



Ipsos MORI
Social Research Institute



January 2021

Active Lives Children and Young People Survey 2019/2020 Year 3 Technical Report

Ipsos MORI

Contents

1	Introduction	5
1.1	Survey Background.....	5
1.2	Summary of the survey	5
1.3	Signposting for the technical report.....	8
1.4	Terminology used in the report	8
2	Questionnaire development and piloting	10
2.1	Overview.....	10
2.2	Questionnaire content requirements.....	10
2.3	Survey mode and questionnaire design	12
2.4	Background to development of the survey.....	13
2.5	Development of new disability questions for 2019/20	14
3	Sampling.....	17
3.1	Sample design.....	17
3.2	Sample size.....	21
3.3	Opt-in schools and classes	22
4	Fieldwork.....	24
4.1	Approach to recruitment	24
4.2	Information for schools.....	24
4.3	Administration of survey	25
4.4	Online questionnaire	26
4.5	Incentives	27
4.6	Accessibility.....	28
5	Response rates.....	31
5.1	Method and assumptions	31
5.2	Responses.....	31
5.3	Break offs	33
5.4	Profile of achieved sample.....	34
6	Weighting.....	36
6.1	Design and purpose.....	36
6.2	Technical information	38
7	Data editing and management.....	44
7.1	Overview.....	44
7.2	Data editing.....	46
7.3	Back-coding of other sports	47
7.4	Checking of data.....	48

7.5	Creation of derived variables.....	49
7.6	The checks on the derived variables	56
7.7	Confidence Intervals.....	57
7.8	Design effects.....	58
7.9	Population estimates.....	58
7.10	Minimum base sizes	59
	Data suppression.....	59
	Flagged data.....	59
7.11	Significance Testing.....	59
8	Appendices.....	61

List of Tables

Table 2.1:	KPIs built into the questionnaire design	10
Table 2.2:	Other key measures built into the questionnaire design	11
Table 2.3:	Outcomes built into the questionnaire design.....	12
Table 3.1:	Selected sample issued for fieldwork by type of school	21
Table 3.2:	Updated summer term sample issued for fieldwork by type of school.....	21
Table 3.3:	Breakdown of selected year groups by school year and term (main sample only)	22
Table 3.4:	Breakdown of selected year groups by school year for the reissued summer term sample (main)	22
Table 5.1:	Number of schools selected and responding by school type (sampled schools)	32
Table 5.2:	Completed questionnaires by term and type of data.....	32
Table 5.3:	Profile of the achieved sample (unweighted) from Year 1-2, Year 3-11 and parent or year 1-2 data (valid data only, excluding can't say, prefer not to say) (percentage).....	34
Table 6.1:	Gender and year group by region (by phase – Year 1-2, Year 3-6, Year 7-11).....	38
Table 6.2:	Urban rural and stage by region	39
Table 6.3:	Free school meals (percentage of pupils at school on FSM) and stage by region	39
Table 6.4:	State school region counts	40
Table 6.5:	Year group and gender (Independent schools)	41
Table 6.6:	Year group and region (Independent schools)	42
Table 7.1:	Missing values and codes used.....	47
Table 8.1:	Number of schools by Active Partnership (Year 1-2, 3-11, parent or teacher)	61
Table 8.2:	Number of schools and responses (Year 1-2, 3-11, parent or teacher) by Local Authority	63

Introduction

Introduction

1.1 Survey Background

Sport England is an increasingly insight led organisation that is tasked with the behavioural challenge of getting more people active. To create the right conditions to increase participation, to decide who they invest in, and understand how sport can deliver wider objectives, they need both a broad and deep understanding of sports participation.

Through their commitment to the measurement of sports participation over the past two decades they have largely unparalleled participation data both internationally and amongst other sporting and cultural agencies in the UK. Through the Active Lives Survey, they have sought to strengthen this commitment whilst ensuring their data reflects the best available methods of data collection and aligns with their 2016-21 strategy '*Towards an Active Nation*'. They initially developed the Active Lives Survey for adults which started in November 2015. For that survey they piloted new methods, consulted widely with the sector and sought advice from independent experts such as the Office for National Statistics and the Institute for Social and Economic Research in the development process.

The 2016-21 strategy included an extension of Sport England's responsibilities to include children from age 5 and over, with a particular focus on building a positive attitude to sport and activity which has benefits in childhood as well as laying the foundations for being active through their adult lives. During Autumn 2016 they started the development of a new Active Lives survey for children and young people to run parallel to the adult survey, using a methodology and approach which is appropriate for those aged 5 to 16 years old. This survey has been running for three years. The first year for this survey was the 2017/18 academic year, the second year was the 2018/19 academic year and this report provides the technical details about the third year of the survey – academic year 2019/20.

1.2 Summary of the survey

In this section, we provide a brief overview of the key points in relation to the questionnaire, sample design, fieldwork and data. Full details are provided in the main body of this report.

The third year of the Active Lives Children and Young People survey was conducted by Ipsos MORI on behalf of Sport England, who commissioned the survey to inform both their own strategy and the strategies of the Department for Digital, Culture, Media and Sport (DCMS), the Department for Education (DfE) and the Department of Health and Social Care (DHSC). The online survey is school based with pupils selected to take part through their schools.

From March 2020 through to the end of the summer term, school sites were closed to most pupils owing to the coronavirus pandemic. Most school pupils had to complete their lessons and work from their homes. Therefore, the Active Lives Children and Young People survey was adapted to be completed from home. The survey continued because it was important for Sport England to understand children and young people's participation in sport and physical activity and their attitudes and wellbeing during the coronavirus pandemic when most pupils were not at school. Throughout this document, amendments made to the survey for the summer term 2020 will be noted.

1.2.1 Questionnaire

The survey employs three different online questionnaires: one for pupils in years 1-2, one for pupils in years 3-11 and parents of pupils in years 1-2, and one for teachers. To ensure the content and language of questions is relevant, within the Year 3-11 and parent questionnaire, individual questions are routed based on whether the respondent is a parent, a pupil in Year 3-4 or 5-6 or a pupil in Year 7-11.

The questionnaire asked each pupil about the sports and activities they had taken part in over the previous week as well as some questions about swimming, volunteering, attitudes towards sport and physical activity, and wellbeing. The questionnaire also includes classification questions such as gender and disability/long term conditions.

Teachers were asked about the sports facilities and the PE offer within their school as well as about the PE and sport premium funding, supporting the transition of pupils between primary and secondary school and how the pupils travel to school. Teachers were also asked about food education, school food standards, participation in PE and active travel to school in order to provide schools with a Healthy Schools Rating¹.

The parent questionnaire asked questions about the activities that their children had done to supplement the answers that their child in Year 1-2 gave with more detailed information.

For comparability, the questionnaire was kept broadly the same as the Year 2 version although there were some changes, described in Section 7.1.2. For the summer term 2020, changes were made to the questionnaire to make it appropriate for home completion during the coronavirus pandemic. Details of these changes are described in Section 7.1.3.

Tables in the Code Book and User Guide also show which year groups were asked each question.

1.2.2 Sampling

The sampling was designed to achieve fixed numbers of returns from children within each local authority in order to permit local level analysis. For the majority of local authorities, this target was 300 returns. To achieve the required sample, the sampling was conducted in three stages.

First, a sample of 5,891 schools in England was selected from the January 2018 school census². This sample consisted of up to ten state primary schools in each local authority, up to ten state secondary schools in each local authority and 370 independent schools across the whole country. Each selected school was randomly allocated to one of the three terms in the school year with a larger number of schools in the Autumn and Spring terms and fewer in the Summer term³. Contact and other details for each school were then matched on from the current Get Information about Schools (GIAS) at the time of sampling.

Due to the coronavirus pandemic and schools having to work remotely in the summer term, the main issued sample was altered to be smaller and more flexible for the summer term to minimise burden on schools. Schools that were actually

¹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/814914/Healthy_schools_rating_scheme.pdf

² https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/719226/Schools_Pupils_and_their_Characteristics_2018_Main_Text.pdf. This was published in June 2018 and was the latest census available at the time of sampling for 2019-20.

³ The sample was originally split unevenly between the terms with fewer in the Summer term because this is an exam term when it is difficult for some year groups with important external exams to take part in surveys. In the main issued sample at the start of the year, there were 2,063 schools in the Autumn term, 2,062 in the Spring term and 1,766 in the Summer term.

issued for the summer term sample included some schools that were originally sampled for this term (a sub-sample of the originally selected schools) and some schools from the spring sample that had not been able to take part in that term due to the pandemic.

Second, a sample of year groups was selected within each selected school. This selection was based on the actual available year groups in each school according to the school census in 2018, not on its classification as a primary, secondary or their type of school. Within each selected school, three year groups were selected. The only exceptions to this were in infant schools or other schools with fewer than three year groups. In the summer term, schools were able to ask any year groups to take part in the survey to give them more flexibility and to help us boost response numbers, but were advised to include the selected (sampled) year groups if they could. Obtaining responses was more difficult in summer term due to the optional nature of the survey whilst completing at home.

Finally, a Kish grid (provided by Ipsos MORI) was used to randomly select one mixed-ability class to be surveyed within each selected year group. In the summer term, Kish grids were not used as all pupils in a year group could be invited to take part.

1.2.3 Fieldwork

Fieldwork was conducted from September 2019 to July 2020, in three phases, aligning with the Autumn, Spring and Summer school terms. Schools were invited to participate prior to the start of the term they were allocated to and had until the end of the term for parent, pupil and teacher completions to be submitted. In Spring term, fieldwork had to close two weeks early due to the closure of schools on 23rd March 2020. Due to the early closure of fieldwork, there were schools intending to take part in the survey who had not yet done so. These schools were encouraged and enabled to 'rollover' their participation and complete the survey in summer term instead. The summer term fieldwork began two weeks later than the start of the school term to allow for adjustments to be made to the questionnaire to be suitable for completion at home.

Active Partnerships (APs)⁴ played a crucial role in recruiting schools to take part in the survey and supporting them through the survey process. Each term, APs were responsible for providing selected schools with survey information packs (developed by Ipsos MORI and Sport England), supporting participating schools through the process of selecting appropriate classes, and providing participating schools with school-specific survey URLs in advance of fieldwork. APs also monitored progress throughout each term and provided regular updates to Sport England.

In the autumn and spring terms, pupils in selected classes completed the online survey during lessons, in one sitting, under exam conditions. Parents completed the survey at home or on school computers or tablets during parents' evenings or similar sessions. Teachers could also complete the survey at home or at school. During the summer term, surveys could be completed at home or at school, using computers, smartphones or tablets. Smartphone completion was allowed for the first time during the summer, and all data was reviewed ahead of analysis where no systematic mode effects were found. More information was provided to pupils, parents and teachers about completing the survey at home.

To incentivise schools and thank them for their participation Sport England offered participating schools credits which can be spent on a range of sporting and activity-based equipment, through ESPO (Eastern Shires Purchasing Organisation).

⁴ Active Partnerships were formerly referred to as County Sports Partnerships (CSP).

Individual school based feedback also incentivises schools to take part. Schools were eligible for a school-level report if at least 30 valid responses for the activity questions were received (for a full report) or 30 valid responses on attitudes or wellbeing only (for an infant only report). During the spring and summer terms in 2020, a school was eligible for a report if they had received 25 or more valid responses to take into consideration any difficulties schools may have had with completion during the pandemic.

1.2.4 Weighting

The aim of the weighting is to ensure that the analysis carried out using the achieved sample is representative of children in England from Year 1 to Year 11. The weighting takes account of a number of factors that could lead to bias in the results. The achieved sample was weighted to population level data about children in the relevant age groups. In addition, school based weighting was carried out to take account of potential socio-demographic differences in the responding sample (compared with the sample frame which is the list of schools from which the sample was selected).

1.3 Signposting for the technical report

This report is organised broadly in the order in which survey processes were completed: questionnaire development, sampling, fieldwork, response, weighting, data editing and management.

1.4 Terminology used in the report

Those who respond to the survey are referred to as respondents. The reason for not using the conventional term participants is that, in the context of sports participation, participant has a different meaning.

Questionnaire development and piloting

Questionnaire development and piloting

2.1 Overview

An extensive programme of development work was carried out between November 2016 and July 2017 in advance of Year 1 of the survey to inform the feasibility and successful delivery of a school-based survey of 5-15 year olds in England. Specifically, it was undertaken to ensure that the proposed questions could be easily understood and accurately completed by this age group and that the survey design was appropriate.

Individual technical reports produced for each of the development phases provide extensive information. This chapter summarises the key aspects of the development work; further detail on each of the phases can be found in the Year 1 technical report available on request from Sport England.

During summer 2019, prior to the start of the 2019/20 fieldwork, development work was carried out to improve the questions about disability. The questions were amended to make them consistent across all age groups and to be able to capture information about long term limiting disability, rather than all disability.

2.2 Questionnaire content requirements

The Government's Sporting Future Strategy⁵ includes some Key Performance Indicators (KPIs) in relation to participation in sports and physical activity for children and young people. The Active Lives Children and Young People survey is designed to collect data to measure progress towards those indicators. The table below shows the KPIs which data have been collected to measure.

Table 2.1: KPIs built into the questionnaire design

KPI	Summary definition	Precise definition
1	Percentage of children undertaking an average of 60 minutes or more of physical activity a day across the week ⁶	Physically active with an average of 60 minutes or more per day across the week of moderate or vigorous intensity activity.
2	Percentage of children physically inactive	Physically inactive with less than an average of 30 minutes per day across the week of moderate or vigorous intensity.
3	Percentage of children taking part in sport and physical activity at least twice in the last 28 days ⁷	Participate in at least two sessions of physical activity at any intensity in the last 28 days.
5	Percentage of children achieving physical literacy standards (4 IPLA ⁸ components/measures)	Percentage of children reporting: <ul style="list-style-type: none"> • motivation (enjoyment) • confidence • perceived competence (whether find it easy)

⁵ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/486622/Sporting_Future_ACCESSIBLE.pdf

⁶ Note that in year 1 published results the KPI 1 was slightly different and distinguished between undertaking 60 minutes every day of the week and taking part in an average of 60 minutes a day but not every day. This reflects the change to the Chief Medical Officer's (CMO's) guidelines for physical activity for children and young people. In the Year 3 published report, Year 1, Year 2 and Year 3 data use the new definition of KPI 1.

⁷ This KPI was measured in Year 3 of the survey but was not published in the data tables.

⁸ International Physical Literacy Association

KPI	Summary definition	Precise definition
		<ul style="list-style-type: none"> knowledge and understanding (understand why good for me and how to get involved and improve skills)
6	Percentage of children achieving swimming proficiency (1st part on 25m 2nd part on confidence and capability)	Percentage of children who can: <ul style="list-style-type: none"> Swim 25m Tread water Self-rescue (from a lake)
8	Percentage of children with a positive attitude towards sport and being active	Percentage of children reporting positive motivation (enjoyment)
9	Number of children volunteering in sport at least twice in the last year	Percentage volunteering in activities to support the participation of others in sport and activity (excluding raising funds)
10	Demographics of child volunteers in sport to become more representative of society as a whole	Profile of pupils volunteering in activities to support the participation of others in sport and activity (excluding raising funds) by demographics such as gender, ethnicity, disability
11	Number of children who have attended a live sporting event more than once in the past year	Attended a live sporting event at least twice in the past year to include watching professional and amateur sport

The survey is carried out to inform the strategies of other government departments as well as Sport England's wider work and so there are some other key measures built into the design shown in Table 2.2.

Table 2.2: Other key measures built into the questionnaire design

Origin	Summary definition	Precise definition
DHSC⁹ Childhood Obesity Plan commitment	Number of children taking part in 30 minutes of physical activity inside school and 30 minutes of physical activity outside of school.	Physically active with 30 minutes or more per day of moderate or vigorous intensity at school and outside school.
DHSC/CMO¹⁰	Number of children taking part in vigorous activity for 10 mins, 3 times a week	Participate in vigorous activity at least 3 times per week.
DEFRA¹¹	Where children take part in sport- i.e. indoors vs outdoors	Physically active with 30 minutes or more per day of moderate or vigorous intensity indoors/ outdoors. Information on location of specific activities.
School Sport and Activity Action Plan (DfE, DCMS¹², DHSC)	Number of children taking part in 60 minutes or more of physical activity every day of the week.	Physically active every day of the week for 60 minutes or more.

⁹ DHSC: Department for Health and Social Care. This KPI was measured In Year 3 of the survey but was not published in the data tables. Note also that in the summer term, 'at school' and 'outside school' were changed to refer to 'during normal school hours' and 'outside school hours'.

¹⁰ CMO: Chief Medical Officer Guideline. This KPI was measured in Year 3 of the survey but not published, as by the time of publication this was no longer a core element of the CMO guidelines for physical activity for children and young people.

¹¹ DEFRA: Department for Environment, Food and Rural Affairs. This KPI was measured In Year 3 of the survey but was not published in the data tables.

¹² DfE; Department for Education, DCMS: Department for Culture, Media and Sport. This KPI was measured In Year 3 of the survey but was not published in the data tables.

In addition, Sport England has a responsibility to collect data on participation in specific sports and disciplines, not just overall participation in activity.

To produce data for these measures, the questionnaire needed to ask questions to capture information on:

which activities pupils take part in,

when they take part,

where they take part (at school or outside school, indoors or outdoors),

how long they take part for, and

the intensity of the activity.

Key demographic information was needed, such as school year group, age, sex, ethnicity, disability and socio-economic status.

The Sporting Future Strategy outlines five key outcomes. The Active Lives Children and Young People Survey is designed to measure four of these, which are shown in Table 2.3.

Table 2.3: Outcomes built into the questionnaire design

Outcome	Summary Definition	Precise Definition
1	Physical wellbeing	a. Percentage of children meeting CMO ¹³ physical activity guidelines b. Percentage of children doing less than an average of 30 minutes per day across the week
2	Mental Wellbeing	Percentage of children reporting positive subjective wellbeing (Happiness, life satisfaction, how worthwhile)
3	Individual development	Percentage of children reporting positive perceived self-efficacy (willingness to try difficult things)
4	Social/community development	Percentage of children reporting positive levels of social trust (trusting peers)
5	Loneliness	Percentage of children reporting each frequency of feeling lonely (introduced in year 3 and is not an intended outcome of participation)

2.3 Survey mode and questionnaire design

This section outlines the key design features of the survey and the reasons for this. For evidence used to decide on this approach, please see the Year 1 technical report available on request.

- 1) *The survey is school based* with children completing the questionnaire at school. This is known from other surveys to be an effective method. It is more cost-effective and able to generate a larger sample than approaching

¹³ CMO: Chief Medical Officer. The guidelines have changed since the survey started and now relate to average levels of activity across the week (60 minutes per day on average) rather than suggesting 60 minutes every day. The target of 10 minutes of vigorous activity on three days a week is no longer part of the guidelines.

children through following up from households taking part in the Active Lives Adult Survey. Whilst completion mostly took place at home during the summer term 2020, the survey is still school based as respondents were recruited through their school.

- 2) ***The survey is online*** to allow robust and cost-effective collection of complex activity data. There was a desire to future proof the survey rather than using an older method (pen and paper). Initial development work showed that online completion was feasible as schools have access to computers or iPads for pupil use and children were positive about an online survey. During the summer term 2020, the survey was adapted to ensure that completion was also possible on a smartphone.
- 3) ***The age range of pupils is 5-15/16 years to align with Sport England's remit.*** The design of questionnaire needed to reflect this age range so that the questionnaire was appropriate for each age group. The development work guided this and resulted in the following questionnaires:
 - Standalone simple questionnaire for Year 1-2 (age 5-7 years) – collecting some activity data but mainly attitudes and wellbeing.
 - Questionnaire for Year 3-11 (age 7-15/16) with variations by year group within it. Use of images for Year 3-6.
 - Questionnaire for parents of Year 1-2 to gather detailed information on their activities. Followed same approach as Year 3-11 questionnaire and was part of the same questionnaire program so in practice treated as one questionnaire with the Year 3-11 pupils.
 - Teacher questionnaire – one per school to gather key data about the school such as time spent doing PE, facilities, active travel and healthy eating/school food standards reduce burden on pupils of answering questions about facilities at school.

2.4 Background to development of the survey

As part of the development of the survey, Ipsos MORI were commissioned to carry out an evidence review to look at the feasibility of Sport England collecting information from children aged 5-15 through a school-based survey. This research informed decisions made about the survey such as the sampling, length and mode. Focus groups were also carried out to inform the design of the questionnaire and survey implementation.

Questionnaires were tested using cognitive interviews with children and young people, parents and teachers. Cognitive interviews involve administering survey questions and exploring how respondents understand the questions, recall the information, make judgements about their responses and then respond to the questions.

Following the development stage of the project, a pilot test of the survey was conducted in June-July 2017. The purpose of the pilot was to test the survey methods ahead of the main survey; specifically, to test engagement with schools and the quality and administration of the questionnaires and levels of response.

As a result of the pilot and earlier stages the survey was implemented in the following way:

Selection of three classes per school and selection of one class per year group

Three main questionnaires but with variants for Year 3-4, 5-6, 7-11 and parents within the main questionnaire

Assumptions made about time spent doing activities at school

Questions about whether indoors or outdoors but no detailed questions on location

An audio option was included in the Year 1-2 questionnaire but not the Year 3-11 questionnaire

Provision of a detailed information pack to schools in advance of taking part

Provision of online practice questionnaires which do not collect data to allow teachers to review the content in advance

Plans for imputation of missing or assumed data to maximise use of cases with don't know answers and where questions were not asked because the answer could be assumed

Owing to the wide age range covered by the survey, different questions were asked to different year groups. This reflected:

whether questions are relevant (e.g. volunteering is not relevant for most Year 1-2 pupils),

whether children could be expected to understand and answer questions on that topic (e.g. younger pupils were not expected to answer questions about life satisfaction),

the time it took younger pupils to answer the questionnaire (questions were omitted for Year 3-4 pupils to reduce questionnaire length and burden),

whether questions can be answered by parents on behalf of their child (e.g. parents were not asked about their child's wellbeing).

The User Guide includes a table showing which groups were asked each question.

An objective measurement study was carried out by researchers at Sheffield Hallam University during 2017-18 to look at responses from the Active Lives questionnaire against objective data from a waist worn accelerometer for pupils aged 5-16. This also included pupils in Years 1 and 2, where parents completed the questionnaire with their child in the objective measurement study. The study showed that self-reported data included both over and under measurement of activity level compared with the objective measurement. This could be due to some reported activity sessions including preparation or briefing time and, therefore, whilst the self-report data has not been adjusted exactly to match the activity measured by an accelerometer, they are adjusted to reflect the known over-reporting in self-report data.

More detail on the development of the survey and the objective measurement study can be found in the Year 1 technical report.

2.5 Development of new disability questions for 2019/20

The questions about disability included in the survey in year 1 and 2 involved different questions for year 3-6 pupils from year 1-2 and 7-11 pupils. The questions also took a very broad and inclusive approach meaning that self-reported disability was higher than other data sources since the figures included all disability rather than just long-term limiting disability. In advance of year 3 development work was carried out to design questions which would be accessible and inclusive but which could be the same for all age groups and identify children with long-term limiting conditions. Cognitive testing was carried out with 14 pupils and 2 parents, half of whom had a disability or a child with a disability (with a range of disabilities

covered). Interviews were carried out face to face in the home of the participant. Various approaches to asking the questions were tested for understanding and acceptability. All continued with an approach focussing on the impacts of disability, rather than the labels or conditions, but recognising that including condition names can assist pupils in responding.

Key informant interviews were also carried out with ten teachers (five primary and five secondary) and three other key informants with expertise relating to child disability.

Detailed reports were prepared for Sport England and recommendations made for the final new questions to be included in the survey in Year 3. After sufficient data had been gathered analysis was carried out to compare the results for the new questions with the old questions and with independent sources of information on the prevalence of disability. These showed that looking at long-term limiting disability the self-reported prevalence in the survey was more closely in line with other sources. Therefore, from Year 3 of the survey, there is a new disability measure being reported. This means that comparison data from previous years for disability cannot be provided in the published tables for this release.

Sampling

Sampling

3.1 Sample design

The sampling for the Active Lives Children and Young People Survey 2019-20 was designed to achieve fixed numbers of returns from children within each local authority across the year of the survey, to permit local level analysis. For the majority of the local authorities the target number was 300 returns. For the purposes of the survey, schools within the two smallest local authorities (City of London and Isles of Scilly) were merged with their neighbouring local authorities (Hackney and Cornwall respectively).

To achieve the required sample, the sampling was conducted in three stages. First, a sample of schools in England was selected. Second, a sample of year groups were selected from within each selected school. Finally, Kish grids (provided by Ipsos MORI) were used in individual schools to randomly select a class to be surveyed from within each selected year group. A Kish grid is a method originally designed for selecting members within a household to be interviewed. It uses a pre-assigned table of random numbers to find the person to be interviewed. It was developed by statistician Leslie Kish in 1949. It is a technique widely used in survey research and in this survey was used as a method for selecting classes within year groups. Classes in each year group were put in a numbered list and the Kish grid indicated which number class should be selected. There were ten Kish grids used for the project and each sampled school was assigned one of these grids.

Selected schools also had an option to include additional year groups or classes within year groups to take part in the survey. Schools which were not sampled could also opt in to take part. Procedures for opt in schools and classes are outlined at the end of the sampling section. Data from opt in classes and schools are not included in the published survey data.

It should be noted that adjustments were made to the sample design in summer term in response to the coronavirus pandemic and these are described in detail below. To summarise, the original sample of schools for the summer term was adjusted to include fewer sampled schools and to include schools that were sampled in the spring term that were unable to complete due to the early closure of schools in March 2020. Any year groups were able to take part in the survey rather than just the selected year groups. Finally, Kish grids were not used to select classes within year groups in the summer term.

Drawing a sample of schools

The sample of schools for the Active Lives Children and Young People Survey was selected from the January 2018 School Census published in June 2018. This provided the detailed information on the number of pupils and year groups required for sampling. The sample for Year 3 (2019/20) was drawn from 2018 data because the sample was selected during the previous academic year so that APs could contact schools in advance of the fieldwork term, and this was done before the 2019 census was published.

All schools are eligible for the survey regardless of whether they took part in the previous year. For secondary schools this is necessary as most local authorities have so few schools which were not sampled in Year 2. There is more scope for

selecting a ‘fresh’ sample of schools for primary schools, which are more prevalent, but removing the primary schools which were selected last year would result in a sample that was not a true random sample. This is because we select the sample using probability proportional to size (PPS) and so the larger primary schools are more likely to be sampled each year and so would be disproportionately removed from the sampling frame for the following year.

The Department for Education provides an official register of educational establishments across England and Wales (Get Information about Schools (GIAS)) which is kept updated continuously and this was used to match on contact information and other school level information not included in the School Census data. The schools contained within the Schools Census and GIAS provide unparalleled coverage of children aged 5-15 in England. When the survey sample was selected in year 3 the mid-year population estimate from 2017-18 for children aged 5-15 in England was 7,028,324 and the 22,831 schools in the Schools Census included 6,750,949 children aged 5-15 (96% of children aged 5-15).

The starting sample frame was all schools in England (independent and maintained). From this, 2,780 schools of specific types were removed from the sample frame. The following school types were removed from the sample frame prior to selection: state funded nurseries (389), pupil referral units (326), state funded special schools (926), non-maintained special schools (58), independent special schools (449), establishments attended only by pupils aged 16-19 (44), studio schools which are mainly year 9-11 (27), technology colleges (3), university technology colleges (44), schools with fewer than 30 pupils in total or containing only one year group (483), schools with fewer than 30 primary pupils (where the school also includes secondary years) (0), schools with fewer than 30 secondary pupils (where the school also includes primary years) (31). These schools were removed from the sample frame for a variety of reasons including being so small that every child in the school would need to be included, the survey not being adapted for pupils in special schools and pupil referral units having a changing pupil population over the course of a term. Schools which contain only or mainly nursery, reception or Year 12-13 pupils were excluded because most or all of the pupils would not have been eligible. Very small schools were also excluded as the within school sample approach would not be effective in those schools. Special schools were excluded because, while children with special needs in mainstream school can participate with their usual support, many pupils in special schools would not be able to take part and a different approach is needed to understand their participation in sport.

Removing these schools reduced the sample frame of schools to 20,051 which contained 6,607,004 pupils aged 5-15 (98% of the 6,750,959 children aged 5-15 in the school census in 2018). It should be noted that some 5-year olds are educated in reception classes which were not included in our sample frame. In addition, pupils turn 16 years old while they are in Year 11. The use of year groups 1-11 for sampling means that the sample includes pupils who had turned 16 years old by the time they took part in the survey and excludes any pupils who were 5-year olds within reception classes.

The sample of schools selected from Edubase for the whole year consisted of:

Up to ten **state** primary schools in each local authority

Up to ten **state** secondary schools in each local authority

370 **independent** schools across the whole country

In addition, up to five state primary and five state secondary schools were selected per local authority as a reserve sample. In the sample frame there was no local authority with fewer than 10 primary schools and there were 192 local authorities with fewer than 10 state secondary schools. In these local authorities every secondary school was selected.

Selection of state primary schools: For state primary schools up to 15 schools were selected in each local authority to form the main (10) and reserve (5) samples. The probability of selection was calculated for each school. Where schools had a probability of greater than 1, they were forced into the sample. After this 392 state primary schools had been forced into the sample. Then the remaining schools were selected with a probability proportional to the size of the school. The sample was stratified by local authority, urban/rural indicator and pupil count. Once up to 15 schools had been selected per local authority, five of these were randomly selected to be in the reserve sample.

Selection of state secondary schools: For secondary schools the main and reserve samples were selected separately. As there were so many local authorities with fewer than 10 state secondary schools (where all secondary schools therefore had to be selected), it was not possible to make the reserve sample probability of selection proportional to size of school.

The main sample was selected in the same way as the primary sample, with schools with a probability of selection greater than 1 forced into the sample, with 1,561 schools forced into the sample. After this the remaining schools were selected with a probability proportional to size with up to 10 main sample schools being selected per local authority (fewer where there were fewer than 10 schools in the local authority).

The reserve sample was selected from among the schools remaining in the sample frame after the main sample selection with up to five schools in each local authority randomly selected with equal probability of selection. This is different from the primary approach which would not work for secondary schools. In secondary schools the priority is getting the main sample as close to equal probability as possible.

Selection of independent schools: The sample consists of 370 independent schools, in addition to the state schools. The sample was stratified by local authority and pupil count. 48 schools were forced into the sample because they had a probability of selection of greater than 1. All other schools were selected with a probability proportional to size. It is good practice to stratify by local authority to ensure we have a good spread of schools geographically.

Allocation of schools to term

The main sample schools were allocated to a term using systematic random sampling. As in Year 2, the sample was originally designed to include 35% of the schools in the Autumn term, 35% in the Spring term and 30% in the Summer term (in Year 1 this was 30%/40%/30%; the adjustment was made in order to achieve equal numbers in the Autumn and Spring terms). The main issued sample of schools at the start of the year was 2,063 in the Autumn term, 2,062 in the Spring term and 1,766 in the Summer term. In the Spring term 270 reserve schools in 110 local authorities were issued and in the Summer term 185 reserve schools in 84 local authorities were issued initially.

Due to the coronavirus pandemic and the majority of pupils being taught remotely in the summer term, the main issued sample was altered to be more flexible for the summer term. Schools that were sampled for the summer term and had already agreed to take part before a decision was made to reduce the sample size were retained in the revised summer term sample - 112 agreed to take part from the original sample. A further 488 schools from the original summer term which had not yet indicated whether they would participate were again invited to take part. The remaining sample originally issued to the summer term was not invited to take part in the final sample - 1,197 schools in the original summer term sample were not in the final reduced issued summer term sample. This reason for this was to minimise burden on schools during a challenging time, while continuing to gather important data about the participation of children and young people during the pandemic. In addition, 396 schools originally sampled in the spring (and two from the autumn) requested that they be included in the summer term sample, having not managed to take part at all when originally

sampled because of the pandemic. The summer sample also contained 69 schools that were sampled in the spring term but did not manage to complete all parts of the survey during the spring term owing to the sudden end of term.

Selection of year groups within schools

The selection of year groups within schools was based on the actual available years in each school according to the 2018 School Census, not on its classification as a primary, secondary or other type of school. This allowed for accurate representation of schools which had unusual combinations of year groups resulting from local education policies (e.g. secondary schools starting in year 6 or year 8) or from schools being in a development phase and only including a few year groups so far.

It should be noted however that the Schools Census was from the school Year 2017-18 but the survey took place in 2019-20. In most schools the school years available in a school were the same from year to year. However, schools which are in the process of growing from the bottom up will have year groups in 2019-20 which did not exist in 2017-18. For the purpose of sampling, these new higher years which emerged in 2019-20 were not included in the sample frame. Only year groups which existed in 2017-18 were selected.

Within each selected school, three year groups between Year 1 and Year 11 were selected. The only exceptions to this were in infant schools, Year 10-11 only schools, or other schools where there are only two year groups where both year groups were selected. In the summer term, schools were able to ask any year groups to take part in the survey to give them more flexibility but were advised to try and included the selected year groups if they could. Details on how year groups were selected for schools in autumn and spring terms for each school type are given below.

Selection of state primary years: All state primary schools were randomly assigned to one of two patterns of selection; years 1, 3 and 5 or years 2, 4 and 6. These patterns worked well for schools with 6 primary years 1-6. Where the primary schools were infant (1-2), junior (3-6) or another combination, the years were selected at random. At the end of this process approximately equal numbers of each year group had been selected and schools were only set to select year groups which actually exist in their school based on the latest GIAS data available at the time the sample was drawn.

Selection of state secondary years: All state secondary schools were randomly assigned to one of ten patterns of selection. Where the pattern assigned did not fit with the years available in the school, the school years were sampled at random. In a very small number of schools, which had both primary and secondary year groups, only secondary year groups were selected. For all through schools which already cover Year 1-11, the random selection of three year groups was done across all the years in the school. At the end, approximately equal numbers of each year group had been selected.

Selection of independent school years: In independent schools three year groups in each school were selected at random across all the years covered by the school.

Selection of classes within years

For any given school, only one class in each year group was included in the sample. Having been informed of which year groups had been selected, a Kish grid was used to select one class within each selected year. As mentioned above, for summer term 2020, schools were able to ask any classes to take part in the survey to give them more flexibility but were advised to keep to the selected year groups if they could and Kish grids were not used. The same 10 Kish grids were used in autumn and spring as in Year 1 and 2 but reallocated to schools so if a school also took part in Year 1 or 2, they did not necessarily get the same grid in Year 3. The classes from which the selections were made were mixed ability and were not set by gender or ability.

Where schools had a single class in the selected year group which also included children from another year group, this class was selected and the whole class was invited to complete the survey (despite some children being in another year group to that originally selected). Where schools had a mixture of classes; some with pupils from a single year group and some with pupils from a mixture of year groups, the selection depended on how the mixed classes were formed:

If children are assigned randomly to the single and mixed classes, then one of the single year group classes should be selected using the Kish grid. In most cases this will just be a single class so the grid would not be required.

If children are assigned to the mixed classes based on age or ability, the Kish grid should be used for all classes that include children of the year group of interest. If a mixed class is then randomly chosen, the whole class (all year groups) can complete the survey.

3.2 Sample size

The originally issued main Year 3 sample contained 5,891 schools in total, which is 29% of those in the initial sample frame. The following table presents a breakdown of the original Year 3 sample by type of school (before any adjustments were made for the summer term). In addition, there were reserve schools in the sample, some of which were issued during the course of the year in response to shortfalls in particular local authorities. Only the issued reserve sample schools are shown in table 3.1. Table 3.2 shows the breakdown of the type of school for the summer term sample that was reissued as a result of the coronavirus pandemic.

Table 3.1: Selected sample issued for fieldwork by type of school

Type of school	Number of main sample schools	Number of issued reserve sample schools	Number of issued schools (total - original)	Number of issued schools (total – after summer term changes)
State Primary	3,150	348	3,498	2,723
State Secondary	2,371	107	2,478	1,977
Independent	370	-	370	297

Table 3.2: Updated summer term sample issued for fieldwork by type of school

Type of school	Number of issued schools
State Primary	607
State Secondary	408
Independent	52

The following tables present a breakdown of the issued main Year 3 sample by year group and term. The number of year groups is uneven, because independent schools include fewer infant year groups.

Table 3.3: Breakdown of selected year groups by school year and term (main sample only)

Year group	Autumn	Spring	Summer (original)	Total
Year 1	581	567	507	1,655
Year 2	576	551	482	1,609
Year 3	552	545	489	1,586
Year 4	538	558	467	1,563
Year 5	602	609	536	1,747
Year 6	576	605	526	1,707
Year 7	520	556	470	1,546
Year 8	487	512	503	1,502
Year 9	552	529	463	1,544
Year 10	537	503	499	1,539
Year 11	592	599	303	1,494
Total	6,113	6,134	5,245	17,492

Table 3.4: Breakdown of selected year groups by school year for the reissued summer term sample (main)

Year group	Summer (reissued main)	Summer (reissued from Spring)	Total Summer sample
Year 1	318	10	328
Year 2	279	10	289
Year 3	305	11	316
Year 4	270	9	279
Year 5	341	11	352
Year 6	304	11	315
Year 7	275	2	277
Year 8	265	2	267
Year 9	267	2	269
Year 10	269	1	270
Year 11	204	2	206
Total	3,097	71	3,168

3.3 Opt-in schools and classes

Because participating schools were offered a school level report which is of value to schools, some schools which were not in the selected sample opted into the survey. In addition, schools which wanted to have a larger sample size and a wider range of year groups for their report could also opt-in additional classes or year groups. These cases were included in the data for school level reports but were not included in the national data for publication or in the archived data. Pupils from opt-in schools or classes were not given a weight in the dataset. Schools that opted in could complete the survey with any year groups and did not need to use the Kish grids for class selection. Schools were also able to opt-in to the summer term of the survey as usual - these schools were treated differently from those sampled schools which opted to defer to or stay open for the summer term having not been able to take part in an earlier term.

Fieldwork

Fieldwork

This section outlines the approach used for fieldwork for the Active Lives Children and Young People survey.

4.1 Approach to recruitment

Sport England has strong links with Active Partnerships (APs) across the country. The APs liaise with schools, local authorities and school games organisers (SGOs) to encourage participation in sport and gather and use statistics at a local level. They are therefore very well placed to provide a link between Sport England and schools for the purpose of carrying out the survey. The benefits are two-fold: existing strong links can be used to encourage participation in the survey, and new stronger links can be established through APs and schools liaising about the survey. The APs were asked to recruit sampled schools to take part in the survey. When schools were happy to participate, the APs' role was to support the schools through the process of selecting appropriate classes (one class per year group from up to three year groups selected) using a Kish selection grid. It was also important that the selected classes were mixed-ability e.g. PSHE¹⁴ or registration groups. In small schools, for example in single-form entry schools, there was no class selection needed. Class selection was removed completely for the summer term 2020. APs were able to provide advice to schools on a case by case basis, for example, if a school did not have any mixed ability classes or only had mixed year group tutor groups. Where necessary, queries were referred back to Sport England and to Ipsos MORI.

The APs were responsible for sending out the information packs to schools as well as following up with schools who said they would be happy to participate. The APs then provided the unique URLs (created by Ipsos MORI) to the participating schools in advance of fieldwork. Whilst the survey was live, the APs managed timings and monitored progress in order to target non-responding schools. This information was then fed back by the APs to Sport England via Smartsheet (online shared spreadsheets).

4.2 Information for schools

APs were provided with access to a Sport England maintained webpage from which they could download and send schools information relevant to the schools. This included:

A brief guide for teachers about the survey including a simple list of what is required.

A letter to parents (year group specific) which provided parents with the ability to opt out their child from participating in the research.

An information sheet for students (year group specific) which explained what would be involved in participating in the research.

¹⁴ Personal Social and Health Education

Information sheets for both teachers of the classes chosen to take part (administering teachers) and those coordinating the schools' participation (lead teachers), outlining what would be involved and providing guidance on how to manage the completion of the survey.

Information on class selection including examples for different scenarios.

Information on school reports including the requirements needed to receive one and examples of school report templates (school type specific).

Information on incentives including a flowchart of the process and a copy of the latest ESPO incentive brochure.

Privacy policies produced in light of GDPR (General Data Protection Regulations) that came into force in May 2018 covering the data collected, teacher email addresses and a statement from ESPO about their use of the data provided to them.

Practice links to the online questionnaires which do not collect data to allow teachers to review the content in advance.

Questionnaire summaries of each questionnaire (pupil, parent and teacher) to allow teachers or parents to view the content of the survey before completion.

In the summer term, advice sheets were provided, both for pupils and parents. These were for support and advice whilst completing the survey without teachers present to offer support.

Additional information sheets were also provided in the summer term with instructions and advice on how to complete the survey from home. These were provided for pupils in Years 3-11 and parents of children in Years 1-2.

A text message template which schools could use to send links to the questionnaire to parents or pupils at home if this is their chosen method of communication.

4.3 Administration of survey

In the autumn and spring terms, pupils completed the survey during school time in lessons which were not grouped by ability e.g. tutor time, PSHE or IT. Pupils completed the survey in one sitting under exam conditions. Teachers were advised that they could help pupils with reading or understanding but not with answering the questions and as such, there should be someone present in the room who could assist children who normally need help with tasks. Teachers were advised to encourage secondary school pupils to have planners or timetables to hand to help with the answering the behavioural questions. Additionally, they were also advised to ensure Year 1 to 2 pupils had headphones available whilst completing the survey, in case they wanted to use the audio feature (to have the questions read out to them instead of reading the questions themselves).

In the summer term, pupils could complete the survey at home or at school. Teachers were asked to send the survey links home to their pupils using email, Show my Homework, ParentMail, text or alternative method. Pupils were able to use a laptop, desktop computer, tablet or smartphone to complete the survey. They were able to complete the survey at any time but preferably during school hours and in one sitting. Parents could help their child with reading and understanding the questions but not with answers. If pupils were still attending school, they completed the survey on school computers or tablets, or their smartphone during school time.

Parents completed the survey at home or on school computers or tablets during parents' evenings or at other times when parents were in school. Although the survey is designed primarily for computer or laptop use, some parents did complete it using a smartphone. Teachers could complete the survey at home or at school using their own or a school computer or tablet.

A free technical helpline was set up in the summer term to enable parents, pupils, teachers or APs to deal with issues they may have completing the survey. This could be contacted via telephone or email. This was only used in a small number of cases

4.4 Online questionnaire

The Active Lives survey was hosted using Ipsos MORI's global Dimensions platform in Rackspace, a managed hosting facility. The security features offered by Rackspace, and Ipsos MORI are listed below:

At Rackspace:

Rackspace has SAS 70 type II and Safe Harbor certifications

The servers and network infrastructure are physically located in England

The servers and network components are fully redundant

Rackspace guarantees recovery of hardware failures within one hour

Strictly monitored access to all data centres using keycard protocols, biometric scanning protocols and continuous interior and exterior surveillance.

Access limited to data centre personnel only without exception.

All data centre employees undergo thorough background security checks before being employed.

At Ipsos MORI:

All access to Dimensions' questionnaires and data was password protected.

Only a small number of online survey experts had access.

Survey data and any respondent personal information were stored in separate databases.

Penetration testing was carried out on our installation to check that there were no problems.

4.4.1 Survey URL

When deciding on the URL to use for the survey we considered how brevity might affect ease of participation. We decided to use short URLs, as we thought this would improve accessibility and would help maximise response rate. This was especially important for younger pupils, who needed to be able to type the URL into their computers during lesson time, or at home in the summer term. Each URL therefore consisted of the domain ipsos.uk followed by a unique randomly

generated five letter string e.g.: <https://ipsos.uk/XZYZU>. These URLs were the same length as in Year 2 but shorter than in Year 1 (seven letters) to make their use easier and every URL had Z as the second letter to avoid short words featuring in the URLs. The survey was hosted on the Ipsos MORI website, which ensured the legitimacy of the survey was immediately evident.

Each sampled school was provided with a series of unique URLs through which the survey could be completed:

One URL was provided for each sampled year group within the school (in the majority of schools three year groups were sampled, and therefore three URLs were issued, but in a small number only two year groups were sampled and therefore two URLs were issued),

One URL was provided for the parent survey,

One URL was provided for the teacher survey.

Schools were able to opt-in to the survey. This could be schools which had not been sampled at all, or schools could request that additional classes took part in the survey, beyond the three chosen in that school. This could be additional classes within a selected year group or other year groups. Where requested, up to three URLs were provided for non-sampled classes (for use where the school asked additional classes to complete the survey or for schools not included in the sample at all). Schools were provided with URLs for classes in years 1-2, years 3-6 and/or years 7-11 as appropriate.

During the summer term, schools could invite any year group and any class to take part in the survey to reduce burden (although they were advised to keep to the selected year groups if they could). Therefore, it was not possible for schools to use the specific URLs for each sampled class and all year groups and all classes within selected year groups took part on the same survey links, rather than on specific class-based links. There were separate URLs for Year 1-2, Year 3-6 and/or Year 7-11 (as appropriate), parents and teachers.

Allocating unique URLs in this way meant that respondents saw only the questions that were appropriate to them given their role (pupil, parent, teacher) and, where applicable, year group (1-2, 3-6, 7-11). The unique URL also minimised error by ensuring that the data collected was automatically allocated to the correct school (which may not have been the case had respondents been required to identify their school and year group themselves).

4.5 Incentives

To incentivise schools and thank them for their participation Sport England offered participating schools credits which can be spent on a range of sporting and activity-based equipment, through ESPO (Eastern Shires Purchasing Organisation). Sampled schools which take part and have at least 30 pupil responses (or responses from at least half of the number of those in sampled classes if this totals less than 30) are given 10 credits (worth about £100). In schools where Year 1-2 parents are surveyed, schools earn an extra 5 credits (worth about £50) for every five parent responses. Sport England work with ESPO in order to administer the incentive scheme. Sport England pass on details of qualifying schools to ESPO on a weekly basis (or at the end of term for schools with Year 1-2 pupils) who then take over the administration of the incentives by contacting schools by both email and by post with a letter telling the school the number of credits they have achieved, a copy of the incentive brochure from which to select their activity based equipment item/s and information on how to redeem their credits.

Response reports provided by Ipsos MORI were used to provide evidence of participation for the administration of the incentives by Sport England.

Schools were also eligible for a school-level report if at least 30 valid responses for the activity questions were received (for a full report) or 30 valid responses on attitudes or wellbeing only (for a shorter infant only report). During the spring and summer terms 2020, a school was eligible for a report if they had received 25 or more valid responses to take into consideration any difficulties schools may have had with completion during the pandemic. The report covered key activity measures overall and for at school and outside school and for boys and girls. Data on the most participated in activities at that school was also included as well as data on swimming. Findings on wellbeing, resilience, trust and attitudes formed part of the report. A notes page highlighted the limitations of the data within a school, because it is based on small numbers and limited year groups. School reports for the summer term were the same as the autumn and spring terms but with sections referring to 'at school' and 'outside school' as 'during school hours' and 'outside school hours'. Information on school travel for infant pupils was not included in the summer term 2020.

The reports also contained a page covering the Healthy Schools Rating Scheme¹⁵. This is a scheme launched by the Department for Education (DfE)¹⁶. The scheme draws on the school's responses to questions covering food education, school food standards, participation in PE and active travel to school taken from the teacher questionnaire. This rating scheme is designed to recognise the positive actions that schools are taking around healthy eating and physical activity and to encourage schools to reflect on useful next steps.

These reports were prepared by Ipsos MORI and sent to schools individually by email. Schools which had opted into the survey received a school level report but were not eligible for the equipment-based incentive.

Small schools and those with low numbers of pupils who struggled to reach the number of responses required for a school-level report received amended versions of the school-level report. These were produced in-house at Sport England based on the same templates as those used for the school-level reports and were based on counts rather than rates. These reports were introduced from Autumn term 2018/19 onwards and are distributed to small schools later than the main school-level reports.

4.6 Accessibility

The Active Lives survey is designed to be as accessible as possible for all respondents. There were three types of questionnaire:

Short simple questionnaire for pupils in Year 1-2 (age 5-7),

Questionnaires for pupils in Year 3-11 (age 7-15/16) and parents of pupils in Year 1-2,

Questionnaire for one teacher in each school (most often the PE lead but could also be completed by heads, deputies and other teachers).

¹⁵ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/814914/Healthy_schools_rating_scheme.pdf

¹⁶ More information about the scheme can be obtained from the Department for Education. <https://www.gov.uk/government/publications/healthy-schools-rating-scheme>

A simple child friendly font (comic sans) was used for the pupils in Year 1-2 as well the use of pictures and an audio feature to enable pupils to hear the questions being read out in case of difficulties with reading.

For the Year 3-11 questionnaire, the questionnaire content varied by year group with Year 3-4 pupils having fewer questions. Year 3-6 pupils had a questionnaire with images and icons and comic sans font to aid reading and understanding of the questionnaire content.

The questionnaires are all in English but it is recognised that for some parents English would not necessarily be their first language. Therefore, an option for the questionnaire to be translated over the phone was available on request by schools. During Year 3 this was not requested by any schools. For pupils with English as an additional language the guidance to schools was that they should give the same support they would usually give the child to access the curriculum in English.

Whilst teachers were not permitted to help pupils answer the questions, they were advised to provide pupils with the level of support that they normally would at school. For example, helping a particular child to read if that was something they often required assistance with.

During the development phase in Year 1 all the questionnaires were reviewed by a primary school teacher to ensure that the design and language would be age appropriate.

For the summer term, the questionnaire was modified to allow for ease of completion on a smartphone. This was to ensure that the survey was accessible for respondents at home who may not have access to a computer or tablet.

Response rates

Response rates

5.1 Method and assumptions

The Active Lives Children and Young People survey was designed to achieve fixed numbers of returns from children within each local authority across each year of the survey. It is not possible to calculate pupil level response rates as we do not know the number of individuals in each class selected to participate (and hence the size of the eligible sample). However, we can calculate school response rates at local authority level, by dividing the number of schools invited within each local authority by the number of schools that participated within each local authority. Sport England has used the final data to analyse activity levels by local authority, as such the survey method aimed to receive a minimum of 300 responses per local authority.

5.2 Responses

During fieldwork, Ipsos MORI monitored the survey responses. In particular, we monitored the number of completes and partial completes by each Active Partnership (AP), Local Authority, individual school, year group and survey type. From this information we could determine whether the appropriate year groups and classes had been selected to participate. We also monitored the number of completes compared to the targets set for the term, and against the completion rates from previous terms. During the summer term, we monitored the number of completes by whether pupils were attending school or not – attending school every day, attending school some days of the week but not all or not attending school at the moment. We also monitored the device that respondents were completing on (desktop, smartphone, tablet, feature phone, console or unknown). This was to ensure that all devices that may be used to complete the survey at home were compatible with the survey and that no devices led to more drop-out than others.

Ipsos MORI produced weekly fieldwork updates for Sport England as well as more detailed monthly summaries.

Ipsos MORI also produced a mid-term response review, to identify local authorities which might fall short of the completion target, based on a review of the number of schools which had agreed to take part and the number of completions. Where necessary, and possible, reserve sample for those local authorities was issued to the AP in the following term to try and mitigate any shortfall in numbers.

Information by school type is shown in the table below. Information by local authority and AP are shown in the appendices. The numbers in this table include all the main sample as well as issued reserve sample for the autumn and spring terms and the re-issued summer term sample (those schools who did not get the chance to complete the survey during Spring due to the early closure of term).

Table 5.1: Number of schools selected and responding by school type (sampled schools)

School type	Selected schools	Responding schools	% of selected schools responding
Primary	3,011	777	26%
Secondary	2,143	594	28%
Independent	312	21	7%

The Year 3-11 and parent questionnaire collected the key behavioural data required for the calculation of estimates for participation in physical activity. The Year 1-2 and Year 3-11 questionnaires provided the attitudinal and outcome data. This means that response was also monitored in terms of overall questionnaires completed, and behavioural and attitudinal questionnaires, by term and overall. This is shown in table 5.2 for complete questionnaires. This includes questionnaires received from schools which were sampled for the summer term or which had been sampled for a previous term and deferred to the summer term (whether main or reserve sample). Note that this only includes complete interviews; the dataset includes partial interviews.

Table 5.2: Completed questionnaires by term and type of data

Type	Total no. of completes: Autumn term	Total no. of completes: Spring term	Total no. of completes: Summer term	Total no. of completes	Target Year 3	Percentage of Year 3 target
Total: Year 1-2, 3-6, 7-11 and parent	46,860	31,610	21,135	99,605	95,000	105%
Attitudinal: Year 1-2, 3-6 and 7-11	45,543	30,673	20,356	96,572	95,000	102%
Behavioural: Year 3-6, 7-11 and parents	38,684	26,782	19,863	85,329	95,000	90%
Teacher	549	405	179	1,133	N/A	N/A

The number of selected schools, responding schools and responding pupils in each AP and local authority are shown in the Appendices.

5.3 Break offs

A break off occurs when a respondent enters the online questionnaire but does not complete it. Software allows this abandoned survey data to be captured. Cases which had a break off near the end of the online questionnaire could be included in the dataset. The table below shows the point in each questionnaire that respondents must have reached in order for it to count as a partial complete and their answers to be included in the dataset. These points were chosen because in the case of Year 3-11 pupils and parents it means that they had completed all the participation in sport and activity questions which means that key survey estimates on respondents could be derived.

Questionnaire type	Variable that needs reaching in order to count as a partial complete
Pupils (Year 3-11)	PLEnjoy (first question after the activity grid)
Parents	SwmCan (first question after the activity grid)
Teachers	ACTTRAV (however all teacher responses are included in the dataset even if they do not qualify as a partial)

In the final dataset for Year 3-parent, 94.2% (84,417) of the valid cases for analysis are complete and 5.8% (4,886 are partials).

Responses were received from 1,186 teachers. There were 272 schools where pupils responded but no teacher and 77 schools where a teacher response was received but no pupils or parent responses. The teacher questionnaire was intended to provide contextual school level information to supplement the pupil level data.

5.4 Profile of achieved sample

Table 5.3 shows the profile of the unweighted sample by key characteristics. As described in the weighting section, weighting was used to ensure that the profile of the weighted sample matched available population estimates as far as possible to ensure that published findings are representative.

Table 5.3: Profile of the achieved sample (unweighted) from Year 1-2, Year 3-11 and parent or year 1-2 data (valid data only, excluding can't say, prefer not to say) (percentage)

	Year 1-2	Year 3-11/ parents of Y1-2
Base	14,576	89,303
	%	%
Year group		
Year 1	48.5	1.8
Year 2	51.5	1.6
Year 3		7.4
Year 4		8.1
Year 5		10.3
Year 6		9.7
Year 7		16.1
Year 8		14.0
Year 9		12.5
Year 10		10.7
Year 11		7.8
Gender		
Male	50.3	47.0
Female	49.7	52.4
Other		0.5
Ethnicity		
White-British		73.6
White-Other		4.6
Asian		8.7
Black		3.8
Mixed		5.8
Other		3.5
Family Affluence		
Low		19.1
Medium		56.0
High		25.0

Weighting

Weighting

6.1 Design and purpose

Weighting is required to reduce the risk of bias in survey estimates. Weights are produced to make the weighted achieved sample match the population as closely as possible. For the Active Lives Children and Young People Survey the weights correct for non-response by schools.

6.1.1 Annual sample weights

The weighting was done separately for the following three sets of year groups: years 1 and 2; years 3 to 6; and years 7 to 11. The parent and pupil returns for years 1 and 2 were also weighted separately; as were state and independent schools. This therefore means that there were eight sets of weights in total that were generated separately:

State schools: parent returns years 1 and 2

State schools: pupil returns years 1 and 2

State schools: pupil returns years 3 to 6

State schools: pupil returns years 7 to 11

Independent schools: parent returns years 1 and 2

Independent schools: pupil returns years 1 and 2

Independent schools: pupil returns years 3 to 6

Independent schools: pupil returns years 7 to 11

Each of these eight groups were weighted up (i.e. grossed) to the corresponding population estimates from the January 2018 School Census.

There are no weights for teachers and any teacher analysis is carried out unweighted. Some of the data reported in the wellbeing tables involves analysis of matched Year 1-2 pupil data with parent data for those year groups. This is only done when an individual match can be made based on gender, date of birth, year group and school. For this analysis the parent weight was used. This is the weight provided on the matched dataset of parents and pupils.

6.1.2 Calibration weighting

For state schools the weighting involved calibrating to school year by gender, pupils in schools with more than 20% of pupils getting free school meals and pupils in schools in a rural area. This was done separately for each region based on the proportions (rather than the actual counts). It was not possible to adjust for local authority as the sample sizes for some local authorities were too small, indeed there were 13 local authorities in which no schools participated at all (there was an additional one local authority where one teacher and no pupils responses were received). Instead counts of pupils

in NUTS2 (Nomenclature of Territorial Units for Statistics) geographical areas were used as there was at least one responding school in each area. Independent schools were calibrated by counts of school year and gender. We explored the possibility of calibrating by region for independent schools but there were several regions with no independent school pupils in Year 3-6 or 7-11 responding to the survey. It should be noted that results by region include pupils in independent schools but the data for independent school pupils has not been weighted by region.

The weighting for year 3 followed the same approach as for year 2 but with some modifications. In the summer term all pupils from sampled schools were included in the weighted data regardless of their year group. This is due to the altered protocol for the summer term which allowed all year groups and all classes within selected year groups to take part on the same survey links, rather than on specific class-based links. In years 1 and 2 of the survey and autumn and spring of year 3 only pupils who completed on the designated sampled class survey links were included in the weighted data, which usually meant only the pupils from the two or three selected year groups and selected classes within them. The remaining pupils were treated as opt-ins. We explored the possibility of weighting the data by term in year 3 because the distribution of responding pupils by term was quite different from year 1 and 2. For example, in academic year 2018-19, 33% of the year 3-11 and parent completes were in Autumn term, 36% were in spring term, 31% were in summer term; and this changed to 46%, 32% and 22% respectively in academic year 2019-20. It was not possible to correct this through weighting due to very small numbers in certain categories (term by year group by NUTS2). It was judged to be more important to weight to take account of other factors in the weighting including gender, free school meals, rurality, geography and school phase. In order to weight by term, other important factors previously included in the weighting would need to have been excluded.

It should be noted that after weighting, whilst the annual sample is representative on all the factors included in the weighting, as also outlined above, it has not been possible to weight variables within the summer term 2020. This means some caution has been taken when producing our coronavirus report due to a limited impact on the summer term data resulting from this. For summer 2020, the distribution of the weighted sample by school phase (Year 1-2, 3-6, 7-11) over-represents pupils in year 7-11 compared with the pupil population. This resulted from uneven response by school phase in the summer term owing to the challenges facing schools in sending work to pupils at home even though the issued samples were balanced across the terms in terms of school type and selected year groups. This is why analysis by school phase has also been provided in the tables. In addition, for summer term 2020 the weighted sample has a lower proportion of the sample from schools with high levels of deprivation on the index of multiple deprivation. This has been borne in mind when producing the results.

It should also be noted that because the proportion of the sample in the summer term in year 3 is lower than in years 1 and 2 when looking at activities which may be seasonal, comparisons between years should be made with care, taking into consideration the proportion of the sample in the summer term.

Because the calibration weighting was carried out on proportions rather than actual counts, they were grossed up to regional counts when combined so that the total weighted sample count by region was the same as the population counts from the January 2018 school Census for the years covered.

As explained in the sampling section, the population estimates were extracted from the January 2018 school census. For consistency, the weighting was carried out using the same data which had been used for sampling.

As for year 2, in year 3, we noted that a number of schools had substantially more responding pupils than the selected 30 per up to three selected classes. In some cases, this appeared to be because schools which had opted in additional pupils

had asked these opted-in pupils to complete using the URLs for sampled pupils only. Therefore, the weighting for year 3 was designed to trim the number of weighted pupils to 40 per class in the school, to avoid these additional pupils affecting the national results. This affected all terms but was particularly important in the summer term of year 3 where there was no restriction on the number of pupils per school and we did not want schools which asked large numbers of pupils to complete the survey to be over-represented in the data.

6.2 Technical information

6.2.1 State school population profiles

The control totals for the calibration consisted of DfE pupil population estimates from the January 2018 school Census. The following tables show the profiles by the calibration measures used for the weighting. Note that we have not included the control totals for NUTS2, given the number of data points.

State school population profiles

Table 6.1: Gender and year group by region (by phase – Year 1-2, Year 3-6, Year 7-11)

Year group	Gender	NE	NW	Y&T H	EM	WM	EE	Lon	SE	SW	ALL
Year 1	Male	25.4%	25.4%	25.5%	25.6%	25.5%	25.5%	25.5%	25.6%	25.7%	25.5%
	Female	24.4%	24.6%	24.6%	24.3%	24.4%	24.5%	24.5%	24.4%	24.2%	24.5%
Year 2	Male	25.7%	25.5%	25.5%	25.6%	25.4%	25.6%	25.6%	25.6%	25.6%	25.6%
	Female	24.5%	24.6%	24.3%	24.5%	24.7%	24.3%	24.4%	24.4%	24.5%	24.5%
Year 3	Male	13.0%	13.0%	13.1%	13.0%	13.0%	13.0%	13.2%	13.1%	13.0%	13.0%
	Female	12.5%	12.4%	12.6%	12.6%	12.3%	12.5%	12.5%	12.6%	12.5%	12.5%
Year 4	Male	12.7%	12.8%	12.8%	12.8%	12.7%	12.7%	12.7%	12.8%	12.8%	12.8%
	Female	12.1%	12.4%	12.3%	12.3%	12.3%	12.4%	12.4%	12.3%	12.3%	12.3%
Year 5	Male	12.7%	12.8%	12.8%	12.9%	12.9%	12.9%	12.7%	12.8%	12.7%	12.8%
	Female	12.6%	12.3%	12.3%	12.3%	12.4%	12.3%	12.5%	12.3%	12.4%	12.4%
Year 6	Male	12.4%	12.4%	12.3%	12.3%	12.3%	12.3%	12.3%	12.3%	12.4%	12.3%
	Female	12.0%	11.9%	11.8%	11.8%	12.0%	11.9%	11.8%	11.9%	11.9%	11.9%
Year 7	Male	10.7%	10.8%	10.8%	10.8%	10.6%	10.6%	10.6%	10.7%	10.7%	10.7%
	Female	10.6%	10.4%	10.5%	10.4%	10.5%	10.2%	10.4%	10.4%	10.4%	10.4%
Year 8	Male	10.5%	10.6%	10.5%	10.4%	10.6%	10.5%	10.5%	10.4%	10.4%	10.5%
	Female	10.3%	10.3%	10.3%	10.1%	10.3%	10.2%	10.3%	10.2%	10.3%	10.2%
Year 9	Male	10.2%	10.2%	10.3%	10.2%	10.4%	10.3%	10.2%	10.3%	10.2%	10.3%
	Female	10.0%	10.1%	10.0%	9.9%	10.0%	10.0%	10.0%	10.0%	9.9%	10.0%
Year 10	Male	9.7%	9.7%	9.7%	9.9%	9.8%	9.9%	9.8%	9.9%	9.9%	9.8%
	Female	9.6%	9.6%	9.5%	9.6%	9.6%	9.6%	9.8%	9.7%	9.7%	9.6%
Year 11	Male	9.2%	9.3%	9.3%	9.4%	9.2%	9.4%	9.2%	9.3%	9.3%	9.3%
	Female	9.2%	9.1%	9.1%	9.1%	9.1%	9.1%	9.2%	9.2%	9.2%	9.2%

NE: North East

NW: North West

Y&TH: Yorkshire and the Humber

EM: East Midlands

WM: West Midlands

EE: East of England

Lon: London

SE: South East

SW: South West

Table 6.2: Urban rural and stage by region

Year group	Urban/ Rural	NE	NW	Y&TH	EM	WM	EE	Lon	SE	SW	ALL
Year 1-2	Rural	16.0%	9.1%	15.0%	24.8%	12.3%	26.1%	0.2%	19.5%	30.4%	15.9%
	Urban	84.0%	90.9%	85.0%	75.2%	87.7%	73.9%	99.8%	80.5%	69.6%	84.1%
Year 3-6	Rural	15.5%	9.5%	15.3%	25.4%	12.2%	26.0%	0.2%	19.4%	30.6%	15.9%
	Urban	84.5%	90.5%	84.7%	74.6%	87.8%	74.0%	99.8%	80.6%	69.4%	84.1%
Year 7-11	Rural	10.8%	8.6%	12.4%	21.1%	10.3%	19.0%	0.4%	12.0%	23.5%	12.3%
	Urban	89.2%	91.4%	88.6%	78.9%	89.7%	81.0%	99.6%	88.0%	76.5%	87.7%

Table 6.3: Free school meals (percentage of pupils at school on FSM) and stage by region

Year group	% pupils on Free School Meals	NE	NW	Y&TH	EM	WM	EE	Lon	SE	SW	ALL
Year 1-2	<=20% FSM	55.3%	65.4%	66.3%	78.3%	63.4%	87.4%	72.8%	88.8%	83.7%	75.0%
	>20% FSM	44.7%	34.6%	33.7%	21.7%	36.6%	12.6%	27.2%	11.2%	16.3%	25.0%
Year 3-6	<=20% FSM	56.3%	65.7%	66.1%	78.9%	63.7%	87.5%	71.6%	88.4%	84.8%	74.9%
	>20% FSM	43.7%	34.3%	33.9%	21.1%	36.3%	12.5%	28.4%	11.6%	15.2%	25.1%
Year 7-11	<=20% FSM	62.6%	69.0%	70.4%	86.6%	68.7%	94.4%	70.9%	94.1%	92.5%	79.7%
	>20% FSM	37.4%	31.0%	29.6%	13.4%	31.3%	5.6%	29.1%	5.9%	7.5%	20.3%

Table 6.4: State school region counts

Region	Year 1-2	Year 3-6	Year 7-11
North East	60,578	117,094	129,059
North West	177,320	344,594	379,161
Yorkshire and the Humber	132,549	257,331	281,738
East Midlands	113,441	219,063	240,281
West Midlands	146,515	281,128	310,237
East of England	147,868	282,881	312,668
London	206,404	395,251	405,886
South East	211,358	399,873	437,142
South West	122,646	234,180	259,701
ALL	1,318,679	2,531,395	2,755,873

Independent school population profiles

Table 6.5: Year group and gender (Independent schools)

Year group	Gender	ALL
Year 1	Male	24.1%
	Female	24.0%
Year 2	Male	26.2%
	Female	25.7%
Year 3	Male	11.5%
	Female	11.2%
Year 4	Male	12.3%
	Female	11.7%
Year 5	Male	13.3%
	Female	12.8%
Year 6	Male	14.0%
	Female	13.3%
Year 7	Male	9.8%
	Female	9.7%
Year 8	Male	9.9%
	Female	9.6%
Year 9	Male	10.1%
	Female	10.1%
Year 10	Male	10.2%
	Female	10.1%
Year 11	Male	10.2%
	Female	10.2%

Table 6.6: Year group and region (Independent schools)

Region	Year 1-2	Year 3-6	Year 7-11
North East	1.6%	1.6%	2.0%
North West	7.6%	7.2%	8.4%
Yorkshire and the Humber	4.3%	4.7%	5.8%
East Midlands	4.6%	4.9%	5.4%
West Midlands	6.0%	6.4%	8.0%
East of England	11.1%	11.5%	11.9%
London	35.6%	30.0%	21.9%
South East	22.8%	26.0%	26.5%
South West	6.5%	7.7%	10.1%
TOTAL COUNT	54,782	137,187	220,648

Data editing and management

Data editing and management

7.1 Overview

7.1.1 Questionnaire versions

As mentioned previously, not all respondents were asked every question. This means that for some year groups information is missing. For example, data on watching live sporting events and volunteering is only available for pupils in year 5 and over. For sports participation, where the pupil is routed past certain questions for different year groups or parents, assumptions have been made to allow for creation of the standard variables. For example, for Year 1-4, the location (indoors or outdoors) of activities taken part in has been assumed using a standard set of rules for each activity and whether it was at school or outside school. The User Guide and Code Book provide information on who was asked each question. In this section we describe some of the data editing and assumptions which were used in creating derived variables. Details on specific values and assumptions used can be found in the Code Book.

7.1.2 Summary of pupil questionnaire changes from Year 2 to Year 3

In year 3, 'Acrobatics including Aerial, Aerial hoop and acro' was added to the list of activities – in year 2 this was only included as a back code.

The activity code 'Running, jogging, cross country, the daily mile' was split into 2 codes – 'Running, jogging, cross country' and 'The daily mile, active mile or other regular run done with your class'. The code for the daily mile only appeared in the questionnaires for Year 3-6 pupils and parents of Year 1-2 pupils.

Half the sample in year 2 had a changed wording to the question about moderate intensity activity 'did it make you breathe faster than sitting down reading' while half the sample retained the old wording 'did it make you breathe faster'. In year 3, the whole sample were asked 'did it make you breathe faster than sitting down reading'.

A new question about travelling to school was added – 'How did you/ your son/ daughter get to school today?'. Answer options were 'Walked', 'Rode a bike', 'Scooter', 'Car', 'Bus', 'Train or tram or tube' or 'Other'. This question was asked to pupils in Year 3-11 and parents of Year 1-2 pupils. Respondents could select multiple answer options and also type in an 'Other' box – answers for this were back coded to the relevant mode or excluded if not eligible.

In year 3, a new question covering loneliness was asked to Year 7-11 pupils. The question asked, 'How often do you feel lonely?' with answer options of 'Often/always', 'Some of the time', 'Occasionally', 'Hardly ever' and 'Never'. There was also a 'Prefer not to say' option. In the data tables, all five response options are presented broken down by demographics. Also, the 'Often/always' response option is presented broken down by activity level and volunteering.

Disability questions were updated for year 3 to be consistent across all respondents and to ask about long-term limiting disability (see section 2.5).

Added the option 'Prefer not to say' for Family Affluence Scale questions.

7.1.3 Summary of pupil questionnaire changes for the summer term of year 3

As mentioned earlier in this document, changes needed to be made to the questionnaire for the Summer term 2020 owing to the impact that the coronavirus pandemic had on schools. Below is a list of changes made to questions for the Summer term 2020:

Year 1-2 questionnaire

Changed the question from 'Have you done any of these sports in the last week?' to 'Have you done any of these sports?'.

Added a new category to the activities question - 'PE with Joe Wicks'.

Removed the question about how they got to school.

Year 3-11 pupils and parents of Year 1-2 questionnaire

Added introductory wording to acknowledge that the pupil may not be attending school and that their activities may be different from normal, but they should report on how things are now.

For pupils in year 3-11 a new question was asked at the start checking whether they wanted to start the survey. This was included to ensure that pupils completing the survey from home knew that it was voluntary.

Added a question to ask whether the pupil has been to school in the last week with routing, questions and wording for the rest of the survey dependent on their answer so that the questions would be relevant for pupils not attending school in person. Answer options included 'I have not been to school', 'I have been to school every week day' and 'I have been to school on some week days, but not all'.

Amended activity codes to clarify that online activities or TV led activities could be included in their answer.

Extended the 'gym and fitness' code to be asked to Years 3-6 and parents of Year 1-2 pupils as well as Years 7-11.

Amended the order of activity codes to put activities which were able to be done (according to government guidelines) in the summer term higher up the list.

In survey years 1, 2 and the first two terms of year 3, respondents were asked about activities they did in school and outside school. In the summer term, this was changed to refer to 'during normal school hours' and 'outside school hours'.

Removed the question asking whether pupils who had done no activities in the last week had done anything in the last four weeks as it was felt to be insensitive to ask this during pandemic restrictions.

Removed the question 'Would you like to swim more often?'. We also added an explanation to the swimming questions: "Even though it may not be possible to swim at the moment it is still important to ask some questions about swimming." The question about falling into a lake (self-rescue) removed the word tomorrow.

In survey years 1, 2 and the first two terms of year 3, only Years 3-6 were asked the follow up question of 'Is this how you usually feel?' after asking 'Overall, how happy did you feel yesterday?' but this was extended to Year 7-11 pupils for the summer term.

Removed the question about how they got to school, whether or not they were currently attending school. For year 7-11 the question about where they usually eat school lunch was removed and the question about whether parents have to pay for school meals was given variable wording according to whether they were attending school, with a reference to last term if the pupil was not currently attending school.

Added a question about outdoor spaces that they can access – ‘Which of these outdoor places can you go at the moment for exercise or play?’. Answer options were ‘A balcony’, ‘A garden or backyard’, ‘A park or field near your home’, ‘A wood or countryside’, ‘School playground or playing field’, ‘Other place outside your house or flat (e.g. cycle way, path along river)’ or ‘None of these’.

At the end of the survey on the thank you screen, details of websites and contacts were provided for support and advice because pupils were completing the survey without their teachers present to offer support. Changes were also made to the teacher questionnaire:

- A note was added to the introduction to ask the teacher to report on the facilities/ activities the school usually has available, even if they are not in use currently due to Covid-19. At each affected question (e.g. school travel, transitions, school food) an additional note was added to remind them.
- The questions about swimming lessons were amended to make it clear they should report on what had been planned even if they did not go ahead owing to COVID-19.
- The questions about the duration of school clubs were dropped.
- Three new questions were added about what PE schools were offering for pupils studying at home, whether the school was open to children of key workers and vulnerable pupils and what PE these pupils were offered.

7.2 Data editing

7.2.1 Online data

Online data need little editing in the office as the checks and edits are found within the questionnaire. Where multiple answers are selected on single code answer questions, respondents are asked to correct their answer and certain impossible answers cannot be accepted by the computer. After the data were received in the office, rules were set for defining missing values (to describe the reasons for the missing value) and a number of further edits and imputations were possible.

7.2.2 Missing values

In the survey data there are various reasons why a question may not have been answered. On an online survey, in order to allow respondents to proceed past questions which they may not know the answer to or do not wish to answer, codes are used for the answers which allow them to say, ‘don’t know’ or ‘prefer not to say’. There are also questions which may not be applicable because they were not asked for respondents in that group or were not asked during that data collection period. A respondent may also stop completing the survey part way through. A consistent series of missing values have been used in the data to denote where data is missing: these are described in Table 7.1.

Table 7.1: Missing values and codes used

Code	Description	Application
-99	Missing, should have been answered	Respondents who are eligible for a question but have not answered it
-98	Not applicable: Survey routing	Respondents who are not eligible for a question or measure
-97	Some information known but not enough for value	Used on impairment number variable where known to have disability but number not known
-96	Outlier on minutes of activity	Minutes of activity set to missing because of extreme number of minutes or activities
-95	Don't know/Cannot give estimate	Respondents who are unable to answer a question (but sometimes a question specific value is used and labelled as appropriate where the don't know could be treated as valid data)
-94	Prefer not to say	Respondents who have explicitly said they do not wish to answer a particular question (but sometimes a question specific value is used and labelled as appropriate)
-93	Question not asked due to COVID	Questions skipped during summer term 2020
-92	Missing: question not asked in this survey year or term	Question not applicable during that data collection period
-91	Missing: reason unspecified	Used to replace system missing values in raw variables, unless otherwise recoded to -99 or -98
-1	Score/ value not available in derived variable/ no information	Used in derived variable or matched on where information used in creation is missing meaning value cannot be created

Wherever possible, the base for questions has been set to all respondents. However, for questions not asked at all for one group, missing values must be used.

For the main activity measures the base is all respondents. If there are missing data on one of the activities, this is just treated as not having done the activity. This is because there are so many different activities asked about and so many different variables which feed in (days activities have been done, minutes and two intensity questions) that if anyone with missing data on one or more of these variables were excluded, there would be a huge number of respondents for whom these key measures could not be calculated. Furthermore, the questionnaire was designed that the absence of an answer for having done the activity in the week is treated as not having it done the activity for the purpose of the main activity measures, so there are no missing data on whether the activity was done in the last week.

7.3 Back-coding of other sports

7.3.1 Capturing open data on other sports and activities

In the online questionnaire, respondents were offered a list of 39 different activities to choose from, many of which included several activities within them (e.g. water sports including canoeing, kayaking, sailing, rowing, surfing etc.). Nonetheless, there were still activities which pupils had participated in over the previous seven days which were not included in the list of activities, or which they failed to identify within the list.

Therefore, the online questionnaire offered a space for respondents to record other activities which they participated in over the previous seven days, and to provide details on the frequency, duration and intensity of each activity. For this data to feed into the main data set these needed to be coded into the categories of activities. These categories included those

provided on the questionnaire as well as additional categories for activities which were mentioned but not in the original list. Each respondent could mention up to four other activities.

7.3.2 Coding the 'other' activities

A coding scheme was created which included all answer codes from the online questionnaire, some additional generic answer codes (e.g. other active play) and all relevant new activities not included in the original scheme (e.g. Volleyball). In total, this coding scheme contained around 75 different activities. It also included a code for ineligible activities such as singing or Brownies to allow any time recorded against those to be excluded from the derived variables on participation.

All 'other' responses were manually coded against this code list and then checked for consistency. Where possible, comparability with the approach taken to the Active Lives Adult Survey coding was sought. At the end of the process all 'other' answers had been assigned an activity code, which could then be used in the derivation of the participation and composite variables. The coded data was then merged back into the main dataset. To do this, the data was pulled into an SPSS file, then matched back onto the core data by serial. The serial number was unique to each respondent, thereby ensuring that cases were matched back correctly.

The derived variables were only created once the coded other answers had been included back into the dataset. This means derived variables include all eligible activities, whether originally listed in the questionnaire or coded from other answers. The full list of activities is provided in the User Guide and Code Book which accompany the data set.

7.3.3 Coding non-activity data

Respondents were given the opportunity to describe other disabilities, special needs or impairments, other types of volunteering (year 5-11 only), other ways in which they travelled to school (Year 3-11 and parents of Year 1-2; this question was not asked in the summer term 2020) and other gender (Year 7-11 only). Responses to these other answers were reviewed and either back coded into the original categories, coded into a new valid category or coded into an invalid category which means their answers would be excluded from further analysis. For example, when asked about sports related volunteering, answers such as 'I helped my mother lay the table' were treated as invalid. For the gender question, answers which described their gender identity in a non-binary way were retained as other. Answers which clarified that boy or girl was the intended answer were backcoded to boy or girl. In some cases, the description given did not appear to describe a genuine gender identity. Answers of inanimate objects, food items or animals were coded as 'uncodeable'.

7.3.4 Coding teacher data

The teacher questionnaire included questions with other answers on topics such as school facilities, activities offered at the school, types of pupils targeted for additional PE support and activities for the transition of pupils between primary and secondary. Other answers were backcoded into existing categories, coded into new categories or left in other.

7.4 Checking of data

7.4.1 Checking raw data

Once the final data had been collated and all illegitimate responses removed (for example, insufficiently completed surveys), further checks were undertaken. All variables were checked to ensure that the number and patterns of response

tallied with what was expected based on the survey routing. Once this was confirmed, further sense-checks were conducted to ensure that the broad pattern of responses made sense against what might be expected.

7.4.2 Checking final survey weights

After the survey weights had been created, checks were conducted to ensure that the weighted profile of respondents matched the weighting targets at school year, gender, and school year within gender, as closely as possible. All weighted counts were found to match the population distribution when rounded to the nearest whole number.

For measures not used in weighting (e.g. ethnicity, disability), the weighted counts do not match the population. However, checks were conducted to ensure that the weighted profile on these measures was broadly consistent with national data from the DfE pupil population statistics (January 2019). These checks found the following:

When looking at state schools only, the weighting corrected for region well.

The effect on ethnicity is good when looking at the distribution of white British and all other ethnic groups combined. However, our data show that within the non-White British ethnic groups, white other and Asian respondents are under-represented compared with Black, mixed ethnicity and other respondents but this varies by year group. This may reflect how children classify themselves in a survey as well as the particular schools included in the sample by phase of education.

Both the weighted and unweighted survey samples suggest that those with any disabilities were over-represented in the survey. However, the weighted and unweighted survey samples for those with long-term limiting disabilities match the population well, with a closer match than the previous disability questions had. Analysis by disability cannot be compared for year 3 and previous years of the survey because of the change to the questions.

7.5 Creation of derived variables

7.5.1 Activity derived variables

During the processing of the final data, 'derived variables' were created. These variables combine data from multiple questions to create activity level measures of participation. These variables were created using SPSS syntax to calculate the duration, frequency and intensity with which people participate in activities. These variables were then used to create headline measures of activity, such as level of activity (whether does an average of 60 minutes of moderate plus activity a day across the week). Details of these variables and how they were created is provided in the User Guide and Code Book.

Data are presented for three categories for overall activity in the last week. The first category includes pupils who meet the Chief Medical Officer's (CMO) guidelines for young people of doing an average of 60 minutes of activity a day across the week. The second category includes children who do an average of 30-59 minutes on average a day and the third category the children do less than 30 minutes a day. The categories are named:

Active – Doing an average of 60 minutes or more a day across the week (420+ minutes a week)

Fairly active – Doing an average of 30-59 minutes a day across the week (210-419 minutes a week)

Less active – Doing less than an average of 30 minutes a day across the week (less than 210 minutes a week)

The categorisation has changed since the 2017/18 report which had 4 categories, bringing it in line with recently published CMO guidelines. In Year 1 the first category was split into Active every day (at least 60 minutes every day) and Active across the week (an average of 60 minutes or more a day but not every day).

Government policy aims that children and young people should get 30 minutes of their daily physical activity through the school day and 30 minutes outside of school. Data is collected on activity in school and outside school¹⁷. Only activity of at least moderate intensity is included in the derived variables¹⁸. For in school activity, every day is five days/150 minutes (week days), for outside school activity, every day is seven days/210 minutes. Where activity is in a specific location or setting, these categories are used:

Doing an average of 30 minutes or more every day (210+ minutes a week outside school/150+ minutes a week inside school)

Doing less than an average of 30 minutes a day across the week (less than 210 minutes a week outside school/ less than 150 minutes a week inside school))

This differs slightly from the Year 1 report where the first category was split into two to distinguish between those who were active every day and those who did 30 minutes on average per day across the week.

7.5.2 Imputation and cleaning of activity derived variables

Information on activities, time spent, intensity and location were combined and fed into the measures presented in the analysis (levels of activity and specific activities participated in). The following rules and edits were used in preparing the derived activity variables:

The questionnaire was set up such that people selected the activities they did. Any activity which was not selected was assumed not to have been done.

Where respondents provided duration information for an activity outside school, this was done as response groups (e.g. about half an hour, about three-quarters of an hour) and we allocated a set time for each for creating the derived activity variables (based on evidence from an objective measurement study¹⁹, a standard duration falling within the band was applied). The data have been cleaned such that missing durations for outside school have been imputed using standard durations for that activity. Pupils were not asked about time spent on activities in school and so for all activities in school durations have been imputed using a standard set of times related to the year group and type of activity based on data for outside school, information from teachers on PE and break time durations and the results of the objective measurement study. The standard values used are shown in the Code Book. Where information on duration, location or intensity was missing, standard rules were used to impute the data so that activity variables could be calculated for every case in the dataset. The standard values used are shown in the Code Book. These have remained consistent across all three years of the survey.

¹⁷ During the summer term 2020, in school and outside school were referred to as 'during normal school hours' and 'outside school hours'.

¹⁸ All activity done by pupils in Year 1-2 was assumed to be moderate, pupils in year 3-11 were asked about the intensity of activity outside school and standard assumptions about the intensity of in school activities were made based on year group and activity type.

¹⁹ In the objective measurement study pupils used a waist worn accelerometer and completed the questionnaire so that their objective data could be compared with the data collected in the questionnaire. More detail is provided in the Year 1 Technical Report.

Where pupils mentioned an excessive number of activities over the previous week the case was dropped from the data. Data were dropped for cases with more than 25 activities per day on average, resulting in 210 cases being dropped from the analysis and the dataset.

In Year 2 a change was made to the questionnaire so that for a small number of activities the level of intensity was assumed rather than asked and this continued in year 3. This does not affect the comparison with Year 1 because though intensity was asked for these activities in Year 1, intensity was assumed in the creation of derived variables. In the implementation of this change in Year 2 an error was introduced to the script which meant that intensity was not asked for walking and cycling for travel when it should have been. To rectify this issue, for the data collected during the first half of the year 2 survey year (to February 2019) when intensity was not asked, imputation was used for intensity. The details of this are covered in the technical report from year 2.

As outlined earlier, in Year 2, a change was introduced for half the pupils in Year 3-11 (alternate pupils going into the survey across all three terms). Half were asked the same question about moderate intensity activity as in Year 1 and half were asked a slightly different question which asked 'breathe faster than sitting down reading'. In year 3, the whole sample were asked 'did it make you breathe faster than sitting down reading'. This change was made to improve respondent understanding of the question. By providing the comparison with sitting down reading, more of the activity done was classed as moderate intensity which has an impact on the amount of moderate plus intensity activity reported by pupils. This change was made because it was felt that some pupils were unclear about the comparison in Year 1 and therefore clearer guidance should be provided on the intended comparison.

In addition to the key measures, a number of other activity and composite level variables were created to help measure participation in sport and as building blocks for creating the key measures. The building block measures are also contained in the Active Lives Children and Young People Survey datafile and details of these measures can be found in the User Guide and Code Book.

Note that in the dataset, where there are extreme values the building block variables (used as the basis for creating final derived variables), these extreme values have been set to missing where the case had not been deleted. For these cases the final variables may have a valid value because the way in which final variables have been created effectively caps extremes in a way that the building block variables do not. This should be borne in mind when conducting analysis with the building block variables. Ungrouped minutes variables have been set to missing for all activities and overall when the respondent reported more than twelve hours of activity (of any intensity) on any week day or more than nine hours of activity (of any intensity) on any weekend day, or more than 40 activities on any one day. For these cases all building block minutes variables are set to missing.

7.5.3 Creation of composite sports

Once derived variables had been created at activity level, they were then aggregated up to create measures of participation spanning activity groups or broad activity groups. This was done by summing the minutes for each individual activity. Further detail about this is provided in the Code Book and User Guide.

7.5.4 Demographic derived variables

In addition to the activity and composite measures, demographic and geographic variables were created from the raw questionnaire data and from sample data. These included, for example, variables grouping year group, ethnicity, disability

and family affluence. In addition, key variables such as whether watched live sports events, volunteering and swimming ability were rebased into versions with the population as the base, even when the key measure was only asked to a subgroup, based on responses to a previous question. The data also includes a number of school and geography-based variables which have been matched on based on the location and unique reference number of the school. Full details of the demographic, geographic and school-based variables are provided in the User Guide and Code Book.

7.5.5 Key definitions used for non-activity derived variables

Volunteering

This is defined as volunteering at least twice in the last 12 months to support sport and physical activity. Examples of volunteering activities include being a sports leader or ambassador, coaching, refereeing, umpiring and stewarding, helping with set up and clearing away, helping with refreshments and any other activities which support sport and physical activity. Activities which only help family members are not included. Activities which involve sport and activity to raise money for sport are not included in the measure, although pupils were asked about them.

These questions were asked to pupils in year 5-11. Pupils in year 5-6 and Year 7-11 were asked about a different range of activities (appropriate to their age) and so information on roles is presented in separate tables for these two year groups.

Pupils were asked whether they had 'volunteered or given your time to do any of the following activities'. The question for pupils in years 5-6 included the clarification: 'Think only about when you do them to help with sports, exercise or dance'. Pupils could report on other activities not on the list. These were subsequently backcoded and ineligible activities such as helping at Brownies or running cake sales were excluded. All pupils who had reported that they helped with at least one type of activity were asked whether they had given their time for these activities more than once in the last year. Only those who had done so more than once were included in the measure. Note that while 'coached or instructed' is a separate category for Year 7-11, for year 5-6 any back coded answers for coaching are included in 'other'. Similarly, 'setting up or clearing away' is a separate category for year 5-6 but for Year 7-11 any back coded answers of this type are included in 'other'.

Attitudes

There were five questions about attitudes included in the Year 3 to 11 questionnaire. These were based on the concept of physical literacy²⁰. Year 3-6 pupils were asked the first four and Year 7-11 pupils were asked all of them. Pupils were asked to respond on a scale with the following categories: strongly agree, agree, disagree, strongly disagree, can't say. The data tables report on the percentage strongly agreeing to each statement.

I enjoy taking part in exercise and sports (*enjoyment*)

I feel confident when I exercise and play sports (*confidence*)

I find exercise and sports easy (*competence*)

I understand why exercise and sports are good for me (*understanding*)

I know how to get involved and improve my skills in lots of different types of exercise and sport (*knowledge*)

²⁰ Whitehead, M. (2016) Physical Literacy', *International Physical Literacy Association*

Year 1-2 pupils were asked about their attitudes in a short questionnaire. They were asked:

Do like playing sport? (I love, I like, I don't like, I hate... data tables report on the percentage saying I love) (*enjoyment*)

Do you find sport easy? (yes, no, don't know... data tables report on the percentage saying yes) (*competence*)

Do you like being active? This includes things like running games, riding a bike or scooter, walking, and dancing. (I love, I like, I don't like, I hate... data tables report on the percentage saying I love) (*enjoyment*)

Do you like swimming? (I love, I like, I don't like, I hate, I don't know... data tables report on the percentage saying I love) (*enjoyment*) but included under swimming in reporting.

In the published data it is levels of strong agreement which are reported on (strongly agree or love doing).

Wellbeing and individual and community development (Outcomes)

Three dimensions of mental wellbeing are presented: *happiness*, *life satisfaction* and the extent to which they feel the things they do in their life are *worthwhile*. For Year 1-2 a smiley face question was used which is expressed as three categories in the tables: happy, neither happy nor sad, sad. For Year 3-6 the standard ONS happiness yesterday question was used. For Year 7-11 the standard ONS happiness yesterday, life satisfaction and worthwhile questions were used.

Happiness: "How happy did you feel yesterday?" (Year 3-11)

Life Satisfaction: "How satisfied are you with life nowadays?" (Year 7-11)

Feeling your life is Worthwhile: "To what extent are the things you do in your life worthwhile" (Year 7-11)

These three questions are answered on an 11-point scale from 0 to 10 where 0 is not at all and 10 is completely. The results are presented as mean scores. The standard ONS wellbeing question about anxiety was not included as it is not recommended for use in children under 14 years old.

Individual and community development was captured from Year 3-11 pupils through a question about trying difficult things (positive perceived self-efficacy) and a question about trusting peers (positive levels of social trust). Each question is asked on a 5-point scale from strongly agree (5) to strongly disagree (1). The questions asked were:

Individual Development: Using the self-efficacy question "If I find something difficult, I keep trying until I can do it" (Year 3-11)

Community development: Using the trust question "How much do you feel you can trust people who are a similar age to you?" (Year 3-11)

As in year 2, in year 3 the results for strongly agree are shown, which differs from the Year 1 report when combined agree and strongly agree results were shown. The tables show the wellbeing and development indicators by demographic characteristics as well as split by level of activity and volunteering behaviour. See previous sections for activity and volunteering definitions. The findings for these variables can be found in Tables for Levels Activity and Volunteering. In the Outcomes tables they are just used to look at levels of wellbeing and development split by level of activity and

volunteering. The means for wellbeing tables are the mean calculated across the groups to which the answer relates from the scores of 0-10 which were used as answers to the questions.

Loneliness: In year 3 the harmonised ONS loneliness question was included for the first time for pupils in years 7-11. This asked “How often do you feel lonely?” with answers of often/always, some of the time, occasionally, hardly ever, never. The data tables report on the full question as well as the percentage saying they often or always feel lonely.

Sports spectating

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

Pupils were asked:

Have you done this activity (attended a live sports event) in the past 12 months?

How many live sporting events have you been to see since last year?

Additional information provided was: Include all matches and competitions, including professional sport as well as watching family and friends compete. Please do not include any events that you took part in yourself, or events you watched on TV.

Answers of ‘twice’ or ‘three or more’ were included in this measure.

7.5.6 Key definitions used for demographic derived variables

Year group and gender

The report contains breakdowns by year group and gender. Gender includes the category ‘other’. Year 7-11 pupils were asked to give more details. The details given were checked and a decision was made about whether to leave an answer as other or to backcode to male or female because the detail indicated they were actually male or female. Where answers did not appear to indicate that they were male or female or a gender other than male or female they were coded as ‘prefer not to say’ or gender uncodeable²¹. Year group is the answer reported by the pupil or their parent. In some cases, this was inconsistent with the age given but we took the year group as given and did not recode.

A derived variable of gender and school year combined has been included as a new variable in year 3 but additional analysis was run to provide comparable data from year 1 and 2. The year group breakdown for the gender category ‘other’ has not been shown because of small base sizes.

Ethnicity

Parents of Year 1-2 pupils were asked about their child’s ethnicity using the full ONS standard question with a breakdown of ethnic groups. These have been grouped into broader categories for analysis. Ethnicity for Year 3-11 pupils was self-reported and used a simplified question which offered these categories: White (British or English), White (not British or English), Mixed race, Asian or British Asian, Black or Black British, None of these. For Year 1-2 pupils’ ethnicity was

²¹ The gender uncodeable category was needed because some pupils used the other specify space to write irrelevant information which did not relate to their gender identity.

reported by the parents. In the parent questionnaire the full census list of ethnic groups was offered and answers of Chinese have been coded into other. In the pupil questionnaire Chinese was not offered so answers may be found in Asian or Other depending on the pupil's preference.

A derived variable of gender and ethnicity combined has been included. The ethnic breakdown for the gender category 'other' has not been shown in published report tables because of small base sizes.

Family Affluence Scale

This is a standard scale developed for the Health Behaviour in School Aged Children Survey (an international study of 11-15 year olds). Minor modifications were made to the questions to make them suitable for parents and for younger children for whom the scale was not originally designed. The updated version of the scale was used which asks the following questions.

We would now like to ask you some questions about your home and your family. Does your family own a car, van or truck?

Do you have your own bedroom for yourself?

How many computers does your family own (including laptops and tablets/iPads, but NOT including game consoles and smartphones)?

How many times did you and your family travel out of England for a holiday last year?

How many bathrooms (room with a shower/ bath or both) are in your home?

Answers to these questions were scored according to the answers given, resulting in an overall score between 0 and 13. Scores of 0-6 =low, 7-10=medium, 11-13= high. Note that in the autumn term of Year 1 the car question only had yes/ no categories when it should have had none, one, two or more. This means that scores in the autumn term have a maximum of 12. Adjustments have been made to the groupings to allow for this in the year 1 data. In year 2 and year 3 the correct question was asked throughout the survey year.

Disabilities and number of impairments

The questions asked about disability were updated in year 3. In years 1 and 2, the questions about disability varied by age, but in year 3, all year 3-11 pupils and parents of year 1-2 pupils were asked the same questions. Respondents were asked "Do you²² have a disability, special need or illness (e.g. autism, dyslexia, or asthma) which makes it difficult for you to do any of these things" and shown a list of tasks which included things like 'moving around including walking and running' and 'concentrating and paying attention'. If the answer was 'yes' they were asked which of those things they have difficulty with. If they selected any of the things in the list, they were then asked: "Do any of these disabilities, special needs or illnesses have a big effect on your life?" (to identify whether the disability is limiting and: "Do you think any of these disabilities, special needs or illnesses will last for a year or more?" (to identify whether the disability is long-term).

²² Or your son or your daughter in parent questionnaire

Those who said yes at the initial question and both the question about the disability having a big effect on their life and whether they think it will last for a year or more were defined as having a long-term limiting disability (reported in the data tables).

The number and type of impairment was derived from the information given about specific things they found difficult to do and whether that impairment is long-term limiting. It should be noted that this is the number of impairments from a set list.

Those in the no long term limiting disability category are those who reported no to the initial disability question or no to the disability having a big effect on their life or whether they think it will last for a year or more. Note that because this was a new question for the year 3 survey, data on disability and impairments is only displayed in the tables for year 3.

7.5.7 Teacher data

The teacher data contains some key information about the length of PE lessons and break and lunchtime. This information also fed into decisions about imputation of at school session lengths for pupil activity derived variables, alongside evidence from the objective measurement study. For some questions, other answers given by the teachers were back coded into existing or new categories and incorporated into the data. In the teacher dataset some derived variables grouping different types of facilities and activities are included. Derivation has also been used to group year groups, roles and responsibilities and to set some don't answers to missing. Teachers' answers to questions about food education, school food standards, participation in PE and active travel to school were used to create a Healthy Schools rating for the school. This is not included in the published outputs but has been provided to schools in individual school level reports.

7.6 The checks on the derived variables

Once the derived variables had been created, a variety of checks were performed to ensure that they had been calculated correctly.

7.6.1 Checking activity and sports measures

The main activity related derived variables are created for multiple composite activities (as described above). Initially, checks were carried out at the activity level. Firstly, the hard logic of the syntax used to derive each measure was checked against the specification. Next, selected activities were tested by cross-tabulating the raw (source) variables against the derived variables to confirm that the data matched as it should. Extensive checks were carried out on the derived variables, ensuring that the derived variables matched the specification at every step of the derivation. This was done by creating temporary 'checking variables' where syntax was written to match the specification. The temporary variable was then compared to the actual variable and any cases which did not match exactly would reveal where there may have been any problems with the derivation. These cases were investigated and dealt with appropriately.

This was done in steps to ensure that the relationship between raw and derived variables was built up correctly. Checks were used to ensure that:

- day of doing an activity was only recorded where the child reported an activity in the last week,
- minutes were only recorded for an activity reported on for at least one day in the last week,

- the derived intensity variables for each activity corresponded to the answers given to the survey questions,
- the minutes of activity in setting (in school or out of school, indoors or outdoors) related to answers given to the questions
- the minutes of activity in derived variables corresponded to the time reported or the correct figure for imputation for that activity and year group.

In addition, checks were conducted to ensure that other answers were feeding into participation measures correctly.

The composite sports variables were only created once it was confirmed that the individual activity variables had been derived correctly. Checks were also carried out to ensure that the correct activities fed into each composite, which would then be used for multiple participation variables. Primarily, the SPSS syntax was checked against the specification (which was itself checked and signed off by the Sport England team) to ensure that composite variables were defined correctly for the key activity measures.

Comparisons were made between different participation measures to check that the way in which they related was consistent with how they had been defined.

Where problems were found, the syntax was corrected, the variables recreated and the checks repeated to ensure that the final data were correct. In a small number of cases inconsistencies in data were found for individual cases. These were investigated and found to relate to likely back tracking in the questionnaire leading to small inconsistencies. No cases were deleted as a result of these checks as the resulting data was not significantly affected.

7.6.2 Checking demographic variables

Demographic variables were checked primarily by cross tabulation of the raw variables against the derived variables. A sense check was applied to variables to ensure that the frequencies 'looked' right. Finally, the demographic variables were checked against each other to ensure that they were internally consistent. This included checking that age bands tallied across variables and that derived variables which used the same source data contained the same number of valid responses. Checks were also made by comparing the pattern of activity by demographic group for Year 1, Year 2 and Year 3 data.

7.7 Confidence Intervals

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

Confidence intervals in the Year 3 report have been calculated using the complex samples package in SPSS, which takes account of design effects. They are presented for rates (%) in the report tables. Confidence intervals would also apply to the population estimates presented in the report and report tables.

Sometimes confidence intervals cannot be provided, for example when the rate is 100%. In this case the symbol ^ is used. See the next section for more detail on the other circumstance in which confidence intervals cannot be calculated.

Confidence intervals vary for each measure and each demographic breakdown and will vary from year to year. Confidence intervals should be calculated using the complex survey package in SPSS, which takes account of design effects.

7.8 Design effects

In the Year 3 tables, for analysis by demography and large geography (region and Active Partnership) the calculation of confidence intervals takes account of strata (local authority) and clustering (school). Where there is only one school in a strata overall or for the demographic sub-groups being presented, confidence intervals cannot be calculated. The symbol ^ is used when confidence intervals cannot be calculated because only one school took part in each Active Partnership covered by the particular demographic or geographic category being shown. Where Active Partnerships, County Councils and Local Authorities have an unweighted base of less than 150, or only 1-2 responding schools overall (or for the school phase), results are suppressed as there are too few respondents and/or insufficient variance in the data to produce a reliable result. Caution is also taken when analysing by these three types of geographical variables, as there may be missing terms (e.g. no summer term responses) or missing school phases (e.g. no year 3-6 responses) for the academic year; making the response profile differ slightly to previous years. The published tables use a highlight system and explanatory text so it is clear for users to take caution. This is explained in more detail below.

7.9 Population estimates

These are estimates of the number of pupils in a particular group (for example, the number of pupils in the less active group, or the number of boys who have attended a live sports event at least twice in the last year).

The estimates in the Year 3 report have been calculated using the rate (%) and the 2019/20 DfE pupil population estimates, and therefore the true value would lie within a range around the estimates. The 2019/20 DfE pupil data was used so that the estimates would be based on the data for the academic year the survey took place. For sub-groups the population estimate is calculated from the share of the weighted responses for that category. The confidence intervals for the population estimates can be calculated by dividing the population estimate by the rate (%) and multiplying by the lower and upper confidence interval rates in the report tables. In some cases, a population estimate has not been provided. Note that in the published tables a single * is used to mean there are fewer than 30 cases in that cell so the population estimate cannot be presented. ** is used where a decision has been made not to publish population estimates. For example, for number of impairments (LT, limiting) because the categorisation in the data does not match those provided in population data.

On the tables presented by term, where the demographic split involves year group, the population estimates have been calculated using the rate multiplied by the population in the relevant school phase (year 1-2, 3-6, 7-11) rather than using rates for 1-11 or 3-11 and shares for the sub-groups. This is because, as outlined earlier, the distribution of responding pupils by phase and term is not consistent across the years because of the impacts of the coronavirus pandemic on sample size and primary pupil response in summer of year 3. It was not possible to weight to correct for this, as explained in the weighting section, and so the share approach to calculation population estimates was not suitable. Within these phases (e.g. years 7-8, 9-11 or by gender) the share approach was used. For annual analysis the weighting does take account of the varying distribution of phase by year and so the standard share measure was used to calculate population estimates.

7.10 Minimum base sizes

Data suppression

The data has been suppressed for certain cells in the data tables:

Where the unweighted number of respondents responding to the question overall or to an individual category is less than 30, results are not presented. The symbol * is used to indicate this.

Where the number of schools contributing to the results for an Active Partnership is 2 or fewer. The symbol ^ is used to indicate this.

Where the unweighted base for an Active Partnership is less than 150. The symbol ^ is used to indicate this.

Flagged data

In the data tables, the absolute change in the significance table for Active Partnerships may be highlighted in yellow. This indicates that the result is not based on all school year phases (a phase is defined as years 1-2, years 3-6 and years 7-11). The highlight indicates at least one of these school phases is missing from the Active Partnership's result. Alternatively, the result may also be highlighted when there is missing data from a particular term for the Active Partnership (e.g. if there are no responses during the Autumn term). The Absolute change is highlighted in yellow to indicate that this change needs to be interpreted with caution. Please refer to the lookup table which provides more detail on why that figure has been flagged, e.g. just years 3-6 in year 3 or missing Summer term data in year 2.

7.11 Significance Testing

The report and accompanying tables show data for the last three survey years (academic Year 2017/18, academic Year 2018/19 and academic Year 2019/20). This has allowed for analysis of the change in participation and activity levels over time.

To compare data across the three survey years, significance testing has been applied to the report tables. This indicates whether changes observed across survey years are likely to be 'true' changes in the population, rather than just observed by chance. Year 3 (2019/20) is compared to year 1 (2017/18) and year 2 (2018/19).

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

Only differences which are statistically significant are reported on as differences in the commentary in the published report²³. When results are reported as being the same for two groups, this means there is no statistically significant difference.

23

<https://www.sportengland.org/activeliveschildren20>

Appendices

Appendices

Geographical breakdown of Year 3 survey responses

These data are taken from the response reports produced monthly for Sport England and are designed to give an idea of fieldwork performance. Where a school appears in the sample in two terms because fieldwork was deferred or the school asked for it to be kept open, it will be counted twice as it reflects the number of schools selected each term summed across terms. Only 15 schools are affected by this. The responding schools and cases are based on the number at the point of assessing response. The numbers in the final derived dataset will be slightly different owing to removal of cases with extreme activity and data cleaning.

Table 8.1: Number of schools by Active Partnership (Year 1-2, 3-11, parent or teacher)

Active Partnership	Selected schools	Responding schools	% of selected schools responding
Active Black Country	80	34	43%
Active Cheshire	75	7	9%
Active Cumbria	80	27	34%
Active Devon	176	45	26%
Active Dorset	48	11	23%
Active Essex	205	117	57%
Active Gloucestershire	88	23	26%
Active Humber	87	27	31%
Active Lancashire	196	103	53%
Active Lincolnshire	119	41	34%
Active Norfolk	110	10	9%
Active Oxfordshire	79	16	20%
Active Partners Trust	243	47	19%
Active Suffolk	87	7	8%
Active Surrey	196	41	21%
Active Sussex	203	47	23%
Active Cornwall	23	14	61%
County Durham Sport	17	11	65%
Energise Me (Hampshire and IOW)	217	52	24%
Energize Shropshire Telford & Wrekin	43	14	33%

Active Partnership	Selected schools	Responding schools	% of selected schools responding
Get Berkshire Active	97	33	34%
Greater Sport (Manchester)	232	59	25%
Herts Sports Partnership	177	49	28%
Kent Sport	216	51	24%
Leap - Bucks & Milton Keynes Sport and Physical Activity Partnership	97	30	31%
Leicestershire & Rutland Sport	148	36	24%
Living Sport - Cambridgeshire & Peterborough Sports Partnership	93	30	32%
London Sport	681	81	12%
Merseyside Sports Partnership	97	19	20%
North Yorkshire Sport	123	33	27%
Northamptonshire Sport	98	34	35%
Northumberland Sport	17	6	35%
Somerset Activity & Sports Partnership	78	23	29%
Sport Across Staffordshire and Stoke on Trent	135	55	41%
Sport Birmingham	24	12	50%
Sports Partnership Herefordshire & Worcestershire	103	49	48%
Team Beds & Luton	63	27	43%
Tees Valley Sport	75	18	24%
Think Active (Coventry, Solihull and Warwickshire)	120	41	34%
Tyne & Wear Sport	96	35	36%
Wesport	78	8	10%
Wiltshire and Swindon Sports Partnership	37	12	32%
Yorkshire Sport Foundation	183	42	23%

Table 8.2: Number of schools and responses (Year 1-2, 3-11, parent or teacher) by Local Authority²⁴

Local Authority	Code	Selected schools	Responding schools	Responding pupils, parents, teachers
Adur	E07000223	10	2	42
Allerdale	E07000026	18	5	433
Amber Valley	E07000032	15	2	208
Arun	E07000224	12	4	100
Ashfield	E07000170	15	5	260
Ashford	E07000105	13	1	101
Aylesbury Vale	E07000004	23	12	1322
Babergh	E07000200	15	2	44
Barking and Dagenham	E09000002	15	6	331
Barnet	E09000003	23	1	67
Barnsley	E08000016	18	7	401
Barrow-in-Furness	E07000027	11	5	256
Basildon	E07000066	17	12	822
Basingstoke and Deane	E07000084	17	6	463
Bassetlaw	E07000171	15	3	223
Bath and North East Somerset	E06000022	19	3	176
Bedford	E06000055	22	13	912
Bexley	E09000004	17	3	174
Birmingham	E08000025	24	13	760
Blaby	E07000129	13	4	151
Blackburn with Darwen	E06000008	16	8	486
Blackpool	E06000009	16	5	362
Bolsover	E07000033	13	2	232
Bolton	E08000001	24	3	33
Boston	E07000136	15	7	325
Bournemouth, Christchurch and Poole	E06000028	23	6	584

²⁴ The local authorities shown in this table are the pre-April 2020 local authorities used for sampling. This shows the responses in each sampled local authority. In April 2020, Buckinghamshire County Council and Aylesbury Vale, Chiltern, South Bucks and Wycombe District Councils merged to form a new single unitary council called 'Buckinghamshire'. Note that Shepway Council is now called Folkestone and Hythe District Council (since April 2018). This table refers to Folkestone and Hythe.

Local Authority	Code	Selected schools	Responding schools	Responding pupils, parents, teachers
Bracknell Forest	E06000036	13	3	135
Bradford	E08000032	19	5	338
Braintree	E07000067	15	8	997
Breckland	E07000143	16	2	478
Brent	E09000005	25	2	73
Brentwood	E07000068	14	6	329
Brighton and Hove	E06000043	21	7	923
Bristol	E06000023	26	4	478
Broadland	E07000144	13	2	606
Bromley	E09000006	18	1	72
Bromsgrove	E07000234	17	11	607
Broxbourne	E07000095	16	6	285
Broxtowe	E07000172	14	4	387
Burnley	E07000117	13	12	985
Bury	E08000002	21	5	277
Calderdale	E08000033	19	5	165
Cambridge	E07000008	17	1	1
Camden	E09000007	24	3	116
Cannock Chase	E07000192	14	8	446
Canterbury	E07000106	17	5	522
Carlisle	E07000028	12	4	239
Castle Point	E07000069	11	5	443
Central Bedfordshire	E06000056	20	12	1500
Charnwood	E07000130	19	6	125
Chelmsford	E07000070	21	12	830
Cheltenham	E07000078	14	2	76
Cherwell	E07000177	15	3	151
Cheshire East	E06000049	25	2	179
Cheshire West and Chester	E06000050	27	2	132
Chesterfield	E07000034	13	5	257
Chichester	E07000225	18	3	361

Local Authority	Code	Selected schools	Responding schools	Responding pupils, parents, teachers
Chiltern	E07000005	17	7	688
Chorley	E07000118	14	8	665
Colchester	E07000071	19	12	726
Copeland	E07000029	12	3	230
Corby	E07000150	14	2	84
Cornwall and Isles of Scilly	E06000052	23	14	700
Cotswold	E07000079	14	4	395
County Durham	E06000047	17	5	294
Coventry	E08000026	20	6	536
Craven	E07000163	14	5	177
Crawley	E07000226	17	5	621
Croydon	E09000008	23	0	0
Dacorum	E07000096	20	5	448
Darlington	E06000005	17	4	235
Dartford	E07000107	14	7	525
Daventry	E07000151	11	4	221
Derby	E06000015	21	0	0
Derbyshire Dales	E07000035	14	1	87
Doncaster	E08000017	22	2	7
Dorset	E06000059	25	5	314
Dover	E07000108	15	2	81
Dudley	E08000027	17	9	460
Ealing	E09000009	25	3	96
East Cambridgeshire	E07000009	16	3	278
East Devon	E07000040	26	3	308
East Hampshire	E07000085	15	2	203
East Hertfordshire	E07000242	24	7	315
East Lindsey	E07000137	19	6	354
East Northamptonshire	E07000152	15	4	189
East Riding of Yorkshire	E06000011	23	5	344
East Staffordshire	E07000193	15	7	377

Local Authority	Code	Selected schools	Responding schools	Responding pupils, parents, teachers
East Suffolk	E07000244	20	0	0
Eastbourne	E07000061	14	2	64
Eastleigh	E07000086	16	3	130
Eden	E07000030	10	5	336
Elmbridge	E07000207	20	3	253
Enfield	E09000010	20	5	259
Epping Forest	E07000072	14	5	472
Epsom and Ewell	E07000208	19	3	213
Erewash	E07000036	13	1	12
Exeter	E07000041	18	6	601
Fareham	E07000087	15	1	187
Fenland	E07000010	12	5	328
Forest of Dean	E07000080	18	3	228
Fylde	E07000119	10	4	337
Gateshead	E08000037	16	5	776
Gedling	E07000173	16	4	187
Gloucester	E07000081	16	5	249
Gosport	E07000088	11	2	167
Gravesham	E07000109	15	2	99
Great Yarmouth	E07000145	14	0	0
Greenwich	E09000011	19	6	314
Guildford	E07000209	25	6	354
Hackney and City of London	E09000012	23	2	256
Halton	E06000006	14	2	146
Hambleton	E07000164	12	2	84
Hammersmith and Fulham	E09000013	24	1	2
Harborough	E07000131	16	2	169
Haringey	E09000014	22	0	0
Harlow	E07000073	13	5	424
Harrogate	E07000165	19	5	401
Harrow	E09000015	18	3	208

Local Authority	Code	Selected schools	Responding schools	Responding pupils, parents, teachers
Hart	E07000089	15	3	137
Hartlepool	E06000001	11	2	92
Hastings	E07000062	12	2	78
Havant	E07000090	16	2	92
Havering	E09000016	22	0	0
Herefordshire	E06000019	16	11	726
Hertsmere	E07000098	18	2	148
High Peak	E07000037	11	1	97
Hillingdon	E09000017	26	6	313
Hinckley and Bosworth	E07000132	17	6	370
Horsham	E07000227	14	3	225
Hounslow	E09000018	18	5	389
Huntingdonshire	E07000011	17	6	597
Hyndburn	E07000120	11	6	312
Ipswich	E07000202	16	2	159
Isle of Wight	E06000046	14	7	583
Islington	E09000019	21	3	151
Kensington and Chelsea	E09000020	22	0	0
Kettering	E07000153	12	6	681
King's Lynn and West Norfolk	E07000146	16	1	86
Kingston upon Hull	E06000010	23	2	127
Kingston upon Thames	E09000021	24	3	225
Kirklees	E08000034	20	6	395
Knowsley	E08000011	12	2	141
Lambeth	E09000022	22	0	0
Lancaster	E07000121	12	5	299
Leeds	E08000035	22	9	563
Leicester	E06000016	23	7	380
Lewes	E07000063	17	3	321
Lewisham	E09000023	19	4	191
Lichfield	E07000194	12	6	475

Local Authority	Code	Selected schools	Responding schools	Responding pupils, parents, teachers
Lincoln	E07000138	18	6	459
Liverpool	E08000012	23	2	54
Luton	E06000032	21	6	430
Maidstone	E07000110	21	6	466
Maldon	E07000074	10	4	416
Malvern Hills	E07000235	12	3	301
Manchester	E08000003	26	6	451
Mansfield	E07000174	13	2	101
Medway	E06000035	21	7	621
Melton	E07000133	16	4	222
Mendip	E07000187	21	4	55
Merton	E09000024	19	1	68
Mid Devon	E07000042	17	4	171
Mid Suffolk	E07000203	15	2	67
Mid Sussex	E07000228	17	2	133
Middlesbrough	E06000002	16	4	247
Milton Keynes	E06000042	20	5	231
Mole Valley	E07000210	17	4	311
New Forest	E07000091	18	5	340
Newark and Sherwood	E07000175	10	3	452
Newcastle upon Tyne	E08000021	28	4	244
Newcastle-under-Lyme	E07000195	19	6	328
Newham	E09000025	24	0	0
North Devon	E07000043	15	6	704
North East Derbyshire	E07000038	13	4	186
North East Lincolnshire	E06000012	17	8	645
North Hertfordshire	E07000099	17	2	80
North Kesteven	E07000139	16	7	376
North Lincolnshire	E06000013	24	12	676
North Norfolk	E07000147	16	3	450
North Somerset	E06000024	18	0	0

Local Authority	Code	Selected schools	Responding schools	Responding pupils, parents, teachers
North Tyneside	E08000022	14	7	442
North Warwickshire	E07000218	14	2	164
North West Leicestershire	E07000134	17	5	244
Northampton	E07000154	16	6	305
Northumberland	E06000057	17	3	185
Norwich	E07000148	17	2	234
Nottingham	E06000018	20	3	273
Nuneaton and Bedworth	E07000219	15	5	324
Oadby and Wigston	E07000135	13	3	234
Oldham	E08000004	24	7	641
Oxford	E07000178	15	2	68
Pendle	E07000122	12	9	754
Peterborough	E06000031	14	4	238
Plymouth	E06000026	24	6	590
Portsmouth	E06000044	19	3	449
Preston	E07000123	17	7	553
Reading	E06000038	16	3	186
Redbridge	E09000026	24	2	45
Redcar and Cleveland	E06000003	15	4	100
Redditch	E07000236	16	7	511
Reigate and Banstead	E07000211	17	1	8
Ribble Valley	E07000124	14	7	432
Richmond upon Thames	E09000027	22	4	401
Richmondshire	E07000166	15	7	348
Rochdale	E08000005	23	6	536
Rochford	E07000075	13	9	651
Rossendale	E07000125	10	6	159
Rother	E07000064	14	5	452
Rotherham	E08000018	20	4	101
Rugby	E07000220	19	11	519
Runnymede	E07000212	14	4	233

Local Authority	Code	Selected schools	Responding schools	Responding pupils, parents, teachers
Rushcliffe	E07000176	15	4	558
Rushmoor	E07000092	16	4	485
Rutland	E06000017	14	1	67
Ryedale	E07000167	13	7	420
Salford	E08000006	22	8	398
Sandwell	E08000028	19	6	354
Scarborough	E07000168	14	6	292
Sedgemoor	E07000188	18	4	343
Sefton	E08000014	16	2	93
Selby	E07000169	16	2	480
Sevenoaks	E07000111	12	1	92
Sheffield	E08000019	21	11	550
Folkestone and Hythe	E07000112	15	4	253
Shropshire	E06000051	23	12	842
Slough	E06000039	15	6	382
Solihull	E08000029	19	9	339
Somerset West and Taunton	E07000246	16	3	389
South Bucks	E07000006	18	3	214
South Cambridgeshire	E07000012	17	4	225
South Derbyshire	E07000039	12	3	150
South Gloucestershire	E06000025	15	3	87
South Hams	E07000044	17	5	276
South Holland	E07000140	13	4	238
South Kesteven	E07000141	23	5	530
South Lakeland	E07000031	17	5	392
South Norfolk	E07000149	18	0	0
South Northamptonshire	E07000155	16	9	637
South Oxfordshire	E07000179	19	3	246
South Ribble	E07000126	20	10	1126
South Somerset	E07000189	23	9	511
South Staffordshire	E07000196	13	5	506

Local Authority	Code	Selected schools	Responding schools	Responding pupils, parents, teachers
South Tyneside	E08000023	17	9	500
Southampton	E06000045	17	3	217
Southend-on-Sea	E06000033	17	16	2125
Southwark	E09000028	18	6	416
Spelthorne	E07000213	16	8	470
St Albans	E07000240	21	6	393
St. Helens	E08000013	16	2	103
Stafford	E07000197	16	4	236
Staffordshire Moorlands	E07000198	16	5	219
Stevenage	E07000243	15	8	793
Stockport	E08000007	28	6	668
Stockton-on-Tees	E06000004	16	4	253
Stoke-on-Trent	E06000021	19	6	444
Stratford-on-Avon	E07000221	15	7	377
Stroud	E07000082	15	5	341
Sunderland	E08000024	21	5	362
Surrey Heath	E07000214	11	2	138
Sutton	E09000029	20	8	370
Swale	E07000113	18	1	51
Swindon	E06000030	15	5	295
Tameside	E08000008	24	3	168
Tamworth	E07000199	11	3	180
Tandridge	E07000215	18	3	106
Teignbridge	E07000045	16	2	70
Telford and Wrekin	E06000020	20	10	871
Tendring	E07000076	12	5	195
Test Valley	E07000093	12	5	381
Tewkesbury	E07000083	11	4	263
Thanet	E07000114	16	3	117
Three Rivers	E07000102	17	8	601
Thurrock	E06000034	18	13	1041

Local Authority	Code	Selected schools	Responding schools	Responding pupils, parents, teachers
Tonbridge and Malling	E07000115	20	5	307
Torbay	E06000027	18	3	183
Torridge	E07000046	14	6	377
Tower Hamlets	E09000030	20	2	98
Trafford	E08000009	22	7	576
Tunbridge Wells	E07000116	19	3	137
Uttlesford	E07000077	11	5	561
Vale of White Horse	E07000180	14	4	240
Wakefield	E08000036	22	3	475
Walsall	E08000030	22	9	476
Waltham Forest	E09000031	17	2	168
Wandsworth	E09000032	24	0	0
Warrington	E06000007	23	3	360
Warwick	E07000222	18	6	154
Watford	E07000103	14	5	337
Waverley	E07000216	21	4	201
Wealden	E07000065	15	4	280
Wellingborough	E07000156	14	2	183
Welwyn Hatfield	E07000241	15	7	738
West Berkshire	E06000037	16	5	327
West Devon	E07000047	11	4	304
West Lancashire	E07000127	17	12	967
West Lindsey	E07000142	15	6	281
West Oxfordshire	E07000181	16	4	57
West Suffolk	E07000245	21	1	47
Westminster	E09000033	23	2	155
Wigan	E08000010	18	4	293
Wiltshire	E06000054	22	8	863
Winchester	E07000094	16	2	183
Windsor and Maidenhead	E06000040	21	4	323
Wirral	E08000015	16	6	212

Local Authority	Code	Selected schools	Responding schools	Responding pupils, parents, teachers
Woking	E07000217	18	3	44
Wokingham	E06000041	16	5	273
Wolverhampton	E08000031	22	10	684
Worcester	E07000237	14	5	480
Worthing	E07000229	22	5	521
Wychavon	E07000238	14	5	262
Wycombe	E07000007	19	7	703
Wyre	E07000128	14	4	280
Wyre Forest	E07000239	14	9	407
York	E06000014	20	2	189

Note that City of London is included with Hackney and the Isles of Scilly with Cornwall

For more information

3 Thomas More Square
London
E1W 1YW

t: +44 (0)20 3059 5000

www.ipsos-mori.com

<http://twitter.com/IpsosMORI>

About Ipsos MORI's Social Research Institute

The Social Research Institute works closely with national governments, local public services and the not-for-profit sector. Its c.200 research staff focus on public service and policy issues. Each has expertise in a particular part of the public sector, ensuring we have a detailed understanding of specific sectors and policy challenges. This, combined with our methods and communications expertise, helps ensure that our research makes a difference for decision makers and communities.