

**April 2023**

# **Active Lives survey**

## **2021-2022**

**Year 7 Technical note**





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# Fieldwork and survey design

The data presented here were collected between November 2021 and November 2022 in England. The data were collected using an CAWI online questionnaire (71.2%) and a paper self-completion questionnaire (28.8%). The questionnaire can be completed by members of the public aged 16 or over and is available through both online and paper versions. Valid responses which could be used for analysis were received from 177,551 people in total.

The Active Lives Survey is a 'push-to-web' survey involving four postal mail-outs designed to encourage participants to complete the survey online. The survey is 'device-agnostic' and can be completed on mobile or desktop devices. The first two mail-outs are letters with information about how to access the survey online and a passcode for accessing the survey. At the third mailing a paper self-completion questionnaire is sent out to maximise response. A final letter reminder is sent as the fourth mailing which includes a reminder of how to access the online questionnaire (it does not include a paper questionnaire).

The sample is selected from the Postcode Address File using random probability sampling and one letter is sent to each address inviting up to two adults from the household to take part.

The sampling was designed to achieve pre-determined numbers of returns from adults within each local authority across the year of the survey. For the majority of the local authorities (282 from 309) the target number of completed questionnaires was 500 returns.

## Target number of survey responses per local authority

Target	Local authority
200	Isles of Scilly
250	City of London
575	Solihull
675	Wolverhampton
725	Walsall
825	Sandwell
850	Dudley
1,000	Bolton, Bury, Calderdale, Coventry, Oldham, Rochdale, Salford, Stockport, Tameside, Trafford, Wigan
2,000	City of Bristol, Leeds, Liverpool, Manchester, Newcastle-upon-Tyne, Nottingham, Sheffield
2,850	Birmingham
3,500	Doncaster
500	All other local authorities

# Weighting

Weighting is required to reduce the bias in survey estimates. Weights are produced to make the weighted achieved sample match the population as closely as possible.

For the Active Lives Survey the weights correct for the disproportionate selection of addresses across local authorities and for the selection of adults within households. They also adjust the achieved sample by month to control for seasonality.

In addition, by weighting to population estimates and national estimates from the Annual Population Survey 2020, the weights should also reduce bias in the survey estimates. The control totals are produced from a mix of: 2020 population estimates (region with Local Authority), 2021 Labour Force Survey (number of people in household) and 2021-22 Labour Force Survey (everything else).

## **There were five stages to the weighting strategy:**

1. Calculation of an individual (within household) selection weight;
2. Initial calibration to local authority and age/sex population estimates and month counts assuming a proportionate sample;
3. A second stage of calibration to the same measures as well as national estimates from the Annual Population Survey;
4. Trimming of the second stage of calibration; and
5. A final adjustment to regional counts.

Multiple weights have been produced to allow correct weighting of the variables for different types of analysis. Most analysis has used the weight which covers the whole sample or the weight for online cases only. These two weights are provided on the main dataset.

# Confidence intervals

Confidence intervals for the measures presented in the report can be found in the linked report tables. Confidence intervals indicate that if repeated samples were taken and confidence intervals computed for each sample, 95% of the intervals would contain the true value. Confidence intervals vary for each measure and each demographic breakdown.

Confidence intervals have been calculated using the complex survey package in SPSS, which takes account of design effects. They are presented for rates (%) in the report tables. Confidence intervals would also apply to the population estimates presented in the report and report tables.

# Significance testing

The report and accompanying tables show data for the baseline year, the previous 12 months, and the current survey year (November 2015-16, November 2020-21 and November 2021-22)<sup>1</sup>. This has allowed for analysis of the change in participation and activity levels over time. To compare data across survey years, significance testing has been applied to the report tables. This indicates whether changes observed across survey years are likely to be 'true' changes in the population, rather than just observed by chance.

Standard errors were generated using the complex samples module in SPSS: these were then applied to t-tests to assess statistical significance.

Only differences which are statistically significant are reported on as differences in the commentary. Where results are reported as being the same for two groups, this means there is no statistically significant difference.

The accompanying tables also include data for the full time series. These tables are intended as summary statistics only, and so significance testing has not been applied to them.

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<sup>1</sup> Baseline periods may vary for individual metrics, where new questions have been added to the survey.

# Population estimates

These are estimates of the number of people in a particular group (for example, the number of people in the inactive group, or the number of males who have volunteered to support sport and fitness activities at least once a week throughout the last year).

These estimates have been calculated using the rate (%) and the 2021 population estimates from the ONS, and therefore the true value would lie within a range around the estimates. The confidence intervals for the population estimates can be calculated by dividing the population estimate by the rate (%) and multiplying by the lower and upper confidence interval rates in the report tables.



# Definitions used in the report

## Activity data in the report

The data were collected by asking which activities from a list people had done in the last 12 months, on how many days they had done each activity in the last 28 days, how long they usually spent doing the activity per day and whether it raised their breathing rate or made them out of breath or sweaty.

**Moderate activity:** This is defined as activity where you raise your heart rate and feel a little out of breath.

**Vigorous activity:** This is where you are breathing hard and fast and your heart rate has increased significantly (you will not be able to say more than a few words without pausing for breath)

People could also mention activities which were not listed on the questionnaire and these were coded to the relevant activity. These data then fed into the measures presented in the analysis (Levels of activity and taking part). The data have been cleaned such that duplicated fitness activities within a single questionnaire have been removed, missing durations have been imputed using the median duration for that activity and extreme durations have been capped at the 95<sup>th</sup> percentile for that activity. The questionnaire was set up such that people selected the activities they did. Any activity which was not selected was assumed not to have been done.

## Activity

- Increase in the percentage of people physically active.
- Decrease in the percentage of people physically inactive.
- Increase in the percentage of people who have undertaken muscle strengthening exercise at least twice a week in the last month.

The Chief Medical Officer defines an active person as someone who, over the course of a week, does 150 or more moderate intensity equivalent (MIE) minutes of physical activity. Breaking that down further:

Moderate intensity equivalent (MIE) minutes means each 'moderate' minute counts as one minute. Any vigorous activity counts for double, so each vigorous minute counts as two moderate minutes.

The 150 MIE minutes can be achieved in one go or in chunks of at least 10 minutes across different days through a combination of physical activities.

Associated measures are 'fairly active' which refers to 30-149 minutes by the same definition and 'inactive' which refers to less than 30 minutes. The sporting future guidelines refer to all sports, fitness, cycling, walking, dance and gardening activity. Gardening does not however fall under Sport England's remit and so, unless referenced otherwise, this is excluded from the data presented.

Activity is considered to be muscle strengthening if it required sufficient effort to '*make your muscles feel some tension, shake or feel warm*'.

## Taking part in Sport and Physical Activity

- Increase in percentage of the population taking part in sport and physical activity at least twice in the last month.

This is measured as the equivalent of 30 minutes or more activity at least twice in the last 28 days. Each session must last at least 10 minutes and be of at least moderate intensity.

An individual can reach the minimum threshold by a combination of two 30-minutes sessions across the last 28 days or by six 10-minute sessions, for example. This is measured for all activities including sports, fitness, dance, cycling and walking (including for travel).

In the analysis, specific activities have been grouped together into composites to look at groups of sports or disciplines. When creating composites across activities anyone who did not tick any of the relevant activities which feed into the composite were treated as not having done that composite activity. Therefore, there are no missing values for these composites. In some cases, intensity was assumed and not asked (assumed always to be light, moderate or vigorous). Activities done by those aged 65 and over were assumed to be at least moderate in all cases and therefore counted in the taking part measure. Results are also presented for smaller groups of specific activities.

The table below shows the specific activities which are included under each of the composite activity groupings used in the report. Where relevant, the wording or description given in the questionnaire is also included for reference.

### Definitions of composite activities within the Active Lives survey

Composite	Activities included
Walking for leisure	Walking for leisure (including dog walking, rambling, and Nordic walking). Walking around shops is excluded.
Walking for travel	Walking around shops is excluded.
Cycling for leisure and sport	Cycling for leisure, Mountain biking, BMX, Road cycling or racing, Track cycling, Cyclo-cross, Cycling for Leisure and all other cycling, Exercise bike, Cycle class (e.g. spinning, RPM).
Cycling for travel	Cycling for travel (including commuting).
Creative or Artistic Dance	Creative or Artistic Dance. For example, ballet, ballroom, belly dancing, contemporary, contact improvisation, Flamenco, folk, hip-hop, historical/period, Irish, jazz, jive, Latin American, line or square dancing, salsa, street dance, South Asian, tango or tap.

Composite	Activities included
Fitness activities	<p>Combining several activities in a gym.</p> <p>Fitness machines such as Cross training machine (e.g. Cross trainer, SkiErg), Exercise bike, Rowing machine, Step machine, Treadmill, Other exercise machine.</p> <p>Fitness class such as Pilates, Yoga, Boxing class (e.g. Boxercise, body combat), Cardio class (e.g. aerobics, step aerobics, body attack), Core strength class (e.g. legs bums and tums, body balance), Cycle class (e.g. spinning, RPM), Dance-based class (e.g. Zumba, fitsteps, raverise or body jam), Water-based class (e.g. aquaerobics, aquafit), Weights-based class (e.g. body pump, kettlebell), Other fitness or exercise class.</p> <p>Weights session such as Resistance weights machines, Free weights (includes kettlebells and dumb-bells), Weightlifting or powerlifting (using a barbell).</p> <p>Interval sessions, such as Circuit training, Cross training, Bootcamp (e.g. drill sergeant, military fitness), Cross fit, High intensity (e.g. HIT, insanity).</p> <p>Generic fitness session, covering things such as Body weight exercises (e.g. pull ups, press ups, sit ups), Skipping, Aerial fitness, Hula hooping.</p>
Sporting Activities	<p>Team Sports: Football, Cricket, Rugby union, Rugby league, Touch rugby, Wheelchair rugby, Netball, Basketball, Wheelchair basketball, Field hockey, Volleyball, Rounders, Dodgeball, Baseball or softball, Lacrosse, Goalball, Handball, Gaelic sports, Other team sport.</p> <p>Racket Sports: Tennis, Badminton, Squash or Racketball, Table Tennis.</p> <p>Adventure sports: Hill or mountain walking or hiking, Rock climbing or bouldering, Climbing or bouldering wall, Caving or pot holing, Abseiling, Orienteering, Parkour or free running, High ropes.</p> <p>Water sports: Rowing, Sailing, Windsurfing, Gliding, paragliding or hang gliding, Canoeing or kayaking, Rafting, Water skiing or wakeboarding, Surfing, board surfing, body boarding, kite surfing, paddle boarding, Scuba diving or snorkelling, Life-saving, Other water sports such as dragon boat racing.</p> <p>Leisure games and activities: Angling or fishing, Archery, Fencing, Ice skating, Frisbee or ultimate Frisbee, Rounders, Garden trampolining, Ten-pin bowling, Croquet, Cue based sports (e.g. billiards, snooker and pool), Darts, Skittles, Other leisure activity or game.</p> <p>Combat sports, Martial Arts or Target Sports: Archery, Boxing, Fencing, Judo, Taekwondo, Martial arts, Shooting, Wrestling, Tai Chi</p> <p>Winter sports: Skiing, Snowboarding, Sledding, luge, tobogganing, Ice hockey, Curling, Ice skating, Other winter sports.</p> <p>Swimming, diving or water polo: Swimming indoors and outdoors, Diving, Water polo.</p> <p>Running, athletics or multi-sports: Track and field athletics, Running or jogging, Fell or trail running, Triathlon (includes aquathlon and duathlon), Modern Pentathlon, Obstacle course (e.g. Tough mudder, Spartan, Rat Race).</p> <p>Golf.</p> <p>Horse riding.</p> <p>Bowls or Boules.</p> <p>Gymnastics, trampolining or cheerleading.</p> <p>Roller or skating sports: Roller-skating, inline skating, rollerblading, Roller hockey, Skateboarding, Ice skating.</p> <p>Motorsports: Karting or go-karting, Motorcycle racing, Motorcar racing.</p>

The report presents certain activities from within the sporting activities group. This table shows what they include.

### Definitions of sporting disciplines within the Active Lives survey

Sporting Activity: Composite	Activities
Badminton	Badminton
Basketball	Basketball (does not include Wheelchair basketball)
Bowls	Bowls including carpet bowls, crown green bowls, flat green bowls, short mat bowls
Boxing	Boxing and boxing fitness
Climbing or mountaineering	Includes hillwalking, hiking, rock climbing and bouldering (including on climbing walls)
Cricket	Long and short form cricket and nets and practice and other cricket
Equestrian	Hacking or pony trekking, Schooling, Show jumping, Dressage, Eventing, Other horse riding
Football	11 a-side, small sided, futsal, walking football and other football
Golf	Full course golf, Short course golf, par 3, pitch and putt, putting, Driving range, Adventure or crazy golf
Gymnastics	Gymnastics and trampolining (excluding garden trampolining)
Netball	Netball
Rowing	Water based rowing and rowing machine
Rugby union	15 a-side, Rugby Sevens, touch and tag rugby
Running	Running or jogging and treadmill
Snowsport	Skiing and snowboarding
Squash	Squash and racketball
Swimming	Swimming (indoors, outdoor pool and open water)
Table tennis	Table Tennis
Tennis	Tennis
Track and field athletics	Track and field athletics

### Volunteering

This is measured as having volunteered in sport and physical activity in the last 12 months. It is reported by four key frequencies from once/ one off to once a week throughout the year.

Respondents were asked a series of questions about different types of volunteering in sport and physical activity. These questions were updated from November 2019 to provide more detailed data on the frequency, duration and longevity of volunteering activity. Please see the Technical Note for the November 2019-2020 release for more detail on the updated volunteering questions.

### Sports spectating

- Number of people who have attended a live sporting event more than once in the past year.

This is measured as having watched two or more live sports events, whether professional or amateur, over the previous 12 months.

The question was asked as part of a list of different activities. They were asked:

- Have you done this activity (attended a live sports event) in the past 12 months?
- If you have done this activity in the past 12 months how many times have you done it? Additional information provided was: Include all matches and competitions, including professional sport as well as watching family and friends compete.
- Answers of 'twice' or 'three or more' were included in this measure. There were some missing data from the postal questionnaire, if people did not answer this question. These people are excluded from the base.

## Outcomes

Respondents were asked a series of questions about their overall wellbeing. These are presented as mean scores out of ten. These included the ONS wellbeing metrics:

- Life satisfaction: "How satisfied are you with life nowadays?"
- Happiness: "How happy did you feel yesterday?"
- Worthwhile: "To what extent are the things you do in your life worthwhile?"
- Anxiety: "How anxious did you feel yesterday?"

Additional questions were included to ascertain respondent's individual resilience and their perceptions of community cohesion:

- Goals: "I can achieve most of the goals I set myself"
- Resilience: "If I find something difficult, I keep trying until I can do it"
- Community trust: "Most people in your local area can be trusted"
- Community integration: "Your local area is a place where people from different backgrounds get on well together"

## Loneliness

This is measured as the proportion who feel lonely often or always.

## Attitudes

Respondents were asked a series of questions to understand the place sport and exercise has in their lives, and their sense that they are both ready and have the opportunity to be physically active.

For each statement, respondents were asked the extent to which they agree or disagree that:

- They find sport/exercise enjoyable and satisfying;
- It's important to them to do sport/exercise regularly;
- They feel they have the opportunity to be physically active; and,
- They feel they have the ability to be physically active.

## Key demographics variables

### Age and gender

The report contains breakdowns by *age and gender*. The gender question used in the Active Lives survey asks people to describe how they think of themselves, and allows them to provide the answer 'in another way'.

### Number of long-term limiting impairments

The questionnaire asked whether people had any physical or mental health conditions or illnesses that have lasted or are expected to last 12 months or more. Those who said yes were asked whether these physical or mental health conditions or illnesses have a substantial effect on their ability to do normal daily activities. All those who reported any conditions or impairments were asked whether the disability or illness affected them in any of 13 ways (including other). These were long term pain, chronic health condition, mobility, dexterity, mental health, visual, breathing, memory, hearing, learning, speech, behavioural, other (more detailed descriptions were provided on the questionnaire). Those who answered yes to the impairment having a substantial effect were considered to have a limiting impairment. The number of limiting impairments was derived from the question which asked about types of impairment. It should be noted that this is the number of impairments from a set list reported by people who said that any of their conditions or illnesses have a substantial effect.

Those in the no limiting impairments category are those who reported no conditions or illnesses and those who reported that any conditions they have do not have a substantial effect on their ability to do normal daily activities.

### Social Status

The measure used is a National Statistics Socio-economic Classification (NS-SEC) measure derived using the self-coded method<sup>2</sup>. This assigns people aged 16-74 to a classification using information collected about employment status (self-employed or employed), the size of organisation and supervisory roles. People are then asked to place themselves in one of eight occupational groups. From this, a five class NS-SEC measure can be derived. Testing of this method by ONS showed a 75% agreement with the interviewer coded method. More details about this method can be obtained from ONS, since the standard self-coded method was used.

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<sup>2</sup> Section 14 in the ONS Socio-economic classification guidance.

<https://www.ons.gov.uk/methodology/classificationsandstandards/otherclassifications/thenationalstatisticsocioeconomicclassificationnssecbasedonsoc2010>

## Current education stage

Those who reported that they were in full or part time education when asked about their working status were asked about where they are studying. In addition, those who did not report being in full or part time education were asked whether they were studying for a recognised qualification. Those who were studying for a recognised qualification were asked where they were studying.

## Note on terminology

In the report tables, the term “respondents” is used as the heading for the unweighted base for each column. The term respondents have been used because the term participant which is usually used to refer to people who take part in a survey is confusing in the context of a survey about sports participation where participation has a different meaning.

The term rate (%) means the weighted percentage of respondents who gave that answer.



