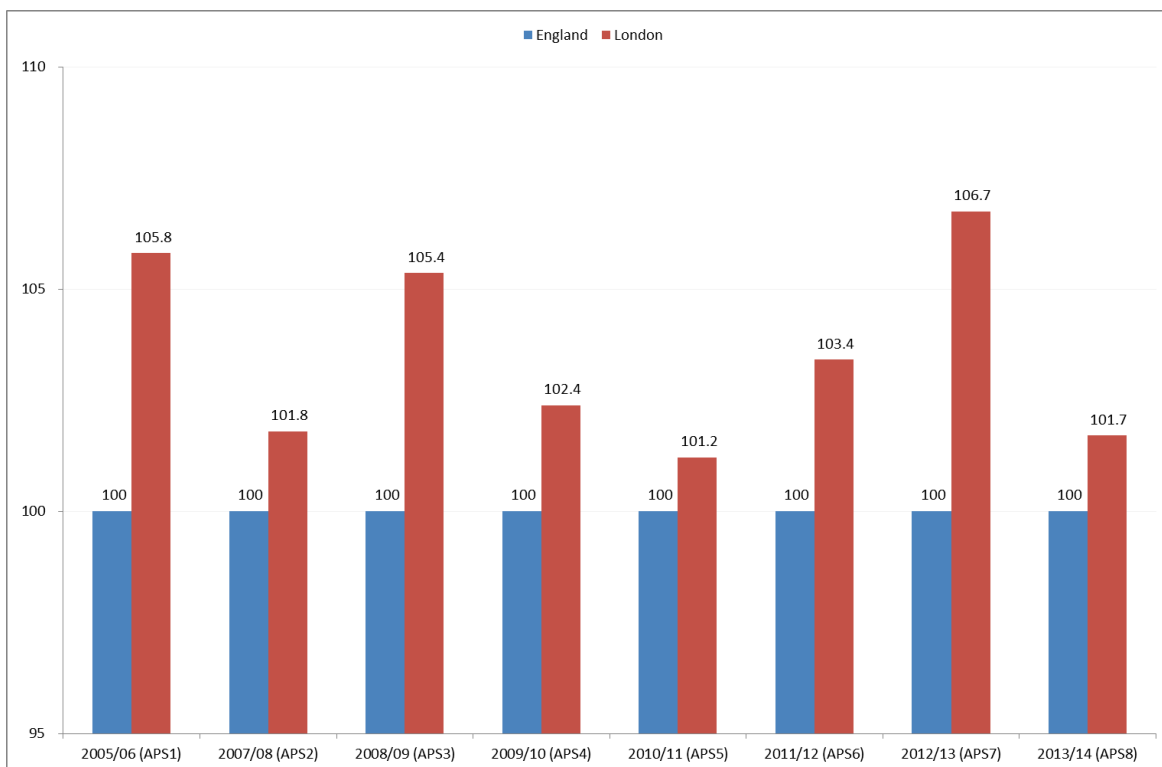


Figure 14: 3x30 sports participation for London and England (England = 100)



The peak in participation rates on this measure is greater in 2012/13 with London rates 6.7% higher in that year than in England. The pattern of changes over time in London is similar to England but the peak in 2012/13 is much sharper for London.

London clearly comes top of the league table for participation rates when we compare London with the other English regions and this is true for both measures of participation (see Figures 15 and 16). The South East is second for the 1x30 indicator whereas the North East is second for the 3x30 indicator.

Figure 15: 1x30 sports participation for London and other English regions (2012/13)

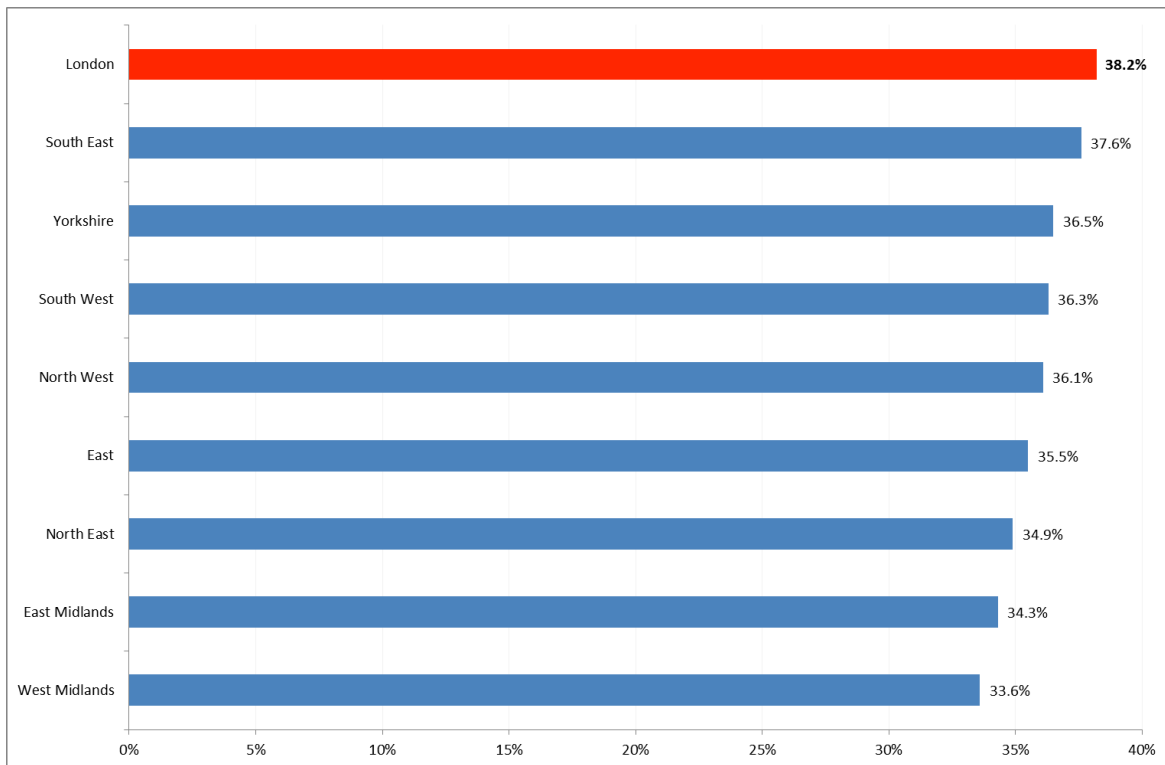
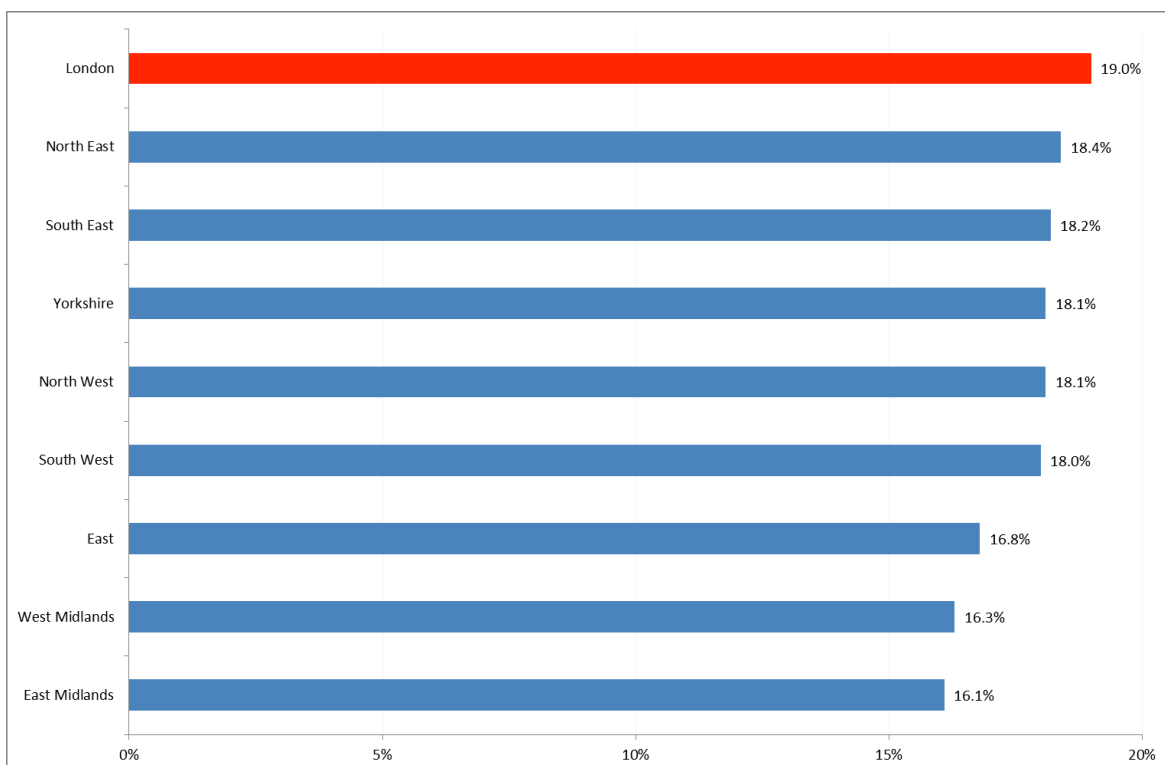


Figure 16: 3x30 sports participation for London and other English regions (2012/13)



This is not the case though when we look at the league table of participation rates across England’s 20 largest cities (by population size). Figure 17 and 18 show that on the 1x30 and the 3x30 measure London is only fifth with Sheffield first and Leeds second in both cases. Sheffield’s first place is probably due to two factors. Firstly, it is a relatively small city compared to London with a population of just half a million people. For most of the year this is swelled by 70,000 university students attending two of the biggest universities in England, University of Sheffield and Sheffield Hallam University. For a small city such as Sheffield this gives its sport participation rate a big boost. Secondly, it is the only city in England that has a part of a National Park within its city boundaries. It is possible to walk to the edge of the Peak District National Park from Sheffield Town Hall in less than an hour. To drive to it some of its main areas for climbing, walking, or cycling takes barely 15 minutes. Sheffield is a centre for these three sports because of its access to the National Park and some of the top climbing areas in England are within easy access of Sheffield. This university effect and access to National Parks effect also applies to Leeds but to a lesser extent.

Figure 17: 1x30 sports participation for London and selected English cities (2012/13)

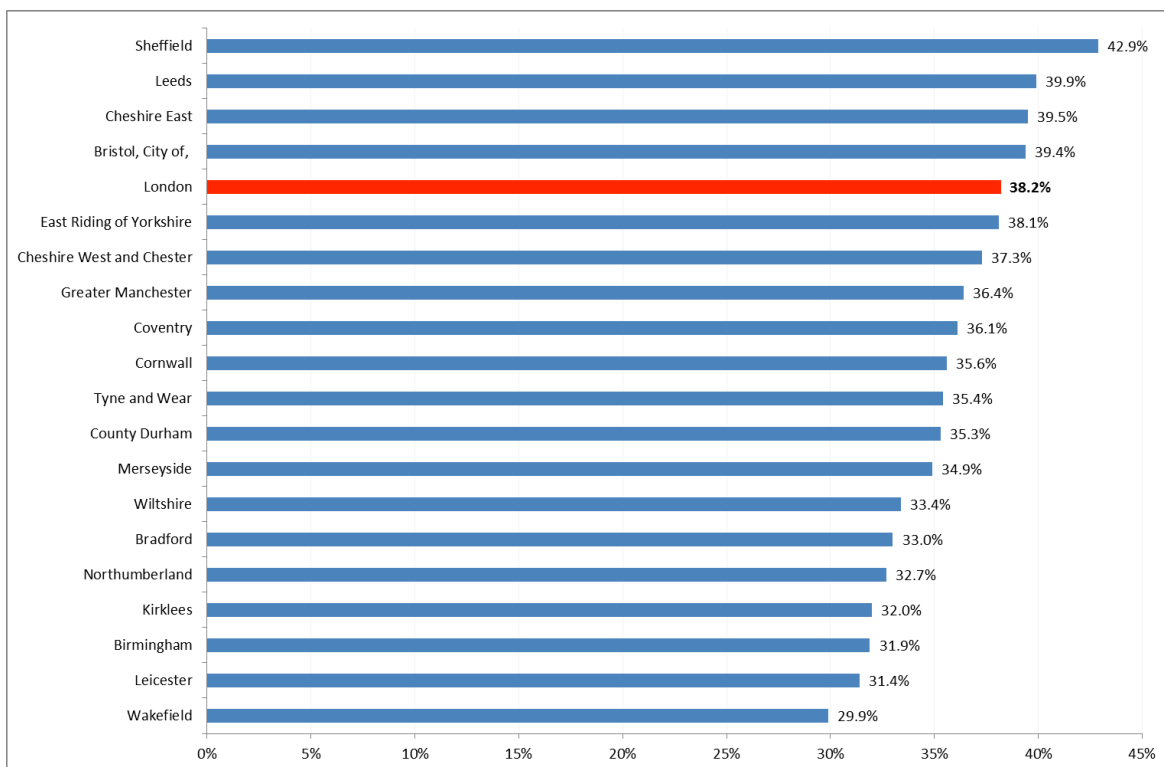
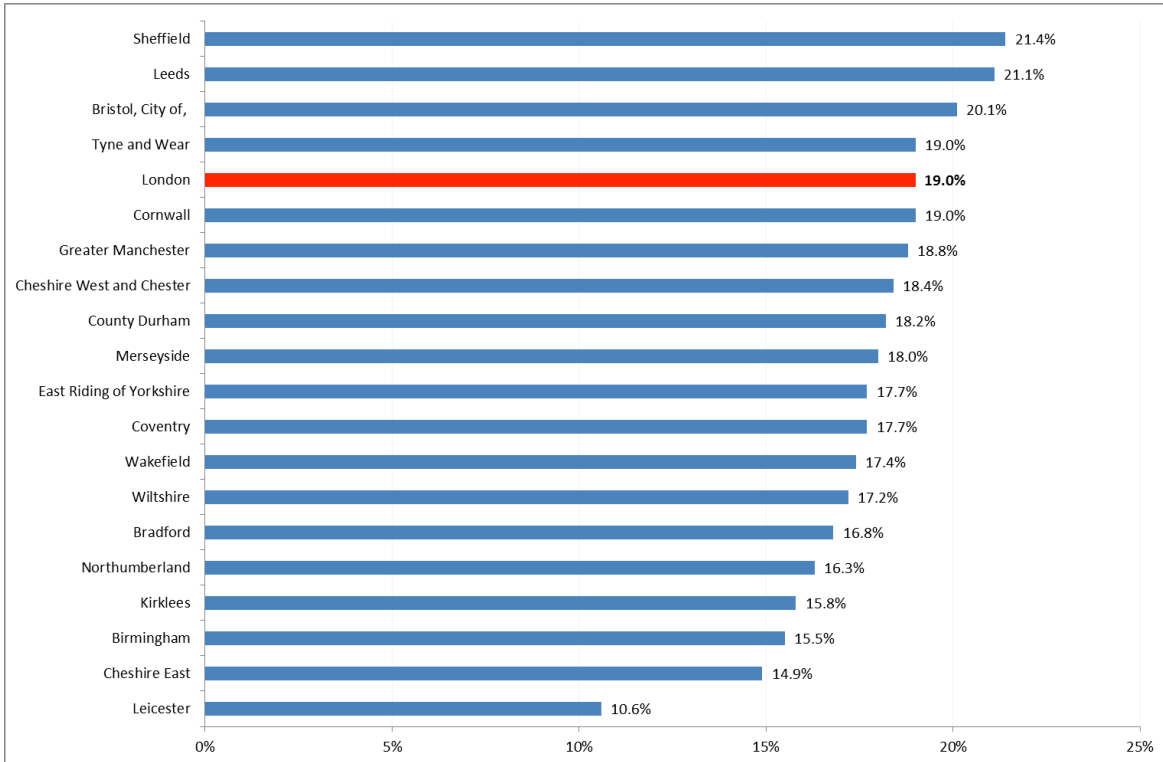


Figure 18: 3x30 sports participation for London and selected English cities (2012/13)



However, if we break London down into its sub-regions for the comparisons London Central comes second and London South third on the 1x30 measure with Sheffield still first (see Figure 19). On the 3x30 measure London Central is first with Sheffield dropping to second (see Figure 20). However, on this measure London East is 20th out of 25.

Figure 19: 1x30 sport participation for London sub-regions and selected English cities (2012/13)

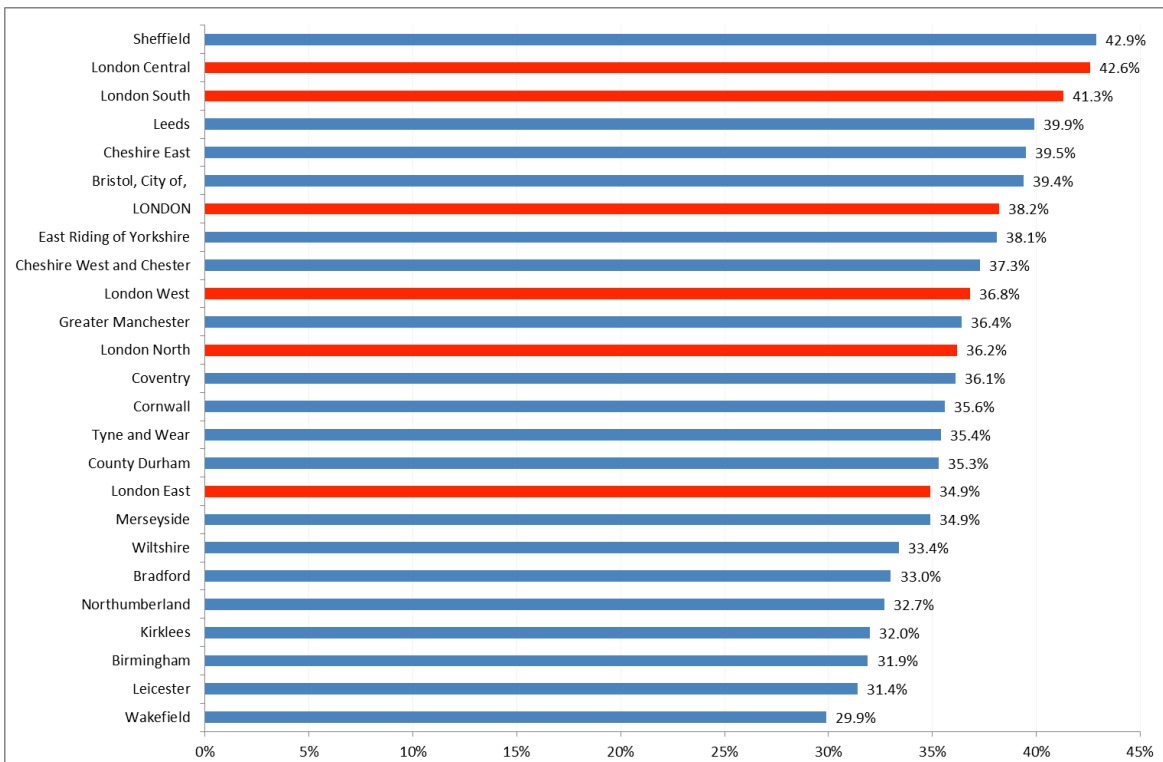
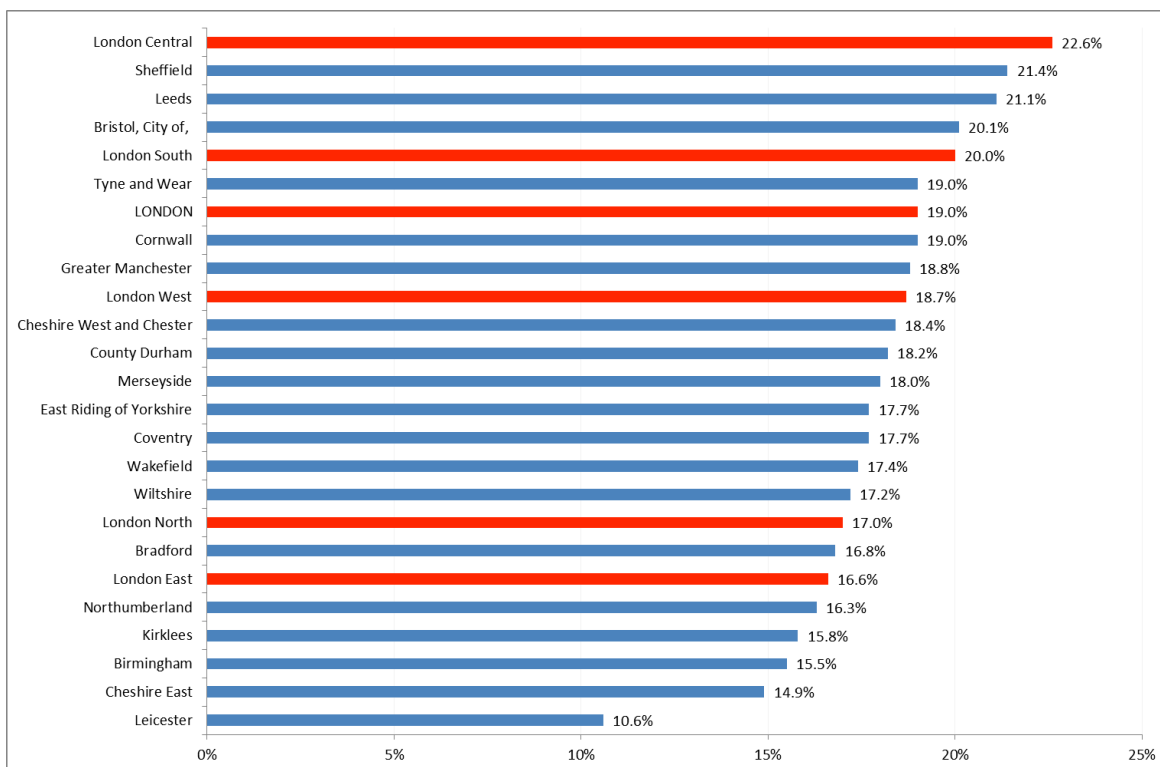


Figure 20: 3x30 sport participation for London sub-regions and selected English cities (2012/13)



Stage 3: International comparisons

There is no research available comparing sports participation across different international cities. There is research however attempting to compare sports participation across European countries. The first attempt to do this was the COMPASS (Coordinated Monitoring of Participation in Sports) project whose first report was published in 1999.³ The initial COMPASS project involved comparisons across six European countries: Finland, Ireland Italy, Sweden, UK and the Netherlands. All these countries had data from which comparisons could be made. In later developments, Spain and Portugal were added allowing comparisons across eight countries.

The main result of the COMPASS project was to identify the Nordic countries, represented by Finland and Sweden in the study, as having much higher levels of regular participation than other European countries. Not only were their participation rates higher than other countries but there was less decline with age and no significant difference between the participation of men and women in contrast to all other countries in the study where male participation was higher than female participation. This is partly because the funding model in these countries puts grassroots participation ahead of elite sport and also because historically they have had a strong club-based system dependent on the voluntary sector. It is also argued by some

³ UK Sport, Sport England and CONI (1999), Sport Participation in Europe: COMPASS 1999, London, UK Sport.

commentators that countries with more equal income distributions have better outcomes on a range of social well-being measures than other countries with bigger inequalities.⁴ Gratton et al show that this is also true for sport participation with Finland and Sweden having the lowest inequality of income and the highest sport participation of all the countries in Europe for which data was available.⁵

Overall there was a north/south pattern in the structure of sports participation in Europe: Nordic countries have both the highest participation rates and take part, on average more frequently than countries to the south of them. Also there appears to be a further fall in both participation and intensity as we move further south to the Mediterranean countries, with low participation rates and frequency in the COMPASS study for Italy, Spain and Portugal. Countries such as the UK, Ireland and the Netherlands were in between the Nordic countries at the top and the Mediterranean countries at the bottom.

Since the COMPASS project there has continued to be substantial interest in comparative studies of sports participation in different European countries. Van Bottenburg et al analysed sport participation in 25 European Union member states.⁶ Finland and Sweden emerged again as the European countries with the highest levels of sports participation with Denmark not far behind. The north/south divide identified in Compass was also evident in this study.

More recently, the European Commission's Eurobarometer survey has been utilised to examine participation in sport in the European Union. This was first commissioned in 2003 and a follow up poll was conducted in 2004. The survey was carried out again in 2009 for the then 27 countries that then made up the European Union, and again in 2013 for the current 28 members of the EU.

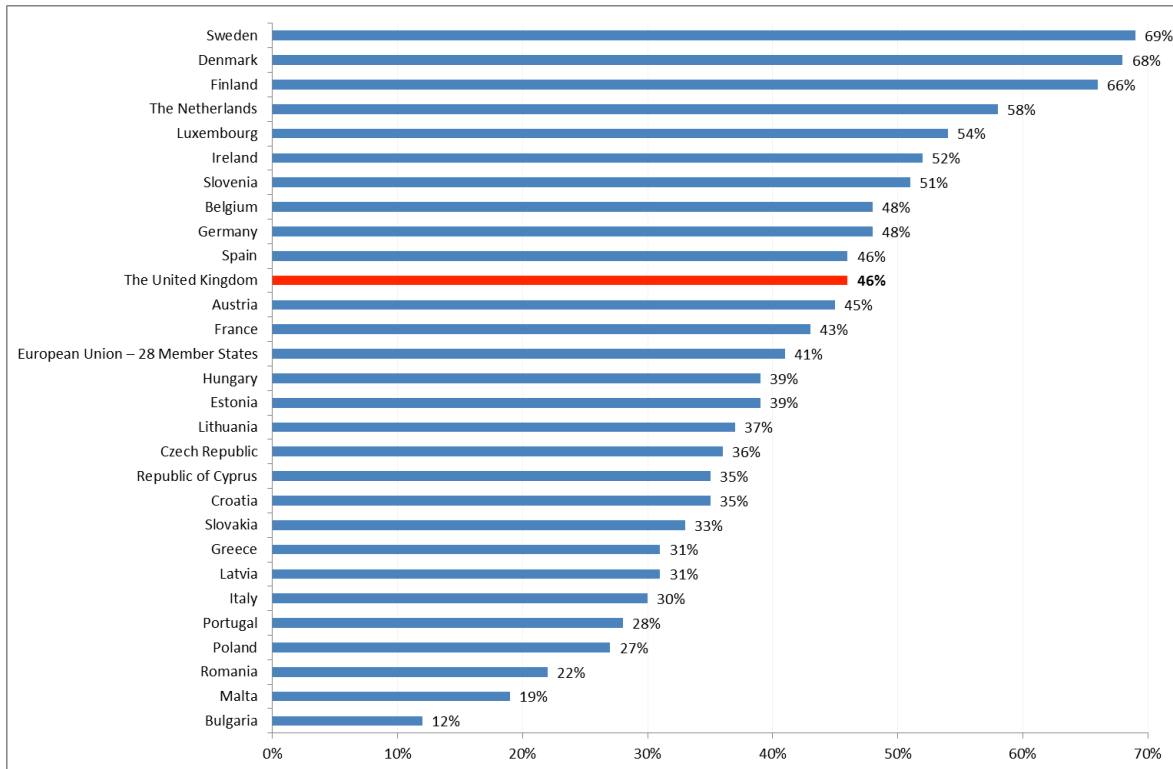
The Eurobarometer survey's strength is that the same questions are asked in all countries. Its weakness is that the sample size in each country is only one thousand, which is extremely small for a sport participation survey. The Active People Survey for instance is around 160,000 sample for just England. The result is that sampling error for any country is likely to be substantial. For the UK, the Eurobarometer results differ substantially from the Active People results.

⁴ Wilkinson, R., and Pickett, K. (2009) *The Spirit Level: Why more equal societies almost always do better*, London, Allen Lane.

⁵ Gratton C, Rowe N, and Veal A J (2011), International comparisons of sports participation in European countries: an update of the COMPASS project, *European Journal for Sport and Society*, 8, 1&2, 99-116.

Figure 21 shows the Eurobarometer results for 2013 for the 'once a week' sport participation measure. This is not the same as the 1x30 measure because no time threshold is mentioned in the Eurobarometer survey.

Figure 21: Once a week sports participation rates in Europe 2013



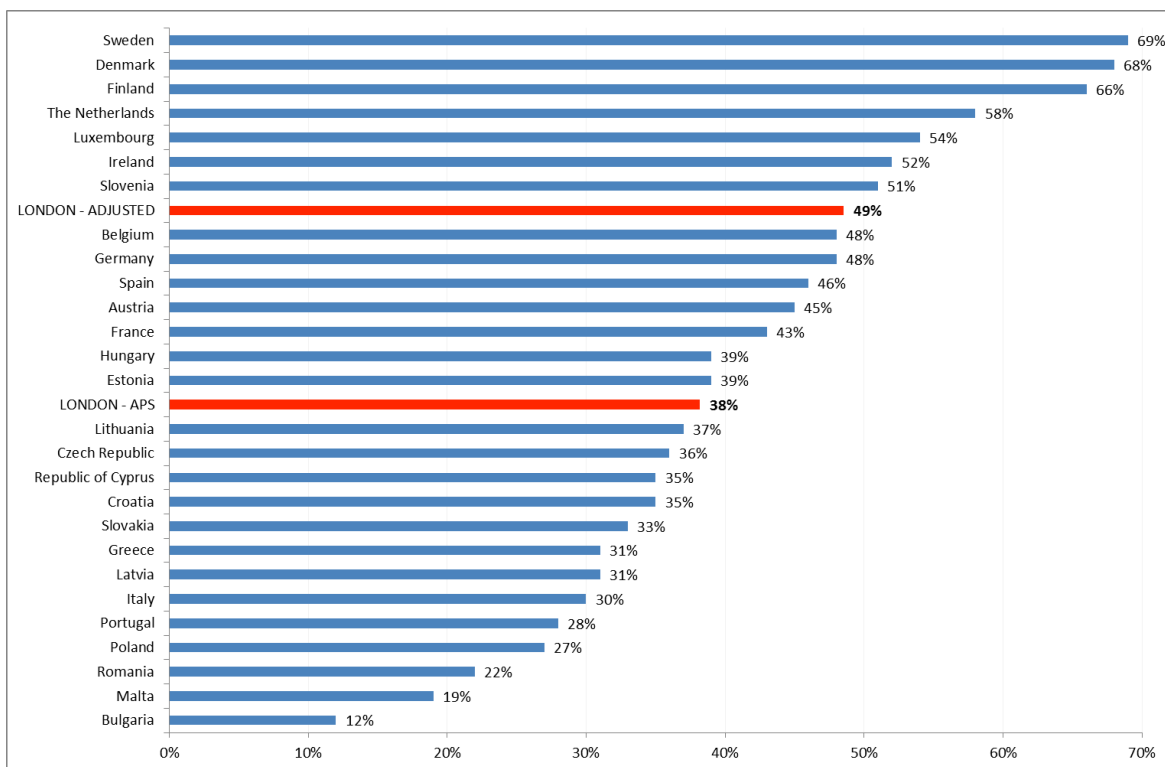
Despite the problems with the sample size, it is still clear that the Nordic countries' levels of sports participation are at a different level to any other country and clearly top any league table. Norway is not in the European Union but research suggests that participation levels would be very similar to Sweden, Finland and Denmark. Also at the bottom of the table we have a range of Mediterranean countries such as Malta, Portugal, Italy and Greece with participation rates below half the level for the Nordic countries. Within this group of countries there are some former communist block countries such as Bulgaria, Romania and Poland. In between these two extremes we have the central European countries such as the UK in joint tenth place and above the EU average by 5%. The north/south divide is not so clear-cut as it was in the 1999 study but it is still there.

⁶ van Bottenburg, M., Rijnen, B., and van Sterkenburg, J. (2005), Sports participation in the European Union: trends and differences, Nieuwegein, Netherlands, W. J. H. Mulier Institute/Arko Sports Media (www.arko.nl/index.php).

Figure 22 repeats the comparison but replaces the UK by London with the London figure adjusted for the difference between the England figure for APS and the Eurobarometer figure for the UK. This rationale for this adjustment is that, unlike the APS, the Eurobarometer survey measures sports participation regardless of whether or not it is undertaken for at least 30 minutes and at moderate intensity. Consequently, it would be reasonable to expect the participation rate for the UK on the Eurobarometer to be higher than the participation rate for England measured using the APS. The once a week participation rate for the UK according to the Eurobarometer is 46%, compared with 36.2% according to the APS for England.

The adjusted figure for London shown in Figure 22 (49%) was calculated by multiplying the participation rate for London from the APS in 2013 (38.2%) by the participation rate for the UK from the Eurobarometer (46%) divided by the APS participation rate for England (36.2%). On this basis London is 8th compared to the other European countries.

Figure 22: Once a week sports participation rates in Europe cf. London 2013



Figures 23 and 24 do the same for the 'three times per week' measure. On this measure the UK is 10th and London is 9th.

Figure 23: Three times a week sports participation rates in Europe

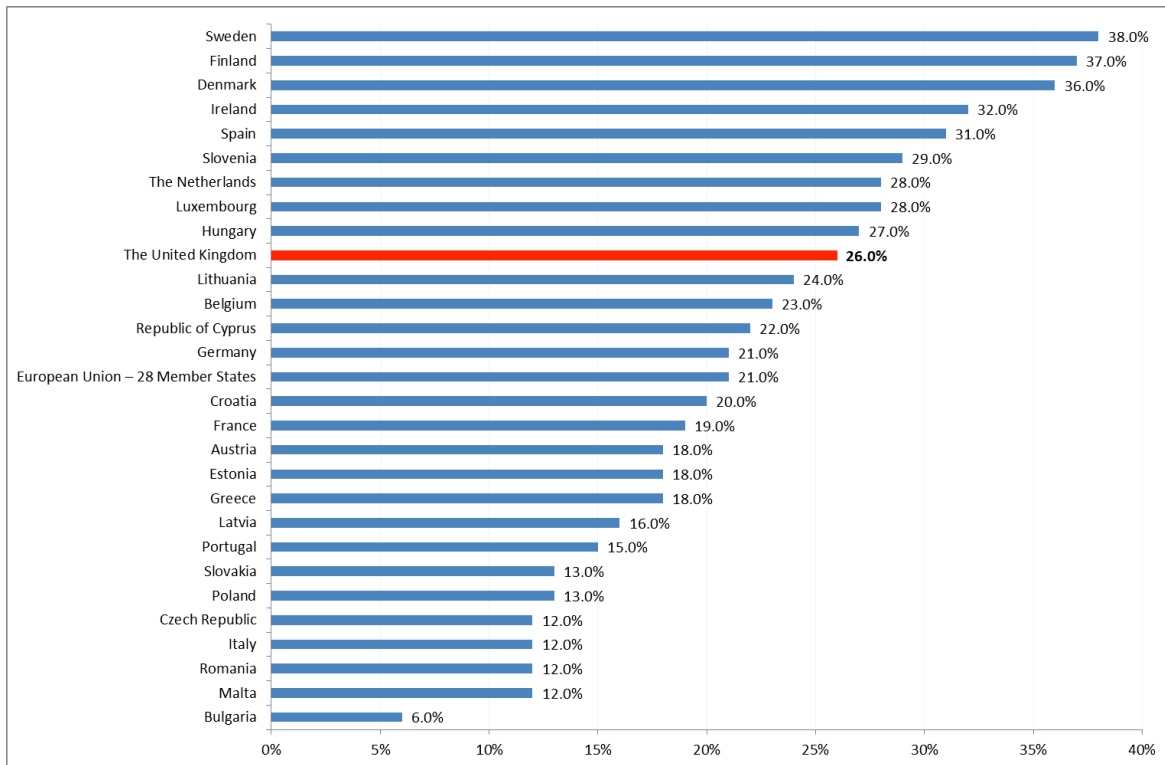
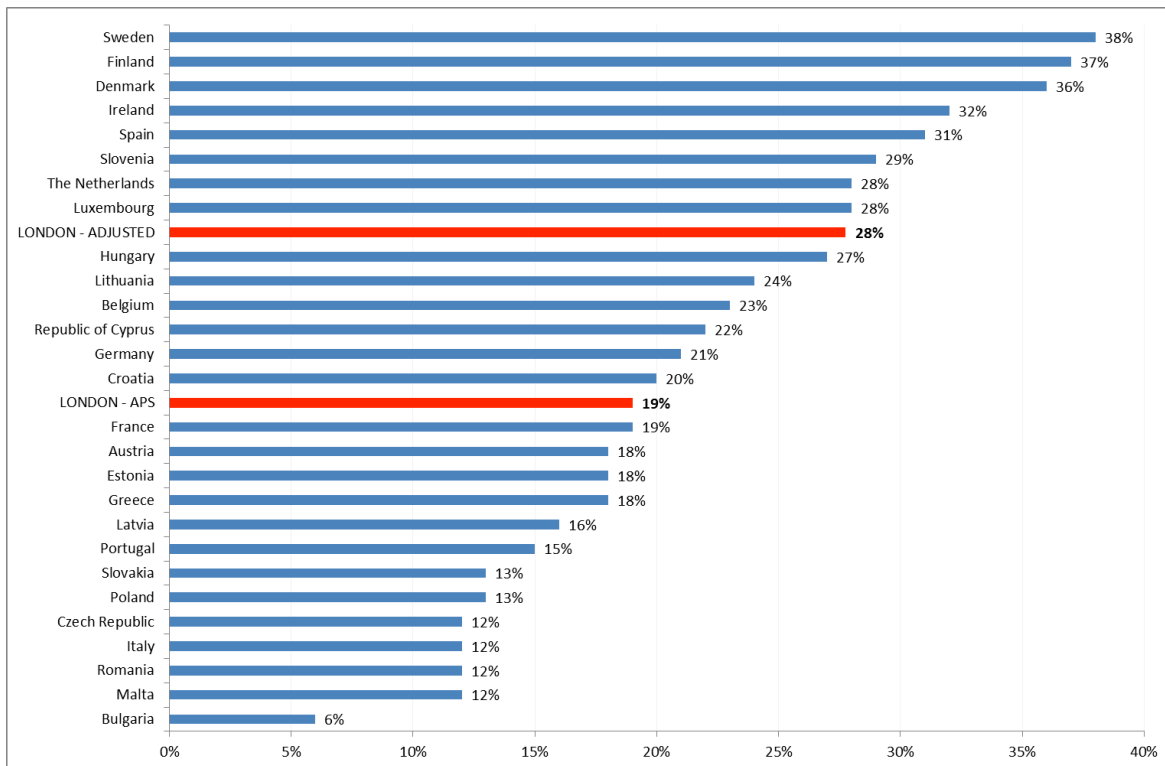


Figure 24: Three times a week sport participation rates in Europe cf. London 2013



Conclusions

Sports participation in London is the highest for any of England's nine regions. It is also substantially higher than the average for England as a whole. Sports participation in London peaked in 2012/13 showing a very clear Olympic effect. It fell back in 2013/14 but remained at a higher level than at any time prior to the Olympics. There is considerable diversity in the sports participation rate within London with London Central and London South having much higher rates than the other three sub-regions.

If we look at the 20 largest cities in England, London is near the top of the table but sports participation in cities such as Sheffield and Leeds is higher than in London. When we compare London's sport participation rate internationally, it does not match the very high rates achieved in particular in the Nordic countries. Although the data does not exist to make clear comparisons there is enough data to establish that cities such as Oslo, Stockholm, Helsinki and Copenhagen will have a much higher sports participation rate than London.