



England Golf

The impact of golf participation on health and wellbeing

Working in partnership



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Executive Summary

Physical Activity: Golf is engaging a large proportion of insufficiently active people

Over half of golfers were classed as insufficiently active (60%). Adding this to the inactive figure of 11% means that over seven in ten of our surveyed sample were not getting the minimum recommended level of activity each week. However, 29% of golfers did reach these minimum levels, compared to 57% of the overall UK population. Whilst these findings highlight the importance of getting golfers more active, they also serve to show that golf is providing a valuable source of physical activity in their lives. In many cases it is likely to be the only activity they are doing.

Mental Wellbeing: Active golfers' average mental wellbeing score is higher than inactive golfers

Golfers mental wellbeing was very similar to the national average (7.64 on a scale of 0–10 compared to 7.65 for the whole country). An interesting finding was the difference in mental wellbeing scores between the three activity groups. The active group had by far the highest score with 8.35. This was 17% higher than the score of 7.12 for the inactive group. Compared to their respective local authorities, there was a reasonably even split of sites that were lower than the average for their area and those that were higher.

Individual Development: Active golfers have a higher self efficacy for playing golf and exercising

There was a pleasing set of results from the self efficacy questions, with over 70% scoring both the likelihood of playing golf and the likelihood of exercising generally with a positive score (7 or above on a 11 point Likert scale). Negative scores for these questions were extremely rare, with 4% rating them at 3 or below. Just under half (43%) of respondents scored their self efficacies the same for golf and exercise, with 30% scoring exercise higher. The difference between these two scores differed dramatically at a local authority level, with the largest difference in the Bexley and Birmingham areas which both recorded higher self efficacies for golf.

Looking at the difference in answers by activity levels, the active golfers scored higher on both questions. This was most significant on the likelihood of exercising question where their average score of 8.95 was 56% higher than the inactive group score of 5.73.

Social Trust: Golfers' have a higher level of trust than the UK average

The response for golfers to the Social Trust was higher than the UK average. Golfers scored this question an average of 6.56, over one point higher than the UK score of 5.38. Over half of golfers (54%) responded to this question with a high score (classed as 7 or more). Looking at the pattern by activity level, again the active golfers scored higher than the inactive. The average for active golfers was 6.75, 12% higher than the inactive score of 6.03.

Economic Development: if active golfers stopped playing it would create a burden of over £3million

The section on the use of the Sport England Value of Sport Model highlighted the magnitude of the financial impact that golf participation can have. The burden of cost that would be placed back onto a local authority were active golfers to stop playing the game would amount to nearly £3.5 million. This is made up of over £0.5 million of health cost savings and just under £3 million of other health benefits such as QALYS. On the other side of the coin, if inactive golfers could be encouraged to increase their activity levels and move into the active category this would amount to over £380,000 of cost savings to the local authority, £60,000 from health cost savings and £320,000 from other benefits. These figures are calculated only from the respondents of the survey – the extent of cost savings were this to be scaled up to all golfers participating in the sport would be a substantial figure.

How will England Golf and Mytime be using the findings from this research?

- >> To set up golf on referral schemes to extend the benefits of golf to hard to reach demographic groups. The Golf on Referral Pilot was developed to provide an additional referral route alongside Mytime Active's traditional methods, incorporating group support on various aspects of a healthy life alongside specific golf skills.
- >> To develop interventions to encourage inactive golfers to play more golf and improve their health and wellbeing.
- >> To promote the health benefits of the game more widely to all audiences.

Introduction

This report presents the final results of a collaborative investigation by England Golf, Mytime Active and ukactive into the impacts of golfing participation on health and wellbeing, and the wider social components associated with playing golf. The ukactive Research Institute conducted research and analysis into golfing participation to provide insight to England Golf to help them improve services and tailor their delivery.

In order to measure the impact of golf participation, a questionnaire was developed which included questions on activity levels and wider health and wellbeing measures. This questionnaire was then disseminated by staff at the 12 Mytime Active courses participating in the project. After each round of golf that was played, golfers were invited to complete the questionnaire. This data collection was ongoing for just over a year, from July 2016 to August 2017.

There was a total of 3,258 completed and signed surveys from 12 golf courses collected during the data collection phase. The distribution of responses was uneven across the participating courses, but overall coverage was widespread with responses submitted from golf courses across the country.

Methodology

The first half of the survey contained demographic questions and two questions related to Mytime Active's wider product base. These questions were used to gain an understanding of the characteristics of those who were playing golf, including gender, age, ethnicity and disability. This part of the survey also established participants current activity levels by asking two questions adapted from the International Physical Activity Questionnaire (IPAQ). This enabled us to use the Chief Medical Officers' activity guidelines for weekly activity to group adults as active, insufficiently active or inactive, which offered the ability to benchmark against the rest of the country.

The second half of the survey was constructed to evaluate the impact of golf in line with the Government's new strategy for sport. The Strategy, 'Sporting Future: A New Strategy for an Active Nation', identifies what needs to be done to increase the number of people enjoying and taking part in sport and physical activity across the UK. At the centre of this strategy is a framework which defines how success will be judged. The strategy states that this will be done by measuring impact on the following set of outcomes:

- >> Physical wellbeing
- >> Social and community development
- >> Mental wellbeing
- >> Economic development
- >> Individual development

The survey asked questions based on the Sport England evaluation framework to measure golfers' scores and compare these to the wider population.

This report includes analysis on each of the key themes based on the framework that were included in the survey, and how responses differed between golfers and the general UK population, as well as between golfers who take part in higher levels of physical activity. Whilst the distribution of golf courses across the UK was not uniform, the UK average has been used as it offers an indicative standard to compare against and more geographically discrete breakdowns are not available for all metrics.

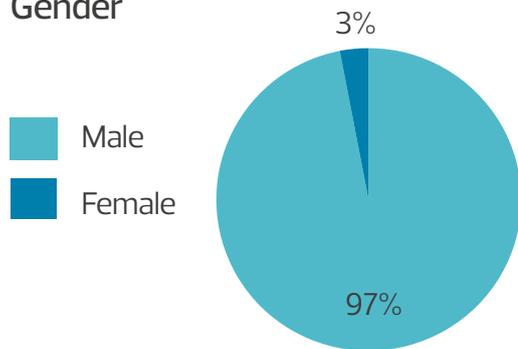
Respondent Overview

This section of the report presents an overview of who completed to the survey and where the responses originated from.

Participant Breakdown

Figure 1: Participant Demographics

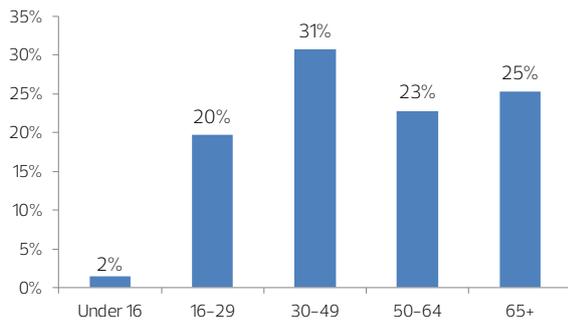
Gender



Ethnicity

White or White British	96%
Asian or Asian British	2%
Black or Black British	1%
Mixed	1%

Age



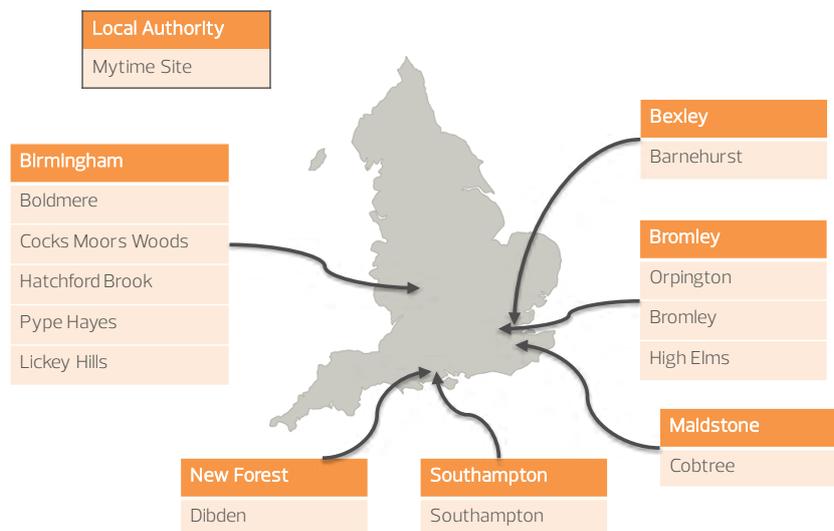
Disability

"Do you consider yourself to have a disability?"



The map below shows the location and local authorities of the golf courses that submitted responses. There was a good spread of courses across the UK.

Figure 2: Location and local authority of golf courses



Physical Activity Levels

To measure their physical health, golfers were asked two questions, the first being:

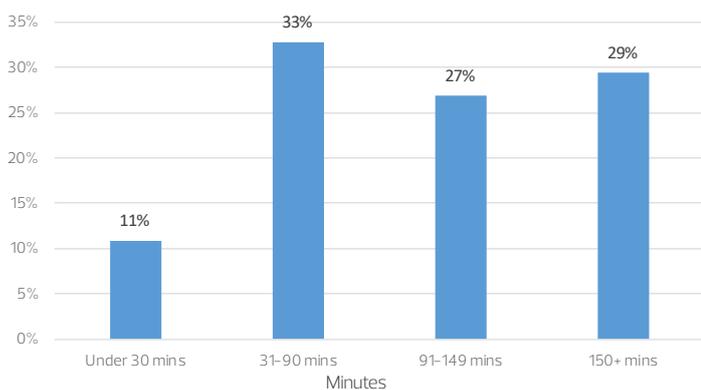
“In the past week, how much moderate intensity physical activity have you completed in total?”
1) Under 30 mins 2) 31-90 mins 3) 91-149 mins 4) 150+ mins (2.5 hours)

The question was adapted from the more in-depth International Physical Activity Questionnaire (IPAQ), and directly relates to the Chief Medical Officer’s (CMO) physical activity guidelines for adults. These guidelines state people should undertake a minimum of 150 minutes of moderate intensity physical activity a week. This would class them as ‘active’. Anyone undertaking less than thirty minutes is classed as ‘inactive’, with the remaining classified as ‘insufficiently active’.

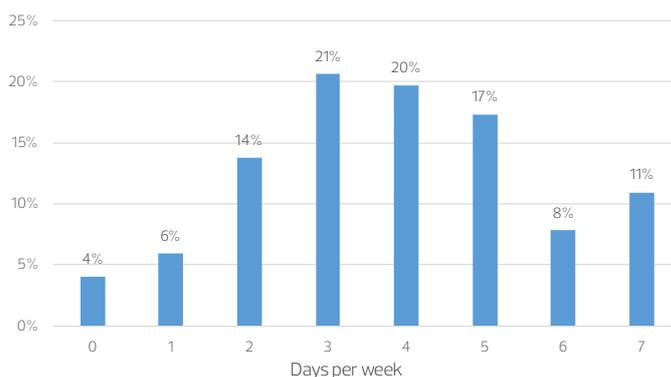
Results

3,080 golfers answered this question, 95% of the overall sample. Of those who answered, 11% of golfers said that they did less than 30 minutes of moderate physical activity per week, placing them in the inactive category. 29% of golfers were achieving the recommended level of at least 150 minutes, which classed them as active. The remaining 60% fell in between these two categories and are classified as insufficiently active.

Graph 1: Percentage of golfers by activity level

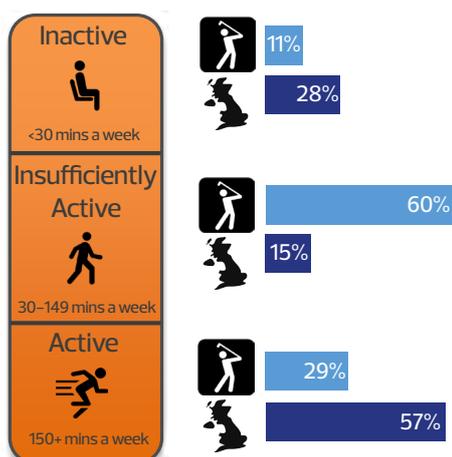


Graph 2: Percentage of golfers active by number of days per week



Golfers were also asked “In the past week, on how many days have you done a total of 30 minutes or more of moderate intensity physical activity?”. The most common answer for this was three days a week with 21% of golfers selecting this option. 4% of golfers were not active at all during the past week (0 days). On the other end of the scale more than one in ten (11%) were active every day of the week. The answers to this question illustrated the huge range of fitness and activity levels that golfers have, and the wide appeal of golf to a variety of groups. The average number of days that golfers were active was 3.86 per week.

Comparison against national figures



The percentages of active, insufficiently active and inactive golfers have been compared to national population activity statistics from the Sport England Active Lives Survey. This showed the proportion of golfers who are inactive to be less than half the proportion of the national population who is inactive (11% compared against 28%).

However, the proportion of golfers who were meeting the CMO guidelines (active) was also much smaller than the proportion of the national population achieving the same standard (29% compared to 57%).

This does mean that golf is engaging a high proportion of insufficiently active people (60%), who without golf, would likely be inactive.

Mental Wellbeing

In order to assess golfers' mental wellbeing, the survey included the Office of National Statistics (ONS) personal wellbeing life satisfaction question:

“Overall, how satisfied are you with your life nowadays?”

Scoring for this question is based on an 11-point Likert scale from '0- Not at all' to '10-Completely'. Asking the ONS satisfaction item allows the self reported mental wellbeing of golfers to be compared to national and local averages so that the outcomes can be benchmarked and contextualised.

This measure has been used in more wellbeing studies and surveys than any other measure, including World Values Survey, European Social Survey and the DEFRA Survey of Public Attitudes and Behaviours.

Results

The results showed that golfers' had a high average life satisfaction, with 78% ranking this question at 7 or above. The average score was almost identical to the national average. The average life satisfaction for the golfers was 7.64. In comparison, the national average is 7.65. 18% of golfers scored this question with the maximum response of 10. Life satisfaction and mental wellbeing are influenced by many different elements and further questioning could provide more in-depth understanding of the impact of golf participation.

Table 1: Percentage of golfers reporting each score for mental wellbeing

Score	0	1	2	3	4	5	6	7	8	9	10
%	1%	0%	1%	2%	2%	9%	8%	17%	28%	15%	18%

Golfers' average: 7.64

National average: 7.65

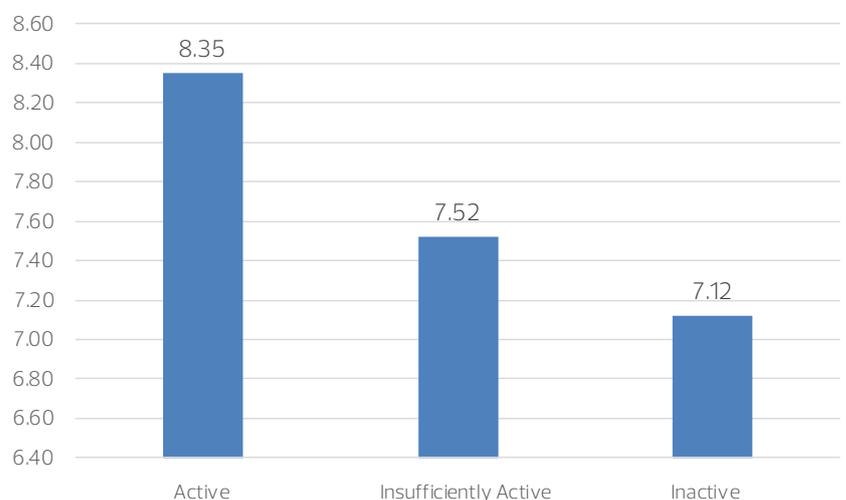
By physical activity level

Splitting the results by golfers' activity levels (as determined according to the CMO guidelines) shows that reported scores for mental wellbeing increase as activity levels increase.

The inactive golfers had an average score of 7.12. This increased by over a point to 8.35 for the active golfers.

The biggest percentage of golfers are classified as insufficiently active, and their average score was 7.52.

Graph 3: Golfers Mental Wellbeing score by physical activity level



Individual Development: Self Efficacy

A single-item scale for assessing exercise self efficacy was developed as part of a randomised trial to determine the cost savings and changes in health-related quality of life elicited through exercise (Grembowski et al., 1993). The measure is scored on an 11-point Likert scale (0-10) where zero is 'Not at all sure' and 10 is 'Very sure'.

Golfers were asked two questions based on this structure to assess their belief about their ability first to perform exercise behaviour and secondly to take part in golf specifically.

“How sure are you that you will exercise regularly during the next year?”

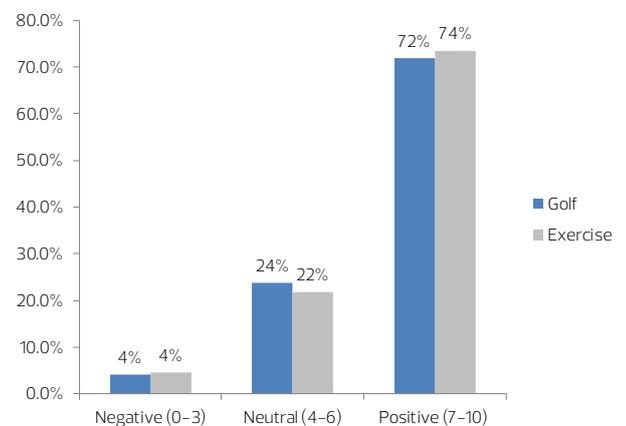
“How sure are you that you will play golf regularly during the next year?”

Results

Golfers scored both their self efficacy for playing golf, and for general exercise, on a scale of 0 to 10. The vast majority of scores for both measures were positive (7 or over). 72% of respondents scored self efficacy for golf at 7 or higher, with 74% scoring self efficacy for exercise at 7 or over.

The average for golf was 7.74, with the exercise average slightly lower at 7.69. There was only a small percentage (4%) who scored either measure negatively (3 or less on the scale).

Graph 4: Summary of self efficacy scores



Comparison of self efficacy for golf and exercise

Graph 5: Scoring difference between golf and exercise



Just under half of respondents scored their self efficacies for golf and exercise at the same level. 30% rated their exercise efficacy higher than their golf.

These results suggest some golfers do not consider the golf they play as counting as exercise, showing the importance of highlighting golf as a form of exercise.

By physical activity levels

	Inactive 	Insufficiently Active 	Active 
Will regularly exercise	5.73	7.59	8.95
Will regularly play golf	7.42	7.60	8.36

By using golfers' physical activity levels we can look at the impact of increasing activity levels on self efficacy. For both golf and general exercise self efficacy, those who were active scored higher than those who were inactive. The difference between the inactive and active was 3.22 for exercise self efficacy and 0.94 for golf self efficacy.

Social Trust

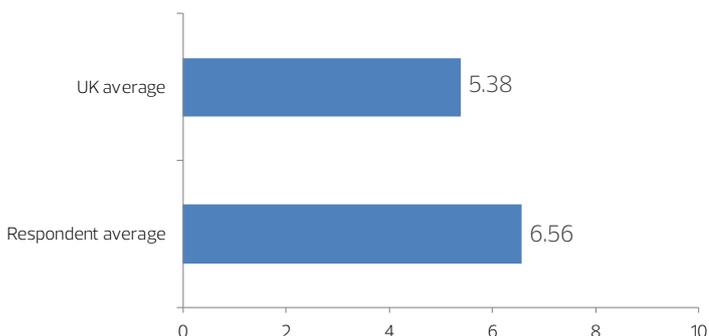
Golfers' levels of social trust were determined by asking about their interpersonal trust:

“Generally speaking, would you say that people can be trusted or that you need to be very careful in dealing with people?”

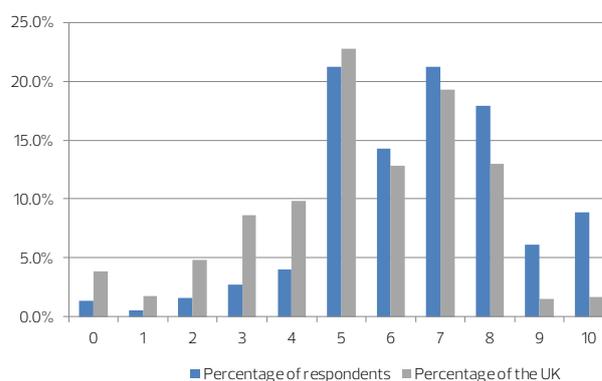
This question was scored on an eleven point Likert scale ranging from '0- Definitely cannot be trusted' to '10- Definitely can be trusted'. The results can be benchmarked against the results of the 2016 European Social Survey (ESS 2016). It is stated within the ONS literature that a score of 7 or more is considered high.

Results

Graph 6: Social trust average scores



Graph 7: Score breakdown for golfers and the UK



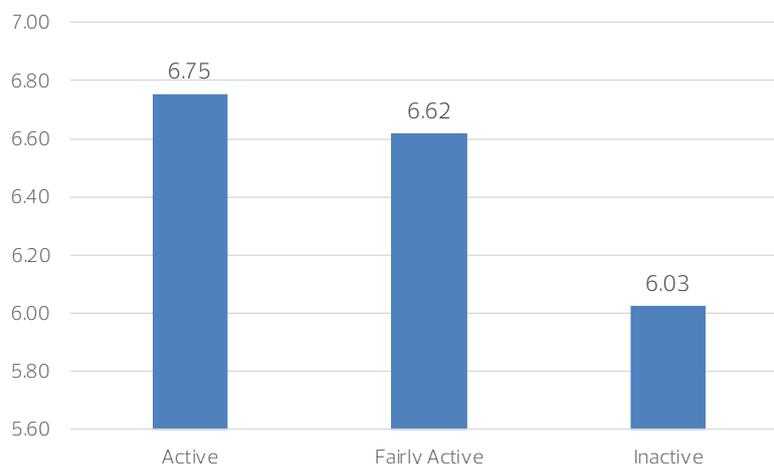
The average score for golfers was 6.56. This is over one point higher than the UK average which is 5.38. Scores of 7 or above are classified as 'high'.

For golfers, 54% of responses fell into this category, compared to 36% for the UK. This suggests that golfers have a higher level of social trust than the general UK population.

By physical activity level

Looking at social trust scores by activity level shows a clear pattern- the average score decreases as activity level drops. Those golfers classed as active had an average score of 6.75, compared to the inactive golfers score of 6.03. This highlights another important aspect of golf and exercise, with increased engagement with exercise in the local community serving to increase the social trust of players.

Graph 8: Social trust scores by activity level



Economic Development

The **Sport England Economic Value of Sport- Local Model** tool is based upon research performed under the Culture and Sport Evidence (CASE) research programme 'Understanding the value of engagement in culture and sport' (DCMS, 2010) and was built to estimate the long term value of sports participation. In the model, value is expressed in monetary terms and the final outcome is a figure representing the savings made through the health benefits associated with engaging in different sports for different age groups. By utilising this tool the value of golf and physical activity can be demonstrated at a local level.

Results

Engagement of inactive golfers

To use the tool the number of participants per age group was inputted for each local authority. Across both phases of the survey 71% of respondents provided their ages. For the purposes of this analysis it has been assumed that this is a representative age distribution of the entire sample. Responses were mapped across the population of each local authority to produce an estimate of the age breakdown for the whole sample (including those who did not give their age).

Using these participation figures the tool calculates the health savings to the Local Authority through health cost savings and other health benefits (QALYs etc.) In total the tool estimates that if the currently engaged 334 inactive golfers continued their participation and moved into the active category a total of £388,315 could be saved. £60,075 would come from the savings attributed to no longer needing treatment and £328,240 from the improved quality of life. As would be expected the areas with the highest participation contributed the largest amount to these totals.

Table 2: Estimated health savings per Local Authority due to golfers' participation

Local Authority	Health Cost Savings	Other health benefits (QALY's etc.)	Total
Birmingham	£13,562	£72,881	£86,443
Bromley	£23,278	£126,590	£149,868
Southampton	£9,132	£51,973	£61,105
Maidstone	£3,709	£20,782	£24,491
Bexley	£6,919	£37,882	£44,801
New Forest	£3,475	£18,132	£21,607
TOTAL	£60,075	£328,240	£388,315

Active golfers' termination

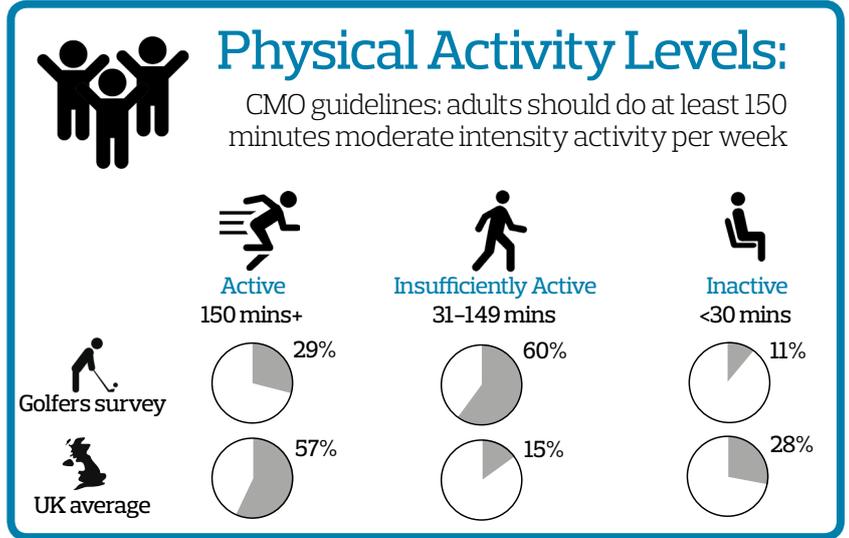
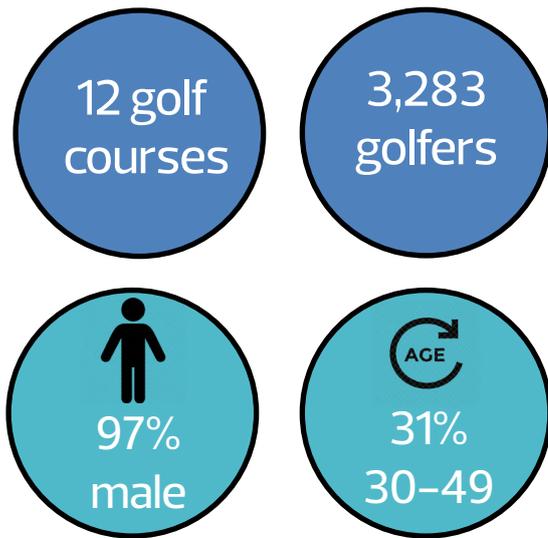
The same procedure was used to calculate the age distribution of the golfers who were not classed as inactive, so included those who were either active or insufficiently active. The health cost savings and other health benefits in the table below represent the amount of money that is already being saved i.e. if these golfers were to stop playing and became inactive this cost would be placed back on the local authority. This amounts to a potential burden of £3,445,293 on the local authority budget. This is made up of £522,976 of health cost savings and £2,922,317 of other health benefits.

Table 3: Estimated health savings per Local Authority due to active golfers' participation

Local Authority	Health Cost Savings	Other health benefits (QALY's etc.)	Total
Birmingham	£87,759	£488,733	£576,492
Bromley	£260,872	£1,446,299	£1,707,171
Southampton	£71,769	£409,243	£481,012
Maidstone	£25,920	£151,102	£177,022
Bexley	£28,032	£157,155	£185,187
New Forest	£48,624	£269,785	£318,409
TOTAL	£522,976	£2,922,317	£3,445,293

The impact of golf participation on health and wellbeing

a research study by ukactive, England Golf & Mytime Active



Mental Wellbeing

- >> Golfers scored the same as UK average (7.64 vs 7.65)
- >> Active golfers scored higher than inactive golfers (8.35 vs 7.12)

Social Trust

- >> Golfers scored above the UK average (6.56 vs 5.38)
- >> Active golfers scored higher than inactive golfers (6.75 vs 6.03)

Self Efficacy for Golf

- >> Average for golfers 7.74
- >> Active golfers scored higher than inactive golfers (8.36 vs 7.42)

Self Efficacy for Exercise

- >> Average for golfers 7.69
- >> Active golfers scored higher than inactive golfers (8.95 vs 5.73)

Economic Development

Using the Sport England Economic Value of Sport-Local Model tool to calculate local authority cost savings associated with participation in golf

Engaging inactive golfers would save local authorities

£380,000+

If active golfers stopping playing it would cost local authorities

£3,400,000+

These are costs associated with savings from the treatment of illness and disease, and savings from other health benefits

Appendix 1: Data Tables

Table 1: Mental Wellbeing scores by site and local authority

Site	Local Authority	Site Average	Local Authority
Barnehurst	Bexley	7.91	7.46
Boldmere	Birmingham	7.22	7.59
Cobtree	Maidstone	8.23	7.69
Cocks Moors Woods	Birmingham	7.28	7.59
Dibden	New Forest	6.99	7.86
Hatchford Brook	Birmingham	7.84	7.59
Orpington	Bromley	7.65	7.60
Pype Hayes	Birmingham	7.58	7.59
Pype Hayes & Boldmere	Birmingham	7.55	7.59
Southampton	Southampton	7.78	7.60
Bromley	Bromley	7.70	7.60
Lickey Hills	Birmingham	7.73	7.59
High Elms	Bromley	7.94	7.60

Table 2 Self efficacy scores for golfers by local authority

Local Authority	Average exercise self-efficacy	Average golf self-efficacy
Birmingham	7.52	7.93
Bromley	7.74	7.65
Southampton	7.98	7.85
Maidstone	8.10	8.17
Bexley	7.51	7.93
New Forest	7.11	7.14

Table 3: Age distributions of inactive golfers from each local authority

Local Authority	Total	Under 16	16-29	30-49	50-64	65+
Birmingham	13.9%	0.0%	8.7%	19.6%	41.3%	30.4%
Bromley	8.2%	1.3%	23.8%	28.8%	28.8%	17.5%
Southampton	10.6%	0.0%	19.4%	29.0%	19.4%	32.3%
Maidstone	11.7%	0.0%	0.0%	31.6%	31.6%	36.8%
Bexley	18.7%	3.1%	9.4%	46.9%	25.0%	15.6%
New Forest	6.5%	0.0%	13.3%	20.0%	46.7%	20.0%

Table 4: Age distributions of inactive golfers from each local authority extrapolated for whole sample

Local Authority	Total	Under 16	16-29	30-49	50-64	65+
Birmingham	81	0	7	16	33	25
Bromley	123	2	29	35	35	22
Southampton	53	0	10	16	10	17
Maidstone	23	0	0	7	7	9
Bexley	35	1	3	16	9	6
New Forest	19	0	2	4	9	4

Table 5: Age distributions of inactive golfers from each local authority

Local Authority	Total	Under 16	16-29	30-49	50-64	65+
Birmingham	86.1%	1.0%	17.1%	28.3%	25.2%	28.3%
Bromley	91.8%	1.3%	23.8%	33.4%	21.5%	19.9%
Southampton	89.4%	0.4%	16.4%	23.3%	22.5%	37.4%
Maidstone	88.3%	0.0%	11.9%	21.7%	21.0%	45.5%
Bexley	81.3%	11.5%	26.6%	39.6%	10.8%	11.5%
New Forest	93.5%	0.5%	16.2%	31.9%	25.5%	25.9%

Table 6: Age distributions of inactive golfers from each local authority extrapolated for whole sample

Local Authority	Total	Under 16	16-29	30-49	50-64	65+
Birmingham	503	5	86	142	127	143
Bromley	1374	18	327	460	295	274
Southampton	451	2	74	105	101	169
Maidstone	177	0	21	38	37	81
Bexley	151	17	40	60	16	18
New Forest	268	1	43	86	68	70



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