SPORT ENGLAND

The social value of sport and physical activity in England

Updating and extending the year one analysis

Primary value | Year two report

November 2025

STATE OF LIFE

sportengland.org

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Lead author: Rose Fawcett

Working group: Lizzie Trotter, Allan Little, Eddie Hillier, Will Watt and Jasmine Kazantzis

This report is prepared by the above authors in collaboration with Sport England and other consortium members. Transparency is fundamental to our work.

Contents

Glossary

Active (adults): Doing 150+ minutes of 'moderate equivalent intensity' physical activity per week.

Active (children and young people): Doing an average of 60+ minutes of physical activity a day.

C-WELLBY

Child wellbeing-adjusted life year. A version of the WELLBY (see next page) for children aged under 10 that links other measures of child wellbeing - such as happiness - to changes in life satisfaction. This provides a comparable way to measure and value children's wellbeing.

Coefficient

The difference in the outcome due to differences in the variable of interest, and not explained by the control variables.

Control variables

Important factors which may influence our outcome of interest.

CYP

Children and young people.

Fairly active (adults): Doing 30-149 minutes of 'moderate equivalent intensity' physical activity a week.

Fairly active (children and young people): Doing an average of 30-59 minutes of physical activity a day.

Inactive (adults): Less than 30 minutes of 'moderate equivalent intensity' physical activity a week.

Less active (children and young people):

Less than an average of 30 minutes of activity a day.

'Moderate equivalent intensity' activity

Each 'moderate' minute (you raise your breathing rate) counts once and each 'vigorous' minute (you're out of breath or are sweating) counts twice.

Monthly volunteering

Volunteering at least once a month (but less than once a week) throughout the year.

Participation

Taking part in forms of sport and physical activity (excl. gardening) that contribute to minutes of physical activity.

Primary value

The direct benefit and value to individuals of improved wellbeing.

Multiple linear regression

A statistical method which identifies how a difference in one 'variable' or factor influences another 'variable' or outcome, while taking into account influences from elsewhere.

Secondary value

The wider value to society, including the state.

Social value

"All significant costs and benefits that affect the welfare and wellbeing of the population". (HM Treasury 'Green Book', 2020).

Weekly volunteering

Volunteering at least once a week, throughout the year.

Wellbeing value

The method for deriving 'primary value' (above). It measures wellbeing using the Office for National Statistics question: "Overall, how satisfied are you with your life nowadays?" (0-10 scale). A one-point change for one year is a 'wellbeing adjusted life year' or WELLBY. HM Treasury values one WELLBY at £15,900 (2024 prices).

WELLBY

Wellbeing-adjusted life year. See 'wellbeing value' above.

Executive summary

Context and background

In 2024, State of Life and our consortium partners (Sheffield Hallam University, Manchester Metropolitan University, and the London School of Economics (LSE)) produced a new national model of social value for Sport England. This model examined the health and wellbeing benefits of being physically active and highlighted how these benefits vary across different groups of individuals.

This new **primary value report** remains aligned with HM Treasury's Green Book guidance[1] and uses the underlying WELLBY[2] measure and methodology developed by LSE. This work builds on the first year to:

- Update results to reflect changes in pricing, inflation, and levels of participation and engagement in sport and physical activity.
- Extend analysis to children of primary school age, and for a wider range of groups.

1 HM Treasury Green Book (2022)
2 Wellbeing-adjusted Life Year

Methodology

This model estimates the health and wellbeing benefits of sport and physical activity by distinguishing between:

- **Primary value**. Direct benefits to individuals through improved wellbeing.
- **Secondary value**. The wider value to society, including the state (e.g. through a reduced burden on the NHS).

This report focuses on **primary value** and its alignment with HM Treasury's Green Book (2022)[3], using the **WELLBY** (Wellbeing-Adjusted Life Year) approach.

The analysis applies the UK Government's recommended wellbeing valuation method. One WELLBY, equivalent to a one-point increase on the 0–10 life satisfaction scale, is valued at **£15,900** (in 2024 prices). Using robust multiple regression models, the study estimates the impact of physical activity and sport volunteering on life satisfaction. These per-person wellbeing impacts are then aggregated using **2023–2024 participation rates**, giving a national estimate of the primary social value of sport and physical activity in England.

Advancements from year one

Several key developments have enhanced the model since the first year:

- Inclusion of younger children (below age 11): use of the newly developed **Child-WELLBY**[4], led by LSE, enables valuation for children aged 7+ in physical activity.
- Expanded scope of analysis:
  - Demographic breakdowns now includes children and young people (CYP).
  - Estimates of the social cost of inequality extended to CYP.
- Updated inputs:
  - All calculations use 2023–2024 participation data and 2024 price levels.

3 HM Treasury Green Book (2022)
4 https://cep.lse.ac.uk/_NEW/publications/abstract.asp?index=1154

Headline findings

The total annual **primary (wellbeing) value** of sport and physical activity in England is estimated at:

£106.9 billion

comprising:

£84.2 billion	Adult physical activity (age 16+)
£14.1 billion	CYP physical activity (age 7–16)
£8.6 billion	Adult volunteering (age 16+)

Wellbeing value per person (annual, 2024 prices)[5]

Group	Fairly active	Active[6]	Volunteering
Adults (16+)	£1,200	£2,600	£1,000 (monthly) £2,100 (weekly)
CYP (11–16)	£3,300	£4,300	
CYP (7-11)	£1,700	£3,100	

These figures represent the uplift in wellbeing compared to being inactive (for adults) or less active (for CYP), and doing no volunteering.

5 Comparison values (from HM Treasury Green Book (2021), Annex 2, 2019 prices): being employed rather than unemployed is valued at £6,000 per year (0.46 shift in life satisfaction), positive job quality characteristics (such as security, autonomy and support) are valued at £3,000 per year (0.25 shift), experiencing flooding or sewage works with odour issues is valued at -£650 per year (-0.05 shift), and exposure to daytime aircraft noise is valued at -£2,000 (-0.147 shift).

6 Using Sport England and CMO thresholds: 'Levels of Activity', Sport England

Demographic insights

Wellbeing values vary across groups, with some less active demographics showing **higher per-person benefits** from physical activity and others showing lower wellbeing benefits. For example:

Group	Value of being active (£/person/year)
Adults (16+)	**£2,600**
Adults of mixed ethnicity	£5,900
Disabled adults / LTHC	£5,300
Adult women	£3,200
CYP (11-16)	**£4,300**
Black children	£2,300
Girls	£3,300
Disabled children / LTHC	£2,800
Low affluence children	£2,900

Key finding: young people present a complex picture but also an opportunity

- With adults we observe that activity generally has a higher value for marginalised groups (those with a disability, long-term health condition) but in children the finding is different.
- For young people the wellbeing benefits of being active appear to be lower for girls, low socio-economic groups, and ethnic minorities. While surprising, there are some clear suggestions as to why this may be:
  - issues around choice, opportunity and quality of provision in and out of school is not accounted for in our model.
  - it has been shown by Youth Sport Trust research that enjoyment and motivation are crucial to the wellbeing benefits and these are not controlled for in this model.
- State of Life's work with the Youth Sport Trust and the work of other organisations support these findings that generating enjoyment and motivation at an early age is vital to ensure the health and wellbeing benefits are realised at childhood with the potential to continue into adulthood.
- When opportunity and choice is equalised - such as the free provision of activity in schools - then we do see that the benefits are greater for the marginalised groups (the wellbeing benefits are almost double for those on free school meals or with a disability)[7].
- There is a significant opportunity to work with young people on addressing the 'enjoyment and equality gap' around the access, provision and quality of physical activity. The new plans from the Department for Education around connecting schools to local clubs through school enrichment programmes is promising.[8] Creating positive experiences for children and young people is a central pillar of Sport England's strategy and the Play Their Way initiative emphasises the importance of enjoyment[9].

7 The social value of free physical activity in schools
8 https://www.gov.uk/government/news/prime-minister-meets-with-lionesses-ahead-of-the-euros-to-announce-a-new-approach-to-school-sport
9 https://www.sportengland.org/about-us/uniting-movement/what-well-do/positive-experiences-children-and-young-people

- However, this evidence suggests that all of this new access and provision must focus on creating enjoyment and engagement for all rather than a more competitive approach that engages those who are already enjoying sport and activity. There is an existing movement to fund and grow the concept of 'play'[10] (including an All Parliamentary Planning Group[11]) and there are a number of countries and sports that are already taking this approach in early years.

Issues around the benefits and barriers in the current system for disadvantaged, vulnerable or marginalised young people seems a key area to address and investigate. We know that Sport England and the Department for Education are keen to do so.

Social cost of inequality

The model estimates the overall value of the wellbeing gap caused by inequalities in participation. This is based on a scenario where we assume less active groups, based on characteristics of inequality (e.g. disabled people, older adults aged 65+), were as active as the most active groups (i.e. those people with no characteristics of inequality). For CYP with characteristics of inequality, we also observe lower levels of wellbeing associated with physical activity and so the scenario also assumes that they experience the same wellbeing as those without these characteristics. We estimate that this is worth:

- **£15.8 billion annually** for all adults.
- **£1.4 billion annually** for all CYP, aged 11–16.

This highlights the potential wellbeing gains from reducing inequalities in access to and participation in sport and physical activity.

10 https://www.api-play.org/resources/funding/
11 https://www.playengland.org.uk/appg

Conclusion

This report offers the most comprehensive and up-to-date valuation of the primary wellbeing impacts of sport and physical activity in England.

The study estimates that sport, physical activity, and volunteering generate £106.9 billion in annual wellbeing value in England. Adults gain the largest share as they represent a larger share of the population than CYP.

Importantly, the report finds **inequalities in who benefits most**: adults from marginalised groups (women, those with disabilities or long-term health conditions) gain higher wellbeing returns when active, but children from disadvantaged groups show lower wellbeing benefits, possibly due to inequalities in access, choice, and enjoyment. Addressing this gap is critical: equalising participation and the experience of sport and physical activity could deliver **an additional £17.2 billion in wellbeing value annually**.

Overall, the findings strengthen the case for investment in sport and physical activity as a cost-effective way to improve wellbeing, reduce inequality, and maximise social value across society.

We thank our partners at Sheffield Hallam University and Manchester Metropolitan University, and the project steering group, including Dr Christian Krekel at the London School of Economics, for their intellectual input into the work. Final thanks go to the team at Sport England, including Andrew Spiers, Rob Flatt and Dominique Lammie.

1 Context and research aims

In 2023, Sport England commissioned a consortium of organisations, led by State of Life[12], to create an updated model of the social value of community sport and physical activity in England. The approach builds on two previous social return on investment studies, conducted by Sheffield Hallam University (SHU) in 2013/14 and 2017/18.

The approach splits social value into the primary and secondary value:

- **Primary value; direct benefits to individuals through improved wellbeing**. A key aim of this updated model is to align more to the UK Government, and HM Treasury guidance on estimating social value. The UK Government defines social or public value as "all significant costs and benefits that affect the welfare and wellbeing of the population, not just market effects".[13] This guidance specifically outlines robust methods to estimate benefits directly felt by individuals.[14] The guidance outlines a wellbeing valuation method, hence the term 'wellbeing value' is also used. This element is led by State of Life, and is the focus of this report.
- **Secondary value; the wider value to society, including the state (through a reduced burden on the NHS, social care and informal care)**. This element is led by SHU and Manchester Metropolitan University (MMU). More information can be found here: www.sportengland.org/socialvalue

12 Included Sheffield Hallam University (SHU), Manchester Metropolitan University (MMU) and London School of Economics (LSE).
13 HM Treasury 'Green Book' (2022), p5
14 HM Treasury 2021

In 2024, a 'year one' summary report and technical reports on the primary and secondary values were published: www.sportengland.org/socialvalue.

This is a final technical report on the primary value of participation in physical activity and sport volunteering. A summary of updates since year one are shown here.

	Year one	Final report
Price year	**2023**	**2024**
Elements that are aggregated to the population		
Participation rates used for aggregation	2022-2023	2023-2024
Primary wellbeing value from physical activity	Adults (16+)	Adults (16+)
	CYP (11-16)	CYP (11-16)
	-	CYP (7-11)
Primary wellbeing value from sport volunteering	Adults (16+)	Adults (16+)
Estimating the social cost of inequality	Adults (16+)	Adults (16+)
	-	CYP (11-16)
Additional exploration at individual level		
Exploring the value of physical activity by demographic	Adults (16+)	Adults (16+)
	-	CYP (11-16)

2 Broad methodology

Estimates of the wellbeing values are produced using robust analysis methods (Section 3) - specifically multiple linear regression (Section 3.1) - to estimate changes in life satisfaction associated with different levels of physical activity and frequencies of sport volunteering. These are converted to monetary value using the approach outlined by HM Treasury Green Book (2022),[15] and more specifically the supplementary guidance on wellbeing valuation.[16]

2.1 Social value, the Green Book, the WELLBY and the C-WELLBY

This research and updated model of the social value of sport and physical activity in England aims to align closely to this guidance on policy appraisal and evaluation.
The Green Book supplementary guidance (2021)[17] outlines robust methods to estimate *benefits directly felt by individuals*.

Behind the approach is a standardised unit of measurement known as the 'WELLBY' (wellbeing-adjusted life year); "*a one-point change in life satisfaction on a 0-10 scale, per person per year.*"[18] The guidance outlines that "**robust estimates of change in life satisfaction can be converted to a monetary value by multiplying by £13,000.[19] This is the recommended standard value of one wellbeing-adjusted life year.**

'WELLBY' - in 2019 prices and values."[20] This is converted to £15,900 using a 2024[21] price and value base year, using the formula recommended in the Green Book supplementary guidance (HM Treasury, 2021, p57).[22]

The guidance recommends asking life satisfaction in line with the Office for National Statistics (ONS) survey questions to measure personal wellbeing:[23]

> *"Overall, how satisfied are you with your life nowadays?"*
>
> [where 0 = not at all and 10 = completely].

15 HM Treasury Green Book (2022)
16 HM Treasury Green Book: Supplementary guidance on wellbeing (2021)
17 HM Treasury (2021)
18 HM Treasury Green Book: Supplementary guidance on wellbeing (2021), p19
19 This figure is the mid-point between two values using different methods (£10,000 is based on converting a Quality Adjusted Life Year (QALY) and £16,000 is based on estimating the effect of changes in income on life satisfaction).
20 HM Treasury (2021) Box 7 / Annex 2
21 In year one, this was £15,300 in 2023 prices.
22 We use GDP deflator growth (ONS series MNF2), and real GDP per capita growth (ONS series IHXW) in conjunction with the marginal utility of income elasticity parameter of 1.3. Rounded to nearest £100. https://missioneconomics.shinyapps.io/timetoggle/
23 HM Treasury Green Book: Supplementary guidance on wellbeing (2021), p6

2.1.1 C-WELLBY

The ONS life satisfaction question cannot be reliably answered by children under the age of 10[24] , and the Treasury's recommended wellbeing valuation method cannot be directly applied to this age group. As a result, economic evaluations have traditionally relied on narrower proxies — such as future earnings or taxpayer savings from reduced public service use — rather than capturing what truly matters in children's lives today.

To address this gap, researchers at the London School of Economics (LSE), supported by State of Life's Chief Economist, Allan Little, have developed the Child-WELLBY (C-WELLBY). This approach maps alternative, age-appropriate measures of child wellbeing onto the standard life satisfaction framework, enabling the valuation of wellbeing benefits for children under 11. This uses the ONS happiness question which is asked to younger children, and is included in the Active Lives survey:

> *"Overall, how happy did you feel yesterday?"*
>
> [where 0 = not at all and 10 = completely].

Further details can be found in Section 3.2.

2.1.2 Duration of impact using Active Lives

> *'over a period of one year'*

This is a key component of the definition of a WELLBY and Treasury guidance; the WELLBY can be applied if the observed change affects a person over a period of one year. How long the change is observed is often tricky to estimate. For it to be possible we would need either a) data on activity levels and wellbeing from the same participants over time or b) survey data produced by asking retrospective questions about activity levels and wellbeing. The Active Lives datasets (Adult and CYP) are not set up in this way; they are cross-sectional rather than longitudinal[25] and all activity variables in Active Lives are contemporaneous.[26]

Therefore, it's not possible to evidence (from Active Lives data) the timeframe along which the wellbeing benefits of sport are realised so we must state a key assumption. Given that sport, physical exercise and sport volunteering are lasting activities (e.g. they may be performed over long intervals of time throughout an individual's life), and the wellbeing benefits estimated in our analysis are contemporaneous, we assume that the per-person value (and therefore the aggregate social value) is a yearly value that is generated *every year for as long as the activity is performed*.

24 See for example: https://www.corc.uk.net/outcome-experience-measures/office-of-national-statistics-personal-wellbeing-domain-for-children-young-people/
25 Following the same individuals over time.
26 They cover a period of time (28 days or 12 months) up to and including the present.

2.2 Data sources

2.2.1 Active Lives Adult Survey

This research uses data from the nationally representative **Adult Active Lives Survey**, conducted by IPSOS Mori for Sport England through a household survey. The data has been available annually through the UK Data Service since 2015.[27] Some restrictions relating to key measures reduce our sample.[28] For this project, four waves of data are appended (years 2018-19 to 2021-22),[29] giving a total approximate sample of 240,000 adults (on average, 60,000 per year).[30] This is the chosen data source for the main findings due to the detail available relating to physical activity and sport volunteering.

2.2.2 Active Lives Children and Young People Survey

For those under 16, the research uses the nationally representative **Active Lives Children and Young People Survey** (CYP), also conducted by IPSOS Mori for Sport England through (mainstream) schools. This means that a) school years are the main age variable[31] and the determinant of who answers which sections of the survey, b) some information is collected at school rather than individual level, such as deprivation (see Section 8.9, and c) that disabled young people in special schools are not represented in the sample (see Section 8.10). The data has been available annually through the UK Data Service since 2017.[32] For the purpose of this project, six waves of data are appended (years 2017-18 to 2022-23). The possible sample size (age 7 -16) we can utilise is 600,000 (on average 100,000 per year).

2.2.3 Understanding Society Survey

Where possible, findings are triangulated with other sources, as recommended in the Green Book. For this purpose, the nationally representative **Understanding Society Survey** is used; the largest longitudinal household panel study in the UK.[33] For this study, seven waves of data can be used (years 2015-16 to 2021-22), giving a sample of approximately 126,000 adults.

27 https://ukdataservice.ac.uk/
28 Although seven waves of data are available, wave 4 (18-19) was when the general health question (an important control) was included in the survey. Although the full sample is approximately 180,000 adults per year, most wellbeing questions (including life satisfaction) are only asked to 'group 2' (approximately a third of all respondents).
29 The adult dataset for the year 2022-2023 will be added once it is made available through the UK Data Service.
30 This is when exploring activity level. Details on the frequency of volunteering was added to Active Lives in wave 5 (19-20), so for the volunteering analysis, three waves of data are appending, and the possible sample is approximately 185,000.
31 ie for ease of understanding we refer to age groups (such as 11-16), but strictly speaking this is those in school years 7-11.
32 https://ukdataservice.ac.uk/
33 https://www.understandingsociety.ac.uk/ and available through https://ukdataservice.ac.uk/

2.3 Descriptive statistics

Before the estimation technique was applied, descriptive statistics (such as averages, percentages, and distributions) were produced to explore the nature of the dataset and identify initial patterns and trends. This was conducted on the same samples used in the subsequent detailed analysis (multiple linear regression, see Section 3.1)—namely, multiple appended waves, and in some cases, specific sub-samples within each wave (see Section 2.2.1).

To keep the report concise, these descriptive statistics are not included in the reporting.[34] For the most recent trends and patterns in physical activity, it is recommended to refer to official statistics available through Sport England's latest annual reports,[35] data tables,[36] and the Sport England query builder.[37] These annual population estimates also inform the aggregation calculations presented in Section 5.

34 To request full descriptive statistics, please contact hello@stateoflife.org.
35 Sport England (2023-24)
36 Sport England (2023-24)
37 https://activelives.sportengland.org/Home

3 Wellbeing estimation technique

While descriptive statistics are useful for identifying general patterns, trends, and differences across groups, they do not account for other influencing factors or reveal how multiple variables interact.

3.1 Multiple linear regression

As outlined in Section 2.1, the underlying principle is that observed changes in outcomes should, as far as possible, be attributable to the intervention under assessment, rather than other, confounding factors. To approximate causal inference using observational data, a **multiple linear regression** framework is used.

This approach estimates the marginal effect of a key independent variable (e.g. physical activity level or volunteering) on the dependent variable (wellbeing), while holding constant a range of observed covariates—such as age, gender, ethnicity, and socio-economic status. Given the cross-sectional structure of the data, a pooled Ordinary Least Squares (OLS)[38] regression is used.

The model jointly estimates the relationships between the outcome and all explanatory variables, allowing the coefficient on the intervention variable to be interpreted as the estimated association, net of other influencing factors. These coefficients represent the best available estimates of the independent contribution of physical activity or sport volunteering to reported wellbeing.

3.1.1 Standards of evidence

Research methods to obtain the most robust estimates of causation (such as well-designed randomised control trials, experimental or quasi-experimental evidence) are beyond the scope of this project and the available data. The above explained methodology meets NESTA Standards of Evidence[39] level 3; '*You can demonstrate causality using a control or comparison group*'. To increase confidence in the evidence, we also conduct robust checks. Checking that the main finding holds from another source (Understanding Society) meets NESTA Standards of Evidence level 4 '*You have one + independent replication evaluations that confirms these conclusions*'. Furthermore, this finding is more robust due to the panel nature of the dataset (more details in Section 8.2).

38 https://www.xlstat.com/solutions/features/ordinary-least-squares-regression-ols
39 https://media.nesta.org.uk/documents/standards_of_evidence.pdf

3.2 Adaption to estimate Child-WELLBYs

The approach is adapted to estimate wellbeing benefits for children under age 11 (following on from **Section 2.1.1**). LSE compared survey data from those who have answered both the life satisfaction question and happiness question, and found this was best represented by a linear mapping function; a one-point improvement in a child's happiness maps to approximately 0.546 points on the life satisfaction scale (table 2). Therefore, it is recommended any change in happiness associated with an intervention is multiplied by 0.546 to appropriately estimate C-WELLBYs (this recommendation is critically considered in **Section 8.10**). They also recommend that this is valued at the same rate as the adult WELLBY.[40]

This happiness question cannot be reliably answered by children under the age of seven. Therefore, we do not assign monetary equivalent values to the significant impacts of sport and physical activity for children under the age of seven.

3.3 Control variables

These are important factors which may influence our outcome of interest, and are informed by the important determinants of wellbeing, as outlined in Fujiwara and Campbell (2011).[41] Some cannot be included as they are not captured in the Active Lives Adult data (e.g. income[42] and marital status) or due to their placing in a different routing of the survey to wellbeing outcomes (e.g. religious affiliation[43]) (see **Section 8.6** and **Section 8.7** for details on implications). The following information is captured through the Active Lives Adult data, and are used as control variables in our regression models. When these are used as controls they are included in their most detailed format, to improve explanatory power[44] in our models (e.g. all 10 deciles of deprivation and the detailed socio-economic groups, rather than the grouped variable).[45]

40 https://cep.lse.ac.uk/pubs/download/occasional/op069.pdf
41 Fujiwara and Campbell (2011) p41
42 Income is rarely included in national data due to the sensitivity of the topic. Socio-economic group and local area deprivation are the closest proxies available.
43 Sexual orientation also comes under this category, being placed in a different survey routing group to the wellbeing outcomes (in waves 4-7).
44 The extent to which explanatory variables (the intervention and controls) explain variation in the outcome variable.
45 There is a limit to the detail included, to avoid 'overfitting' (where a model too closely fits a particular set of data, and therefore is not applicable more widely.) For example, we do not include more detailed geographic information such as local authority.

Table 1 Standard set of control variables used in regression models

Adult data

Demographic characteristics:
- Age (grouped)[46]
- Gender
- Ethnicity
- Disability[47]
- Education (highest qualification)
- Employment status
- Socio-economic group (NS-SEC)[48]
- Self-reported health[49]

Geographic location:
- Region of England
- Urban/rural classification
- Local area deprivation (IMD decile)[50]

Household information:
- Household composition
- Number of children in household

Timing of survey:
- Month of interview[51]
- Wave of data collection
- Level of COVID restrictions[52]

CYP data

Demographic characteristics:
- School year[53]
- Gender
- Ethnicity
- Disability[54]
- Family Affluence Scale[55]
- Whether recipient of free school meals (secondary age only)

Geographic location:
- Region of England
- Urban/rural classification
- Local area deprivation (IMD decile) of school location[56]

Timing of survey:
- School term[57]
- Wave of data collection
- Level of COVID restrictions[58]

Notes: For various reasons, the level of control variables available in the CYP data is not as comprehensive as in the adult data. This is considered in Section 8.9.

46 Age in its raw format is not included in wave 7, so in all waves the grouped age variables are used.
47 Includes detail on whether an individual has a disability or long-term health condition, and whether it is limiting.
48 National Statistics Socio-economic classification (NS-SEC), see table 1.
49 Explored in more detail in section 8.8
50 Index of Multiple Deprivation
51 Months are grouped from the midpoint of each month, e.g. categories are 'mid-November to mid-December' rather than 'November'.
52 Four categories were created (no restrictions; limited restrictions; severe restrictions; full lockdown), informed by Sport England's report during these periods; November 19-20 and November 20-21 (page 4).
53 Captures influence of age.
54 Includes detail on whether an individual has a disability or long-term health condition, and whether it is limiting.
55 The Family Affluence Scale gives an indication of the social status of children and young people's families. More information on p.56 in Sport England CYP Active Lives Report 23-24.
56 Index of Multiple Deprivation
57 Captures influence of seasonality.
58 Four categories were created (no restrictions; limited restrictions; severe restrictions; full lockdown), informed by Sport England's report during these periods; Academic Year 21-22 (page 4).

3.4 Interpreting regression tables

The next section presents results from the multiple linear regression analysis. Each table begins by specifying the outcome variable of interest (e.g. life satisfaction), followed by the intervention variable under examination. This includes a 'base group' — the reference category against which other groups are compared.[59]

For each group, a coefficient is reported, representing the estimated difference in the outcome variable associated with that group (relative to the base group), after controlling for other variables in the model. These coefficients reflect the portion of the association not explained by the control variables.[60]

Each coefficient is accompanied by a significance level, indicated by asterisks, which denote the level of statistical confidence that the result is unlikely to be due to chance. The more asterisks, the higher the confidence. At the bottom of each table, the number of observations[61] included in the model and the adjusted R-squared value are provided, indicating the model's overall fit.[62]

When considering the magnitude of these shifts, we note that most adults (58%) answer (6, 7 or 8) to the ONS life satisfaction question. For further context, the table below shows the associated shift in life satisfaction for substantial life events.

3.5 Applying the valuation

Following the HM Treasury Wellbeing Guidance for Appraisal (2021), any identified shifts in life satisfaction (or mapped happiness) are multiplied by our 2024 valuation rate of the WELLBY; £15,900 (Section 2.1). For simplicity, and to avoid the impression of pinpoint accuracy, all monetary figures are rounded to the nearest £100.

Table 2 Comparison values (from HM Treasury Wellbeing Guidance for Appraisal (2021), Annex 2)

Life satisfaction shift	Value per year (2019 prices)
+0.46	being employed rather than unemployed: £6,000
+0.25	positive job quality characteristics (such as security, autonomy and support): £3,000
-0.05	experiencing flooding or sewage works with odour: -£650
-0.147	exposure to daytime aircraft noise: -£2,000

59 E.g. in table 4, 'inactive' is the 'base group' and we compare those who are 'fairly active' and 'active' to this group.
60 Hence, the base group has a coefficient of 0.000.
61 Observations in these tables are smaller than the reported possible samples (section 2.1) because if any of the control variables are 'missing' that observation automatically drops out of the regression.
62 Specifically, the proportion of variation in the outcome variable which is explained by variation in all explanatory variables (intervention variable of interest and all the control variables).

4 Value of individual participation

4.1 Physical activity

Table 3 Summary of analysis to estimate value of physical activity

Age	Adults (16+)	CYP (11-16)	CYP (7-11)
Outcome	life satisfaction	life satisfaction	happiness
Intervention	'active' and 'fairly active'	'active' and 'fairly active'	'active' and 'fairly active'
Comparison	'inactive'	'less active'	'less active'
Controls	standard controls in adult data (Table 1)	standard controls in CYP data (Table 1)	standard controls in CYP data (Table 1), (excluding free school meals as absent from primary school data)
Valuation	WELLBY	WELLBY	C-WELLBY

4.1.1 Adults

The outcome measure used is life satisfaction. Sport England's key metric for adult physical activity is informed by the Chief Medical Officer (CMO's) guidelines, which recommends adults do 150 minutes or more of 'moderate intensity equivalent' activity a week.[63] This means minutes of 'moderate'[64] activity are included, minutes of 'vigorous'[65] activity count as double and minutes of 'light' activity do not count.[66] Therefore, activity level is not simply a measure of minutes; it also accounts for intensity.[67]

The three categories of activity level are:

- ***Inactive*** *(< 30 minutes a week)*
- ***Fairly active*** *(30-149 minutes a week)*
- ***Active*** *(150+ minutes a week)*

63 'Levels of activity', Sport England
64 Activity where you raise your breathing rate
65 Activity where you're out of breath or are sweating
66 https://www.sportengland.org/research-and-data/data/active-lives?section=measures
67 Additionally, it only includes individual bouts of activity that last for 10 minutes or more. Sport England Active Lives Report (2023-24), p4

Table 4 Primary values for adult participation in sport and physical activity

Annual primary (wellbeing) value, per person per year (2024 prices).
Value is in comparison to being 'inactive'

	Primary value	Average life satisfaction score (having accounted for other influences)
Inactive	**£0**	6.99
Fairly active	**£1,200**	7.07
Active	**£2,600**	7.15

Notes: primary value = coefficient from table 5 multiplied by £15,900. (Previously £15,300 in year one, reflecting 2023 prices).

The associations in these tables may appear less than those from Sport England's descriptive statistics.[68] The difference here is that – due to our use of multiple linear regression – this reported association can be relatively confidently attributed to activity and not other observable factors.

These values are the monetary equivalent of the wellbeing shift associated with being fairly active or active, instead of being inactive. These primary values are calculated taking the coefficient associated with each level (table 5), multiplied by our 2024 WELLBY valuation rate (£15,900). **For adults, being active is worth roughly *double* the value of being fairly active**. Analysis to estimate the associated differences in life satisfaction are presented in table 5.

68 Such as those in the Sport England Active Lives Adult Report (2023-2024) (p34)

Table 5 Adult activity and life satisfaction: regression results

Active Lives Adult data, years 2018-2022

[Outcome variable-life satisfaction 0-10]	
	Regression coefficient
Inactive (base group)	0.000
Fairly active	0.077***
Active	**0.163*** **
Observations	211,086
Adjusted R-squared	0.258

Notes: Stars denote statistical significance: *p<0.1, **p<0.05, ***p<0.01. Only the coefficient of the variable of interest is shown here. A coefficient of 0.000 means this is the base group other subgroups were compared to.

Standard control variables included (see Table 1).

Having controlled for a variety of factors, we find that differences in life satisfaction are:

- **0.077** associated with an adult *being fairly active* rather than *being inactive*
- **0.163** associated with an adult *being active* rather than *being inactive*.

As these findings make up the majority of the overall social value (73%), we conduct a number of robustness checks on this (see section 8.2 and Appendix A7-A10).

4.1.2 CYP

For the age group 11-16, the outcome measure used is life satisfaction. For the age group under 11, the outcome measure used is happiness. Both age groups use the same measure for physical activity. Sport England's key metric for CYP's physical activity is also informed by CMO guidelines, which recommends young people do an average of 60 minutes of activity a day across the week, with activity being of at least 'moderate intensity':[69]

The three categories of activity level are:

- ***Less active*** *(< an average of 30 minutes of activity a day)*
- ***Fairly active*** *(An average of 30-59 minutes of activity a day)*
- ***Active*** *(An average of 60+ minutes of activity a day)*

Age 11-16

Table 6 Wellbeing values for CYP participation in sport and physical activity (11-16)

Annual primary (wellbeing) value, per person per year (2024 prices). Value is in comparison to being 'less active'

	Primary value	Average life satisfaction score (having accounted for other influences)
Less active	**£0**	6.55
Fairly active	**£3,300**	6.76
Active	**£4,300**	6.82

Notes: primary value = coefficient from table 7 multiplied by £15,900. (Previously £15,300 in year one, reflecting 2023 prices).

69 https://www.sportengland.org/research-and-data/data/active-lives?section=measures#children-and-young-people-survey-9263

These values are the monetary equivalent of the wellbeing shifts associated with being fairly active or active, instead of being less active. These primary values are calculated taking the coefficient associated with each level (table 7), multiplied by our 2024 WELLBY valuation rate (£15,900). **For this age group (11-16) being active is worth more than adults being active (1.7 times more)**. Analysis to estimate the associated differences in life satisfaction are presented in table 7.

Table 7 CYP (11-16) activity and life satisfaction: regression results

Active Lives Children and Young People data (age 11-16), years 2017-2023[70]

Outcome variable: life satisfaction [0-10]	
	Regression coefficient
Less active (less than an average of 30 minutes a day) (base group)	0.000
Fairly active (an average of 30-59 minutes a day)	0.207***
Active (an average of 60 minutes or more a day)	**0.269*** **
Observations	236,886
Adjusted R-squared	0.112

*Notes: Stars denote statistical significance: *p<0.1, **p<0.05, ***p<0.01. Only the coefficient of the variable of interest is shown here. A coefficient of 0.000 means this is the base group other subgroups were compared to. Blank spaces mean the respective variable was not included in that model.*

Standard control variables included (see table 1).

Having controlled for a variety of factors, we find that differences in life satisfaction are:

- **0.207** associated with 11-16 year-olds *being fairly active* rather than being less active.
- **0.269** associated with 11-16 year-olds *being active* rather than being less active.

70 This analysis uses the same data and method as in the year 1 report, but the findings differ very slightly. In year one, the wave 6 data was added using a dataset shared by Sport England. Now, the wave 6 data was added after downloading from the UK data service, this maintains a slightly larger sample size as it doesn't drop those with unknown disability. The difference is insubstantial, and the interpretation is materially the same.

Age 7-11

Table 8 Wellbeing values for CYP participation in sport and physical activity (7-11)

Annual primary (wellbeing) value, per person per year (2024 prices).
Value is in comparison to being 'less active'

	Primary value	Average happiness score (having accounted for other influences)
Less active	**£0**	7.55
Fairly active	**£1,700**	7.75
Active	**£3,100**	7.90

Notes: primary value = coefficient from table 9 multiplied by 0.546, multiplied by £15,900. (Previously £15,300 in year one, reflecting 2023 prices).

These values are the monetary equivalent of a wellbeing shift associated with being fairly active or active. This primary value is calculated taking the coefficient associated with this group (table 9), multiplied by 0.546 (to account for happiness as the outcome rather than life satisfaction), and by our 2024 WELLBY valuation rate (£15,900). **For this age group (7-11) being active is worth more than adults being active (1.2 times more)**. Associated differences in happiness are presented in table 9.

It is important to note that the valuation approaches differ between age groups, meaning direct comparisons should be treated with caution. For children aged 7–11, we map reported happiness (on a 0–10 scale) onto the life satisfaction scale used for older age groups, applying a conversion factor of 0.546. While this enables the inclusion of wellbeing values for younger children - an important step forward - it also means that some broader components of life satisfaction are not captured in the estimates for this age group. For example, beyond happiness, overall life satisfaction is also associated with lower levels of anxiety and the feeling that life is worthwhile. As a result, lower monetary values for younger children may reflect methodological constraints rather than genuinely smaller wellbeing gains.

Table 9 CYP (7-11) activity and happiness: regression results

Active Lives Children and Young People data (age 7-11), years 2017-2023

Outcome variable: happiness [0-10]	
	Regression coefficient
Less active (less than an average of 30 minutes a day) (base group)	0.000
Fairly active (an average of 30-59 minutes a day)	0.198***
Active (an average of 60 minutes or more a day)	**0.355*** **
Observations	168,177
Adjusted R-squared	0.028

*Notes: Stars denote statistical significance: *p<0.1, **p<0.05, ***p<0.01. Only the coefficient of the variable of interest is shown here. A coefficient of 0.000 means this is the base group other subgroups were compared to. Blank spaces mean the respective variable was not included in that model.*

Standard control variables included (see Table 1).

Having controlled for a variety of factors, we find that increases in happiness are:

- **0.198** associated with 7-11 year-olds *being fairly active* rather than being less active.
- **0.355** associated with 7-11 year-olds *being active* rather than being less active.

4.2 Sport volunteering

Table 10 Summary of analysis to estimate value of volunteering

Age	Adults (16+)
Outcome	life satisfaction
Intervention	'weekly' and 'monthly'
Comparison	'no volunteering'
Controls	physical activity level, standard controls in adult data (Table 1)
Valuation	WELLBY

4.2.1 Adults

Sport England's key metrics for adults volunteering to support sport and physical activity are[71]:

Any volunteering:

- *Individual has volunteered in any role in the last 12 months: Yes/No*

Frequency of volunteering:

- *Once/one-off in the past year*
- *A few times in the past year*
- *At least once a month, but not once a week, throughout the year*
- *At least once a week throughout the year*

Table 11 Wellbeing values for adult sport volunteering

Annual primary (wellbeing) value, per person per year (2024 prices). Value is in comparison to 'not volunteered'.

	Primary value	Average life satisfaction score (having accounted for other influences)
Not volunteered	**£0**	7.04
Once/one-off	**£0**	7.07
A few times	**£0**	7.07
Monthly volunteering	**£1,000**	7.11
Weekly volunteering	**£2,100**	7.18

Notes: primary value = coefficient from table 12 multiplied by £15,900. (Previously £15,300 in year one, reflecting 2023 prices).

These values are the monetary equivalent of a wellbeing shift associated with weekly or monthly volunteering. These primary values are calculated taking the coefficient associated with each level (table 12), multiplied by our 2024 WELLBY valuation rate (£15,900). **For adults, weekly volunteering is worth roughly double the value of monthly volunteering** (similar to the findings of being 'active' compared to 'fairly active'). **For adults, weekly volunteering is almost as valuable as being active**.

71 The Active Lives Children and Young People Survey also measures volunteering among children aged 9-16. However, unlike the Active Lives Adult Survey, it does not capture higher frequencies of volunteering (such as weekly or monthly) and therefore lacks consistency with the measures available for adults. As such, CYP wellbeing values for volunteering are excluded in this analysis but could be explored more thoroughly in future research.

Associated differences in life satisfaction are presented in table 12. We run this analysis using the variable for having done any volunteering in the last year (first column), and using the more detailed frequency of volunteering (second column).[72] Frequency is the preferred measure here, as it contains more detail about the nature of volunteering and evidence suggests that adult volunteers do volunteer frequently and put in many hours. 30% of those who volunteer in sport, volunteer at least once a week.[73]

Table 12 Adult volunteering and life satisfaction: regression results

Active Lives Adult data, years 2019-2022

[Outcome variable -life satisfaction 0-10]		
	Regression coefficient, Any volunteering	Regression coefficient, frequency of volunteering
Not volunteered (base group)	0.000	0.000
Volunteered (in last 12 months)	**0.067*** **	
Volunteered - once/one-off in the last year		0.026
Volunteered - few times in the last year		0.031
Volunteered - at least once a month but not once a week		**0.065*** **
Volunteered - at least once a week		**0.135*** **
Observations	159,344	159,344
Adjusted R-squared	0.251	0.251

*Notes: Stars denote statistical significance: *p<0.1, **p<0.05, ***p<0.01. Only the coefficient of the variable of interest is shown here. A coefficient of 0.000 means this is the base group other subgroups were compared to. Blank spaces mean the respective variable was not included in that model.*

Standard control variables included (see table 1) plus levels of physical activity.

72 'Any volunteering' is answered by more survey respondents but these two models are run on the same sample (those who answer the frequency question) in order to directly compare between the two models.

73 In our pooled dataset of four waves. Other volunteers are split fairly evenly between the other, less frequency categories. It's not possible to know from Active Lives patterns of volunteering more than once a week, as this is the most frequent category option.

Having controlled for a variety of factors, we find that associated increases in life satisfaction are:

- **No monetary value** can be applied to volunteering less frequently than once a month.[74]
- **0.065** associated with an adult *volunteering on a monthly basis* rather than *not volunteering*.
- **0.135** associated with an adult *volunteering on a weekly basis* rather than *not volunteering*.
- The findings above are consistent with our work in Faith, Hoops and Charity (2021),[75] which found that weekly participation is the most valuable frequency for volunteering, sports participation, and religious attendance. The Faith, Hoops and Charity paper used fixed effect regressions - similar to those used in the July 2025 work by DCMS on the Economic Value of Volunteering.[76]

74 These coefficients are insignificant.
75 https://www.stateoflife.org/news-blog/2021/3/8/faith-hoops-and-charity-why-weekly-works
76 https://www.gov.uk/government/publications/estimating-the-economic-and-social-value-of-volunteering/estimating-the-economic-and-social-value-of-volunteering - this paper uses a very similar approach to valuing volunteering by using wellbeing valuation, the WELLBY and then cost replacement of volunteers. The paper has a lower value for volunteering of £680 but uses a figure for 'once a year' and not weekly, and not sport which have been shown to have higher wellbeing attached. There is a finding in the DCMS work that weekly volunteering is not as beneficial that we will be investigating as it applies to different types of volunteering in the Community Life data.

5 Total annual social value for England

The estimates of individual wellbeing value can be aggregated to the population-level using estimates of the population who are active, fairly active and inactive, and who volunteer in sport at different frequencies.[77] This is done using the latest population estimates produced by Sport England from Active Lives data.[78]

Since the regression for volunteering includes a control variable for activity level, **the wellbeing value for volunteering is *over and above* any wellbeing value from activity** and hence the two values avoid double counting and can be added together. Conversely, sensitivity checks revealed that including volunteering as a control variable in the physical activity analysis would have made negligible difference to the results and so was not necessary.

Table 13 Annual (2023-24) wellbeing value of physical activity and sport volunteering

Values are per year, in 2024 prices.	
Physical activity	
Adult (16+ population):	£84,206,640,000
CYP (7-16):	£14,088,100,000
Total from physical activity:	**£98,294,740,000**
Sport volunteering	
Adult (16+ population):	£8,645,940,000
Total from physical activity and sport volunteering:	**£106,940,680,000**

77 By multiplying the per person value (e.g. for being active) by the estimated population at that activity level (e.g. population who are active).

78 https://www.sportengland.org/research-and-data/data/active-lives/active-lives-data-tables

5.1 Physical activity

Table 14 Annual (2023-24) wellbeing value of physical activity

Values are per year, in 2024 prices				
Adult (16+ population)				
Activity level	**%**	**Estimated population**	**Value to the individual**	**Population value**
Sources:	Active Lives data tables 23-24, (Table 1)		Table 4	population*value
Inactive	25.1%	11,826,300	£0	£0
Fairly active	11.2%	5,252,800	£1,200	£6,303,360,000
Active	63.7%	29,962,800	£2,600	£77,903,280,000
Total from adults (16+):				**£84,206,640,000**
Children and young people (age 11-16)				
Activity level	**%**	**Estimated population**	**Value to the individual**	**Population value**
Sources:	Active Lives data tables 23-24, (Table 1)		Table 6	population*value
Less active	29.6%	984,600	£0	£0
Fairly active	21.4%	711,400	£3,300	£2,347,620,000
Active	49.0%	1,627,100	£4,300	£6,996,530,000
Total from CYP (11-16):				**£9,344,150,000**
Children and young people (age 7-11)				
Activity level	**%**	**Estimated population**	**Value to the individual**	**Population value**
Sources:	Active Lives data tables 23-24, (Table 1)		Table 8	population*value
Less active	35.3%	975,400	£0	£0
Fairly active	20.9%	578,800	£1,700	£983,960,000
Active	43.8%	1,212,900	£3,100	£3,759,990,000
Total from CYP (7-11):				**£4,743,950,000**
Total value from CYP (7-16):				**£14,088,100,000**

Notes: Estimated populations are from Sport England's published data tables. Values for activity among children and young people can also be added together with value from adults because they apply to a different population (see Table 13).

5.2 Sport volunteering

Table 15 Annual (2023-24) wellbeing value of sport volunteering

Values are per year, in 2024 prices

Adult (16+ population)				
Volunteering frequency	**%**	**Estimated population**	**Value to the individual**	**Population value**
Sources:		Active Lives data tables 23-24, (Table 10a)	Table 11	population*value
No volunteering	78.8%	37,058,000	£0	£0
One-off/a few times	10.4%	4,870,500	£0	£0
Monthly volunteering	4.0%	1,902,000	£1,000	£1,902,000,000
Weekly volunteering	6.8%	3,211,400	£2,100	£6,743,940,000
Total from adults (16+):				**£8,645,940,000**

Notes: Estimated populations are from Sport England's published data tables. For adults, the proportion and population who don't volunteer is calculated as the residual from the frequency detail in table 10 and total population of 47,041,900 (as per activity level tables). In estimating the values for volunteering we control for physical activity level, therefore values for activity and values for volunteering can be added together when applied to the same population.

6 Value of individual participation for subgroups (physical activity)

6.1 Split sample disaggregation

Besides the full sample, we also conduct the same analysis for a specific sub-sample to investigate whether the association between our interventions of interest and the outcome varies for subgroups within the population. This initial grouping of demographic characteristics to explore was largely informed by the breakdown presented in Sport England's Active Lives headline reports for adults (page 7)[79] and CYP (page 9).[80] In year one this was done for adults. Now this analysis expands to CYP (age 11-16).

Table 16 Split samples[81]

Adults	CYP (11-16)
• Age group[82]	• Gender
• Gender[83]	• Ethnicity
• Ethnicity	• Disability[87]
• Disability[84]	• Family Affluence Scale
• Socio-economic group (NS-SEC)[85]	• Whether recipient of free school meals
• Local area deprivation (IMD decile)[86]	• Local area deprivation (IMD decile) of school location[88]

When these demographic characteristics are used to determine a sub-sample, they can no longer be included as a control variable, since there would be no variation in that control variable.[89]

Findings from all sub-sample splits are in **Appendix A1-A2**. We report here those where the difference between subgroups of interest are statistically significant.[90]

79 Sport England Active Lives Adult Report (2023-24), (excluding sexual orientation due to its placement in a different survey routing group than the wellbeing outcomes).
80 Sport England Active Lives CYP Report (2023-24)
81 See table 1 (control variables) and relevant footnotes for more information on these categories.
82 Grouped ages (16-34, 35-54, 55-74, 75+)
83 By appending multiple years of data, our sample size is large enough to include the group whose gender identity is non-binary.
84 Disabled adults are those reporting they have a physical or mental health condition or illness that's lasted, or is expected to last, 12 months or more, and that this has a substantial effect on their ability to do normal daily activities.
85 Grouped NS-SEC (1-2, 3-5, 6-8)
86 Grouped IMD 1-3, 4-5 and 8-10
87 Disabled CYP refers to children and young people who report they have a disability, special need or illness which has a big effect on their life (is limiting) and is expected to last for a year or more (is long term).
88 Grouped IMD 1-3, 4-5 and 8-10
89 e.g. we cannot control for the impact of gender if we are using a restricted sample where all observations are of the same gender.
90 i.e. two subgroups may have different coefficients but their standard errors mean there is no statistical confidence that the coefficients are different to each other (the confidence intervals overlap) they are not reported.

6.2 Adults

Table 17 Wellbeing values for different adult subgroups

Annual primary (wellbeing) value, per person per year (2024 prices). Compared to being 'inactive'.

Demographic group	Active	Comparison to other subgroup
Mixed ethnicity	**£5,900**	Being active is 2.3 times the value for those of white ethnicity.
Disabled or have a LTHC	**£5,300**	Being active is 2.7 times the value for non-disabled people.
Female	**£3,200**	Being active is 1.7 times the value for males.

Notes: In comparison to £2,600 for all adults. Waves of data: 2018-2022. LTHC = Long-term health condition. Findings for all single demographic split samples with confidence intervals are presented in **Appendix A1**

For those of mixed ethnicity the value is high (£5,900). There are also significant differences for disability and gender; the value of being active is highest for female adults and those who are disabled or those who have a LTHC (both groups which are least likely to be active).

For some other groups experiencing the greatest inequalities in physical activity (namely people from Black and Asian (excl. Chinese) ethnic groups, lower socio-economic groups, people over 75+, and those living in areas of high deprivation (**Sport England Active Lives Adult Report (2023-24)**, we don't find a higher wellbeing value than average for being 'active'. However, persistent inequalities in participation mean that these groups are less likely to receive the wellbeing benefits that sport and physical activity offers, which itself means that the direct benefits to individuals are not shared fairly across different parts of the population. Interventions which tackle inequalities both redress this imbalance and also drive up the overall wellbeing value of physical activity across the population.[91]

91 For example, consider an intervention affecting 100 people, randomly selected from the population which successfully results in all participants being 'active'. To start with, it was likely approximately 25 were inactive, 11 were fairly active and 63 were already active (**Active Lives data tables**). Therefore social value gained would be £78,200 [(25*£2,600)+(11*£1,200)]. Now consider that the same intervention targeted 100 people from lower socio-economic groups (NS-SEC 6-8) and successfully resulted in all participants being 'active'. To start with, it was likely approximately 36 were inactive, 11 were fairly active and 52 were already active (**Active Lives data tables**). Therefore social value gained would be a higher value at £106,800 [(36*£2,600)+(11*£1,200)].

6.3 CYP

Table 18 Wellbeing values for different CYP (11-16) subgroups

Annual primary (wellbeing) value, per person per year (2024 prices). Compared to being 'less active'.

Demographic group	Active	Comparison to other subgroup
Black ethnicity	**£2,300**	Being active is 0.5 the value for those of white ethnicity.
Disabled or have a LTHC	**£2,800**	Being active is 0.6 the value for those who are non-disabled people and do not have a LTHC.
Those in 'low' affluence families	**£2,900**	Being active is 0.6 the value for those in 'high' affluence families.
White other ethnicity	**£3,000**	Being active is 0.7 the value for those of white ethnicity.
Girls	**£3,300**	Being active is 0.6 the value for boys.
Those at schools in IMD schools (1-3)	**£4,000**	Being active is 0.8 the value for those in IMD schools (8-10).
Those at schools in IMD schools (4-7)	**£4,000**	Being active is 0.8 the value for those in IMD schools (8-10).

Notes: In comparison to ***£4,300 for all CYP (11-16)****. Waves of data: 2017-2023. LTHC = Long-term health condition. Findings for all single demographic split samples explored are presented in* Appendix A2.

Our analysis of adult data reveals that some of the groups who are least active and most marginalised - such as women and people who are disabled or have a long-term health condition (LTHC) - show a stronger association between being physically active and wellbeing.

In contrast, for secondary school-aged children, groups who are least active and most marginalised such as girls, disabled young people, those from low-affluence families, pupils attending schools in areas of high and moderate deprivation, and some ethnic minority groups - exhibit a weaker association between physical activity and wellbeing.

Although, across all subgroups examined (see **Appendix A2**), the association between physical activity and wellbeing is positive, it's important to emphasise that this is **correlation, not causation**. These findings do not suggest that physical activity leads to lower wellbeing gains for certain groups. Instead, there are several plausible explanations for why the association may appear weaker for the most marginalised children and young people:

1. **Limitations in the CYP data controls**. Compared to the adult dataset, the controls available in the children and young people (CYP) data are more limited. While regression controls help approximate causality, there are always constraints. For example, the CYP data lacks variables such as general health, household composition, and educational attainment. Additionally, deprivation is measured at the school level (via the Index of Multiple Deprivation) rather than at the individual level (see **Section 8.9**), limiting granularity.
2. **Unmeasured differences in choice, opportunity, and quality**. We cannot account for individual differences in access to choice, opportunity, or the quality of physical activity provision. Children from less marginalised backgrounds may have more positive experiences of physical activity, which could contribute to the stronger association with wellbeing observed in these groups.
3. **Enjoyment and motivation are not accounted for**. The analysis does not include measures of enjoyment or intrinsic motivation. These unobserved factors could explain differences in the strength of the association — particularly if children from marginalised groups enjoy activity less, potentially due to lower quality provision, fewer options, or less supportive environments.

Further research could explore these mechanisms more directly, particularly the roles of choice, opportunity, quality, enjoyment, and motivation. However, existing literature supports these interpretations:

- There are well-documented barriers to participation that disproportionately affect girls, such as reduced access to facilities, safety concerns, and anxiety linked to puberty.[92]
- A 'gender enjoyment gap' is also recognised, with girls often reporting lower enjoyment of sport and physical activity.
- When opportunity and choice are somewhat 'equalised' — such as through compulsory school-based activity — the association between physical activity and wellbeing appears stronger among more disadvantaged groups. For example:
  - Research for the Youth Sport Trust (YST) found that the wellbeing benefits of PE in school were greater for free school meal (FSM) recipients than for their peers.[93]
  - The same YST research found that pre-existing motivation and enjoyment accounted for at least half of the wellbeing benefit in secondary school pupils.
  - An evaluation of Active Row by London Youth Rowing (a programme that specifically targets schools with a high percentage of pupil premium students, and supports young people to access rowing for the first time) found that wellbeing benefits from rowing participation were significantly higher among FSM recipients, disabled pupils, and disadvantaged ethnic minority groups.[94]

These findings highlight the critical importance of ensuring **equitable access, quality, and support in physical activity provision for children and young people**. Addressing disparities in experience — not just participation — will be key to maximising the wellbeing benefits for all.

92 Health barriers for girls and women in sport, UK Parliament
93 The social value of free physical activity in schools
94 Active Row Social Value Study 2023

7 Social cost of inequality in physical activity

Physical activity levels are not equally distributed across the population,[95] and neither are the wellbeing benefits associated with being active (see Section 6).

This analysis considers a scenario where physical activity levels across the population – including for those most likely to experience inequalities in participation – increased to match the physical activity levels of adults least likely to experience inequalities.

This analysis focuses solely on physical activity (excluding volunteering) and is conducted separately for adults and children and young people (CYP), aged 11–16. This enables us to quantify the **wellbeing cost of inequalities in sport and physical activity participation**.

7.1 The Inequalities Metric

The Inequalities Metric, developed by Sport England, allows further exploration of intersectionality. Statistical analysis[96] of the Active Lives data identified geodemographic characteristics which most strongly influence physical activity levels (using the specific measure of minutes).[97]

The population is then categorised into whether people have 0, 1 or 2+ of these characteristics. The research indicates a trend between having more characteristics of inequality and lower activity levels and that these characteristics are compounding. 74% of adults with no characteristics of inequality are active, compared to 44% for those with two or more characteristics (Appendix A5). Whereas 54% of CYP (11-16) with no characteristics of inequality are active, compared to 39% for those with two or more characteristics (Appendix A6).

At the time of our analysis, the characteristics in the Inequalities Metric for adults included:

- disabled people and those with a long-term health condition
- people aged 65 or over
- those from lower socioeconomic groups (NS SEC 6-8)
- people from an Asian, Black or Chinese ethnic group
- pregnant women and parents of children under one year, and
- adults of Muslim faith.[98]

and for CYP included:

- girls
- other gender (secondary-aged children)
- those from low-affluence families
- those from an Asian or Black ethnic group
- those who lack access to a park, field, or outdoor sports space (secondary-aged children).[99]

95 Sport England Active Lives reports and data tables.
96 Regression analysis, similar to that explained in section 3.1.
97 Sport England plans to refresh periodically to ensure it reflects the most recently available data.
98 Due to survey routing in the waves used (waves 4 to 7), faith is not answered by all respondents, and it is answered by a different subgroup to those answering wellbeing questions. Although it is one of the characteristics of inequality it is not reflected in our sample and analysis (as we need to use the subgroup that includes wellbeing).
99 The inequalities metric for CYP can only be calculated as far back as wave 4 (2020-2021), due to this question only being included in this wave onwards.

7.2 Individual wellbeing values split by Inequalities Metric

Using a split sample method (as in Section 6), we repeat our analysis on the relationship between activity level and wellbeing for the subgroups with different numbers of inequality characteristics (see Appendix A3 and Appendix A4).

7.2.1 Adults

Table 19 Wellbeing values for different adult subgroups of Inequalities Metric

Annual primary (wellbeing) value, per person per year (2024 prices). Compared to being 'inactive'.

Demographic group	Fairly active	Active	Comparison to other subgroups
0 characteristics	**£1,000**	**£2,400**	Being active is less than the value for those with 2+ characteristics and with 1 characteristic
1 characteristic	**£900**	**£2,600**	Being active is less than the value for those with 2+ characteristics
2+ characteristics	**£2,900**	**£3,800**	Being active is 1.6 times the value for those with zero characteristics

Notes: In comparison to £1,200 for all adults being fairly active and £2,600 for all adults being active. Waves of data: 2018-2022. Further detail in Appendix A3.

Adults with multiple characteristics of inequality experience higher wellbeing gains from physical activity — up to £3,800 annually — compared to those with none whose wellbeing gains are worth £2,400. These groups stand to gain the most from the benefits of being physically active, yet face some of the greatest barriers to participation.

7.2.2 CYP (11-16)

Table 20 Wellbeing values for different CYP(11-16) subgroups of Inequalities Metric

Annual primary (wellbeing) value, per person per year (2024 prices). Compared to being 'less active'.

Demographic group	Fairly active	Active	Comparison to other subgroups
0 characteristics	**£3,300**	**£3,400**	Being active is more than the value for those with 2+ characteristics and 1 characteristic
1 characteristic	**£3,000**	**£3,100**	Being active is more than the value for those with 2+ characteristics
2+ characteristics	**£1,100**	**£2,300**	Being active is 0.7 times the value for those with zero characteristics

Notes: In comparison to £3,300 for all CYP (age 11-16) being fairly active and £4,300 for all CYP (age 11-16) being active. The wellbeing values for all CYP (age 11-16) are based on data from waves 2017-2023. The characteristics of inequality for children and young people include not having access to a park, field, or outdoor sports space, a question which is only included from 2020 onwards. As this sample only contains observations from 2020-2023, wellbeing values for subgroups by characteristics of inequality will not correspond exactly with the overall average wellbeing values. Further detail in Appendix A4.

CYP (11-16) with multiple characteristics of inequality experience lower wellbeing gains from physical activity - £2,300 annually - compared to those with none (£3,400), as discussed in Section 6.3 above.[100] The values do not correspond neatly with the average CYP wellbeing values due to the limitations of the data containing the required fields for this analysis. See notes in table 20 for more detail.

7.3 Overall calculation

Firstly, in scenario 1, we estimate the wellbeing value of activity at current levels and use observed wellbeing benefit for the different subgroups. Then, in scenario 2, we calculate potential primary wellbeing value, if everyone was equally active (at the levels of those with zero inequality characteristics) and received the maximum primary wellbeing value.

100 Reasons for this contrasting finding are similar to those explained in section 6.3. Values for all groups are lower than our average findings for CYP (11-16), this may be due to conducting the analysis on fewer waves (see footnote 87).

7.3.1 Adults

For adults, those with 2+ characteristics have the highest primary wellbeing value, so we maintain the observed primary wellbeing value in scenario 2.

Table 21 The social cost of inequality in physical activity levels (adult population)[101]

Values are in 2024 prices.							
Scenario 1: current activity levels							
	Estimated population	**Activity level**			**Value to the individual**		**Population value**
Sources:	Appendix A5 (2023-2024)	Appendix A5, 2023-2024			Table 19		population*value
No. of characteristics		**Inactive**	**Fairly active**	**Active**	**Fairly active**	**active**	
0 characteristics	19,347,900	15.4%	10.3%	74.3%	£1,000	£2,400	£36,492,900,000
1 characteristic	18,739,000	26.7%	11.5%	61.8%	£900	£2,600	£32,069,270,000
2+ characteristics	8,955,100	44.3%	11.9%	43.7%	£2,900	£3,800	£17,981,410,000
Total wellbeing value from physical activity[102]:							**£86,543,580,000**
Scenario 2: if everyone was as active as those with no inequality characteristics							
	Estimated population	**Activity level**			**Value to the individual**		**Population value**
Sources:	Appendix A5 (2023-2024)	Appendix A5, 2023-2024			Table 19		population*value
No. of characteristics		**Inactive**	**Fairly active**	**Active**	**Fairly active**	**Active**	
0 characteristics	19,347,900	15.4%	10.3%	74.3%	£1,000	£2,400	£36,495,200,000
1 characteristic	18,739,000	15.4%	10.3%	74.3%	£900	£2,600	£37,936,470,000
2+ characteristics	8,955,100	15.4%	10.3%	74.3%	£2,900	£3,800	£27,956,590,000
Total potential wellbeing value from physical activity:							**£102,385,960,000**
Social cost of inequality:							**£15,842,380,000**

101 This is different to the value calculated in year one for a number of reasons: a) changing of factors which make up the inequalities metric (therefore different proportion of the population in each category, and different individual wellbeing values), b) changing activity levels of activity within each group, c) population growth, and d) inflation.

102 This estimate of the total wellbeing value of physical activity 'at current levels' for adults is different to the total of £84.2 billion in Table 14, which used average activity levels and average individual values. The difference is due to the additional detail here in Table 19; activity levels and values to individuals are not based on the average value but different levels and different values for those with 0, 1, or 2+characteristics of inequality.

7.3.2 CYP (age 11-16)

For CYP, those with 2+ characteristics have the lowest primary wellbeing value, so we substitute this with the higher primary wellbeing value for those with zero characteristics in scenario 2. This assumes that both participation levels and the wellbeing derived from taking part in sport and physical activity would be made equal, regardless of number of characteristics.

Table 22 The social cost of inequality in physical activity levels (CYP 11-16)

Values are in 2024 prices.

Scenario 1: current activity levels							
	Estimated population	**Activity level**			**Value to the individual**		**Population value**
Sources:	Appendix A6 (2023-2024)	Appendix A6, 2023-2024			Table 20		population*%*value
No. of characteristics		**Less active**	**Fairly active**	**active**	**Fairly active**	**Active**	
0 characteristics	1,248,500	26.1%	20.3%	53.6%	£3,300	£3,400	£3,111,530,000
1 characteristic	1,426,100	28.4%	21.8%	49.8%	£3,000	£3,100	£3,133,650,000
2+ characteristics	739,800	37.9%	22.5%	39.6%	£1,100	£2,300	£856,590,000
Total wellbeing value from physical activity[103]:							**£7,101,770,000**

103 This estimate of the total wellbeing value of physical activity 'at current levels' for CYP 11-16 is different to the total of £9.3 billion in table 18, which used average activity levels and average individual values. The difference is due to the additional detail here in table 26; activity levels and values to individuals are not based on the average value but different levels and different values for those with 0, 1, or 2+characteristics of inequality.

Table 22 The social cost of inequality in physical activity levels (CYP 11-16) - **Continued**

Values are in 2024 prices.

Scenario 2: if there was equality in activity levels and wellbeing benefits

	Estimated population	**Activity level**			**Value to the individual**		**Population value**
Sources:	Appendix A6 (2023-2024)	Appendix A6, 2023-2024			Table 20		population*%*value
No. of characteristics		**Less active**	**Fairly active**	**Active**	**Fairly active**	**Active**	
0 characteristics	1,248,500	26.1%	20.3%	53.6%	£3,300	£3,400	£3,111,530,000
1 characteristic	1,426,100	26.1%	20.3%	53.6%	£3,300	£3,400	£3,554,010,000
2+ characteristics	739,800	26.1%	20.3%	53.6%	£3,300	£3,400	£1,843,780,000
Total potential wellbeing value from physical activity:							**£8,509,320,000**
Social cost of inequality:							**£1,407,550,000**

Notes: In comparison to £3,300 for all CYP (age 11-16) being fairly active and £4,300 for all CYP (age 11-16) being active. The wellbeing values for all CYP (age 11-16) are based on data from waves 2017-2023. The characteristics of inequality for children and young people include not having access to a park, field, or outdoor sports space, a question which is only included from 2020 onwards. As this sample only contains observations from 2020-2023, wellbeing values for subgroups by characteristics of inequality will not correspond exactly with the overall average wellbeing values. Further detail in Appendix A4.

Combining the £15.8bn social cost of inequality among adults and £1.4bn social cost of inequality among CYP (11-16) we calculate the **total social wellbeing cost of inequalities in sport and physical activity participation at £17.2bn**.

8 Data considerations and potential limitations

Here we explore the limitations of this analysis due to the data sources available. In subsequent years these could be investigated further and we provide detailed recommendations where possible to further address these limitations and improve similar future studies.

8.1 Cross-sectional data

Active Lives data - Adult and CYP - are multi-year, cross-sectional data sets; they observe many individuals in a given year. Generally, they were designed to be analysed one wave at a time, understanding population estimates (of activity levels etc.) and comparing these year on year. Indeed, Sport England's reports focus on the most recent wave of data, compare it to data from previous years, and observe change over time.[104] Estimation techniques utilising panel datasets (observing the same individuals over time) would obtain coefficients with greater confidence.

While panel datasets do exist (Understanding Society, for example), they don't include physical activity variables in the same level of detail as Active Lives. While also considering other potential limitations, **Active Lives is the most practical and feasible data source** to respond to the needs of the research brief for this updated model (which may seek to further explore different types of activity, intensity, frequency, or settings in subsequent iterations – see Section 9). A dataset that was panel *and* included the detail of activity within Active Lives would be a powerful data source to draw more robust conclusions into the wellbeing value and social value of physical activity and volunteering.

8.2 Robustness and sensitivity checks

We conduct **robustness checks** to our findings from cross-sectional data. Firstly, we find that our main finding (the relationship between activity level and life satisfaction for adults) holds using the panel dataset Understanding Society[105] (see Appendix A8).

Secondly, Green Book guidance advises that confidence in robust estimates from cross-sectional regressions is highest when (a) the causal effect is backed up with theories or evidence from wider social science and b) data is drawn from a large sample size and from across regions and time.[106] Existing evidence in the sector on the wellbeing benefits of sport and physical activity is strong[107] [condition (a) addressed]. We find that our main finding holds across years and regions (see Appendix A9-10) [condition (b) addressed].

104 Sport England (2024)
105 This contains our key measures (activity level, life satisfaction and key controls) but does not include more detail about different activities, so can't be used for the full study.
106 HM Treasury (2021). See box 6.
107 https://www.sportengland.org/about-us/uniting-movement/why-moving-matters

8.3 Reverse causality

It's possible that happier people tend to exercise more, rather than exercise directly causing happiness. We can't investigate this further using only the Active Lives data, as it provides information at just one point in time. To truly understand whether exercise causes happiness or vice versa, we would need longitudinal data or different research methods. While this is a limitation of our study, we don't consider it a major concern since the positive impact of physical activity on wellbeing is well-established in existing research.

8.4 Appending multiple years of data

The Active Lives datasets are set up so variables are largely consistent from year to year. This gives us the opportunity to append multiple years of data to create a substantially larger sample size. Increased sample size reduces the margin of error and therefore increases statistical power, allowing us to be more confident in our findings. Furthermore, this gives us more scope to consider more specific subgroups (Section 6 and Section 7.2) which would not be possible with one year of data (as overall sample increases, sample size of marginal subgroups also increases). Appending data also means that findings don't apply to a specific year, but are based on findings over a four-year period, and estimated values can be applied to population estimates of levels of physical activity or sport volunteering in any given year.

An important consideration here was the consistency of variables across years. Where certain variables were not available in all years (e.g. self-reported health in the Adult data, only collected from wave 4 onwards), consistency in the model was prioritised — using waves 4 to 7 — rather than maximising sample size by including waves 2 to 7, which lacked this important control. In other cases, inconsistency was not deemed important enough to reduce the full sample (e.g. volunteering frequency being available from wave 5 onwards), and instead we acknowledge the reduced sample size when exploring this intervention.

Inconsistencies between years are generally well documented in technical notes (e.g. the adjustments to Family Affluence Scale in the CYP data). On balance, it was considered **beneficial to append multiple years** of the Active Lives data for both the Adult and CYP datasets.[108]

108 It is understood that, for some specific research projects, two waves of data have been appended and re-weighted by IPSOS. Whilst re-calculating weights for four waves of data is theoretically possible, it is assumed to be an unnecessary and inefficient use of resources.

8.5 Application of weighting in Active Lives data

There is a complex weighting system in the Active Lives Adult data.[109] Weighting is calculated with one year of data in mind, aiming for each wave of data to be representative of the population. When researchers produce descriptive statistics, we aim to summarise levels within the population, i.e. we want them to most closely represent the population. We explored weighting in the context of appended data. If each year of data is weighted to be as representative as it can be, then appending these datasets together (and applying the relevant weight variable) is also as representative as it can be. In addition, appending does not give any year more weight above another.[110] Therefore (although not published) **we used weighted data for our descriptive statistics**.[111]

For regression analysis, there is not a clear consensus of whether to apply weights.[112] It is advised to estimate the chosen model using unweighted data and weighted data, and compare the parameter estimates[113] (coefficients). If there is no substantive difference, estimates from unweighted data are preferred as they are 'more efficient, and the standard errors will be correct'. We compared the coefficients on the activity level variable (fairly active and active) and found that collectively there is no statistically significant difference (p-value = 0.498) in the coefficients from weighted and unweighted data (see Appendix A7). In addition, conceptually, when exploring the *relationships between variables*, representation of the population is less important. Therefore we use **unweighted data in our regressions**.

8.6 Survey routing restricting the adult sample

Due to the routing within the Active Lives Adult survey, only group 2 – or roughly a third of respondents – are asked about key wellbeing outcomes.[114] This reduces the sample that can be used for wellbeing regression analysis to roughly a third of the full Active Lives Adult Survey.

Future analysis of a similar nature would greatly benefit from a larger proportion of respondents being asked about key outcomes, as this would allow for more efficient use of the data that is collected. This would increase the overall sample size, allow for more robust analysis and greater potential in terms of analysis using split samples. (It could also reduce bias, as outlined above.)

109 There are eight possible weighting variables available, and the correct one must be chosen depending on the subsample used, and type of analysis being implemented.
110 Weights are consistent (and normalised to 1) across years and the total sample size for each year is roughly similar. (Mean value of the main weight variable (wt_final) and the appropriate weight variable in our analysis (wt_final_c) is 1 across all years.
111 The correct weight to use for our adult sample (group 2, containing wellbeing outcomes) is wt_final_c and the correct weight for our CYP sample is wt_gross.
112 Solon, Haider and Woodridge (2013)
113 Winship and Radbrill (1994)
114 ONS4 personal wellbeing measures, which includes life satisfaction. (It is noted that loneliness is asked of all respondents).

8.7 Survey design and routing resulting in omission of key determinants of adult wellbeing

Some key determinants of wellbeing listed by Fujiwara and Campbell (2011) cannot be included in the study because they are either a) not included in the Active Lives data (income and marital status) or b) they are asked to a different group of respondents to those who answer wellbeing questions (religious affiliation). Indeed, in our own sensitivity checks using Understanding Society, religious affiliation, higher household income and being married/in a civil partnership are found to be positively and significantly associated with wellbeing. Being divorced/formerly in a civil partnership is found to be negatively and significantly associated with wellbeing. Although there is less evidence, sexual orientation (which cannot be included due to survey routing, similar to religious affiliation) may also influence wellbeing.

Exclusion of these as control variables means our study may suffer from omitted variable bias (not including an important control variable which may influence the outcome of interest).

Income is rarely included in national data due to the sensitivity of the topic (in our study, socio-economic status, working status, and area deprivation are considered sufficient proxies for income). **If Active Lives data included these missing variables known to influence wellbeing, it would reduce the risk of omitted variable bias**.

8.8 Controlling for health in adult data

The relationship between physical activity, health, and wellbeing is complex. It is therefore important to consider whether we should include the control for self-reported health. If we include it, we risk underestimating the associated increase in wellbeing due to physical activity. This is because we then do not capture if physical activity increases wellbeing through improved health. However, if we *exclude it*, we risk overestimating the increase in wellbeing associated with activity level as we do not account for the fact that healthier people are more able (or likely) to do physical activity. Indeed, when self-reported health is excluded from the regression, our coefficient of interest would be 2.5 times higher.[115] Therefore, **to avoid potentially overestimating the relationship, we have taken the conservative approach and include self-reported health in our control variables**.

115 When the regression reported in table 4 is run without the control for self-reported health (otherwise the exact same model), the coefficient on being 'active' is 0.411***. Compared to our chosen reported model in table 4, that coefficient would be 2.5 times higher (0.411/0.163).

8.9 Limited controls available for CYP

The standard set of controls used in adult wellbeing analysis are well established, and comprehensive, and are mostly available in the Active Lives dataset, whereas for CYP the available controls are fewer. This is particularly clear when considering socio-economics. In adult and CYP, we can control for age, gender, ethnicity, disability, region, rural/urban, timing of survey and level of COVID restriction. In the adult data we can also control for education, employment status, IMD decile of individual, socio-economic group, household composition, number of children and self-reported health.

Altogether (along with physical activity), in our models all this information explains approximately 26% of the variation in life satisfaction. For CYP (on top of the controls available for both), we can control for Family Affluence Scale, whether recipient of free school meals (secondary only) and IMD decile, but of the school not the individual. This is much less information than is available in the adult data. As a result, in our models all this information explains approx 11% of the variation in life satisfaction (secondary school) and approx 3% of the variation in happiness (primary school). However, these controls are the **most appropriate controls in the available data**.

We note that Youth Sport Trust provides pupil-level IMD: using a freedom of information request, they can identify the IMD of the catchment of the school based on pupil postcodes rather than school postcodes. This may provide a useful additional factor in further research.

8.10 Under-representation of young people with most complex needs

The Active Lives Children and Young People Survey is conducted through mainstream schools only, and does not include pupils attending special schools. This means that the sample is likely under-representative of CYP with the most complex needs. However, more than 90% of those with a disability or long-term health condition attend mainstream schools[116] and **CYP Active Lives is still the most appropriate data source for CYP activity and wellbeing**.

116 Sport England Active Lives CYP Report (2023-24)

9 Suggestions for further development and research

This report highlights several priority areas for future research to strengthen the evidence base and improve the practical application of wellbeing valuation in sport and physical activity.

These areas fall into five key themes:

1. **Enhancing practical application**
   Develop clear guidance, training materials, and user-friendly tools — such as wellbeing value estimators — to support organisations in applying the valuation approach to their own programmes, projects, and activities. This will help enable wider use of the methodology at local and organisational levels.

2. **Strengthening data infrastructure**
   Review and refine the Active Lives dataset to better support future wellbeing analysis, including improvements to structure, content, and consistency. Where relevant, incorporate additional waves of data to enhance the longitudinal value of the dataset.

3. **Deepening analysis by activity and demographic group**
   There has been some initial analysis exploring how wellbeing outcomes vary by type of sport or physical activity for adults. The results have not been included in this report because we want more time to carry out some deeper analysis and contextualise the findings before they are made available. There is also considerable scope to further this work by exploring variations across demographic groups and activity types at a granular level.

4. **Expanding the understanding of wellbeing outcomes**
   Extend the valuation framework to account more explicitly for individual development (e.g. self-efficacy, resilience), social development (e.g. trust, belonging), and community-level outcomes (e.g. integration, cohesion). Use qualitative methods to explore the 'how' and 'why' behind the observed impacts.

5. **Advancing methodological approaches**
   Apply additional statistical techniques to explore causal pathways and unpack the relative contribution of key activity dimensions — such as frequency, intensity, setting, company (alone or with others), social connectedness, skill development, and sense of purpose.

Advanced methods might also explore how wellbeing value might apply to lower levels of activity, below the Chief Medical Officer's (CMO) recommended thresholds - for example, 'light activity only' among adults, as examined in recent work for **Activity Alliance**. In addition, further research could assess the impact of the CMO's separate guideline on **muscle strengthening activities**, which remains underexplored in relation to subjective wellbeing outcomes such as life satisfaction.

10 Appendix

Link to appendix →

Sport England
SportPark
3 Oakwood Drive
Loughborough
Leicestershire
LE11 3QF

sportengland.org

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