

December 2018

Active Lives Children and Young People Survey 2017/2018 Year 1 Technical Note

September 17 – July 18

Ipsos MORI

The Active Lives Children and Young People Survey was conducted by Ipsos MORI on behalf of Sport England which 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).

Fieldwork and Survey Design

The data presented here were collected between September 2017 and July 2018 (2017/18 academic year) in England. The data were collected using CAWI online questionnaires administered in schools. 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 also heads, deputies and other teachers).

The table in the questionnaire content section shows which year groups and participant types were asked each type of question. The questionnaire content varied by age so as not to over-burden younger pupils.

Valid responses from sampled schools which could be used for analysis were received from:

- 25,927 year 1-2 pupils,
- 109,503 year 3-11 pupils and parents of pupils in year 1-2,
- 1,636 teachers.

Pupils took part during school time using school computers or tablets. Teachers and parents took part at school or on their own computers, tablets or phones at home. Information about the survey was provided to schools, class teachers, pupils and parents in advance of taking part in the survey.

Sample design

The survey design is schools based. A sample of schools was drawn from the Department for Education list of schools (Edubase 2016/17). The database contained 24,288 schools, from which certain types of establishment were removed¹ before selection of the sample resulting in a sample frame of 21,363 schools. Of these 6,098 were selected as main sample and 2,006 as a reserve sample. The main sample was designed to include up to ten primary and ten secondary schools in each local authority and 370 independent schools across the country. The reserve sample comprised up to five primary and five secondary schools in each local authority but not every local authority had sufficient schools. State schools with a probability of selection of one or greater were automatically included in the sample. The remaining state schools were selected with a probability proportional to size. The sample of independent schools was stratified by local authority. Reserve schools were only issued in local authorities where insufficient responses had been obtained from the main sample.

The main sample schools were allocated to a term using systematic random sampling. The sample was designed to include 30% of the schools in the autumn term, 40% in the spring term and 30% in the summer term. The main issued sample of schools was 1,833 in the autumn term, 2,433 in the spring term and 1,832 in the summer term. In the spring term 180 reserve schools in 84 local authorities were issued and in the summer term 169 reserve schools in 85 local authorities were issued.

For each school up to three year groups were selected (only two in schools which only had two eligible year groups). The sample was designed to ensure that where possible year groups affected by summer exams were oversampled in earlier terms. Schools could opt-in to take part in the survey if they had not been sampled. The data for these schools are not included as part of the national dataset and so are not included in this report.

The information about the selected schools and the selected year groups in each school was communicated to County Sports Partnerships who were responsible for asking schools to participate. They did this directly with schools or through third parties such as School Games Organisers. Once a school had agreed to take part they used a Kish Grid provided by Ipsos MORI to select one mixed ability

¹ Nurseries, Pupil Referral Units, Special schools, Technology and Technical colleges, Studio schools, Sixth form colleges, schools with fewer than 30 pupils or containing only one year group.

class within each of their selected year groups. URLs for the online surveys were then provided to each school. There were unique URLs for each school but not each pupil or parent.

The table below shows the number of schools with any pupil responses included in the analysis dataset in each term by type of school. This includes schools with partial pupil responses in cases where the questionnaire was completed sufficiently to be included in the analysis. Cases were included in analysis if pupils in year 3-11 and parents completed all the activity questions in the survey and if year 1-2 pupils responded to the question which asked whether they like playing sport. This table excludes schools which opted into the survey but which are not used for national level analysis (of which there were seven). This also excludes schools where a teacher responded but there were no pupil responses (of which there were 63).

Number of schools with partial or complete pupil responses in the 2017/18 academic year

School type	Autumn term	Spring term	Summer term	Total
State Primary	326	503	365	1,194
State Secondary	249	281	251	781
Independent	16	13	7	36
Total	591	797	623	2,011

Weighting

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.

For state schools the weighting involved calibration to counts of school year by gender, counts of pupils in schools with more than 20% of pupils getting free school meals and counts of pupils in schools in a rural area. This was done separately for each region. It was not possible to adjust for local authority counts as there were two local authorities in which no schools participated. However, 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.

The population estimates are produced from DfE pupil population estimates from Edubase (2016/17). The sample for year 1 (2017/18) was drawn from 2016/17 school data because the sample was selected during the previous academic year so that CSPs could contact schools in advance of the fieldwork term. For consistency, the weighting was carried out using the same data which had been used for sampling.

Weights have been calculated for pupils and parents. 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.

Minimum base sizes

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.

Confidence Intervals

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

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

Design effects

For analysis by demography and large geography (region and County Sports 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 where confidence intervals cannot be calculated because only one school took part in each local authority covered by the particular demographic or geographic category being shown. For analysis by local authority, the confidence intervals take account of strata but not clustering because using the full design effects resulted in too many local authorities having missing confidence intervals.

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).

These estimates have been calculated using the rate (%) and the 2017/18 DfE pupil population estimates, and therefore the true value would lie within a range around the estimates. The 2017/18 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. ** is used where a decision has been made not to publish population estimates for disability because the categorisation in the data does not match those provided in population data.

Questionnaire content

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 table on the following page shows which year groups were asked each question for the questions included in the annual report and tables. This is also clearly indicated on each table.

The questionnaires were developed through:

- discussion between Sport England and Ipsos MORI over the key measures required for the survey,
- review of existing questions about physical activity for children in the UK and abroad,
- focus groups with pupils, teachers and parents about the types of activities they participate in,
 the language used and the best way of capturing the information required,
- two rounds of cognitive interviews with pupils, parents and teachers to test the questionnaires,
- review of the questionnaire by a primary school teacher and SATs marker,
- a pilot using a sample of 60 primary and 60 secondary schools to test the sample and
 recruitment approach, the distribution of URLs to schools and the online questionnaire.

Details of the questions asked of respondents and presented in the 2017/18 report

Questionnaire content covered for each year group	Year 1-2 pupils	Year 1-2 parents	Year 3-4 pupils	Year 5-6 pupils	Year 7-11 pupils
Activities					
Participation in sport and physical activity in last week (activities in and out of school and time spent out of school) (time spent in school assumed)	No	Yes	Yes	Yes	Yes
Intensity of activity (whether made them breathe faster, whether made them hot or tired)	No	No – moderate intensity assumed	Yes	Yes	Yes
Whether outside school activity done indoors or outdoors (NB indoor/outdoor is assumed for all at school activity)	No	No - location assumed based on responses received for Year 5-11 pupils	No – location assumed based on responses received for Year 5-11 pupils	Yes	Yes
Swimming					
Whether can swim at all, 25m, tread water	No	Yes	Yes	Yes	Yes
Whether can swim 200m	No	No	No	No	Yes
Whether can self-rescue, would like to swim more often	No	No	Yes	Yes	Yes
Do you like swimming	Yes	No	No	No	No
Volunteering frequency and type (types vary between year 5-6 and 7-11 pupils so are presented separately)	No	No	No	Yes	Yes
Wellbeing and development					
Happiness	Smiley face	No	Yes	Yes	Yes
Life satisfaction and how worthwhile life is	No	No	No	No	Yes
Self-efficacy (trying difficult things)	No	No	Yes	Yes	Yes
Social trust (trusting peers)	No	No	Yes	Yes	Yes
Live sporting events	No	No	No	Yes	Yes
Demographic and social questions					
Gender, age, year group	Yes	Yes	Yes	Yes	Yes
Ethnicity	No	Yes	Yes	Yes	Yes
Disability (different for year 3-6 and year 7-11 and parent)	No	Yes	Yes	Yes	Yes
Family affluence scale	No	Yes	Yes	Yes	Yes

Definitions used in the report

Activity data in the report

Activity questions

The data were collected by asking:

- which activities from a list pupils had done in the last 7 days,
- on which days they had done each activity in the last 7 days (separately for in and out of school),
- how long they spent doing the activity the last time they did it (outside school), and
- whether it made them breathe faster or made them hot or tired.

Respondents could also mention other activities which were not listed on the questionnaire and these were coded to the relevant activity.

Year 5-11 pupils were also asked whether they did each out of school activity indoors or outside (except for certain activities such as cycling for travel which were assumed). The indoor/outdoor location of all in school activities and all activities for year 1-4 pupils was assumed using a standard approach.

Moderate activity: This is defined as activity where you raise your heart rate and feel a little out of breath (pupils were asked whether it made them breathe faster).

Vigorous activity: This is defined as when you are out of breath or are sweating - you may not be able to say more than a few words without pausing for breath (pupils were asked whether it made them hot or tired)

For year 1-2 pupils all activity has been assumed to be moderate intensity since parents were not asked about intensity for their children.

Deriving and cleaning activity data

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 study², 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.
- 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.
- 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 440 cases being dropped from the analysis.

1. Levels of Activity

Data are presented for four categories for *overall activity in the last week*. Only activity of at least moderate intensity is included. The first category includes pupils who meet the Chief Medical Officer's (CMO) guidelines for young people of doing 60 minutes of activity on seven days a week. The second category includes children who do an average of 7 * 60 minutes across the week (at least 420 minutes) but do not do 60 minutes or more on every day of the week.

- Active every day (60 minutes or more every day)
- Active across the week (an average of 60 minutes or more a day but not every day)

² In the objective measurement study pupils used a wrist worn accelerometer and completed the questionnaire so that their objective data could be compared with the data collected in the questionnaire.

- Fairly active (an average of 30-59 minutes a day)
- Less active (less than an average of 30 minutes a 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. Tables are also presented for *activity in school and outside school and indoors and outdoors*. Only activity of at least moderate intensity is included. For in school activity every day is five days (week days), for outside school activity every day is seven days. Where activity is shown for a specific location or setting these categories are used:

- 30 minutes or more every day
- An average of 30 minutes or more a day but not every day
- Less active (less than an average of 30 minutes a day

Tables are also included to show whether:

- pupils participated in *vigorous activit*y on at least 3 days per week (another aspect of the CMO guidelines),
- pupils participated in activity of any intensity (light, moderate or vigorous) at least twice in the
 last 28 days for any duration.

2. Activities

Information is presented on whether or not the pupil has done each activity for any duration with at least moderate intensity in the last week for groups of activities and specific activities. The table on the next page shows the specific activities which are included under each of the composite activity groupings used in the report. Where relevant, the wording or description given in the questionnaire is also included for reference.

Activities which are included under each of the composite activity groupings used in the report

Broad activity group	Activity group	Activities		
Sporting activities	Team sports	Football, Netball, Hockey, Cricket, Rugby, Baseball, Softball, Rounders, Basketball, Dodgeball, Benchball, Volleyball*, Lacrosse*, Handball*, King ball*, Korfball*, Roller hockey*, Other team sport*		
	Running, athletics or multi-sports	Running, jogging, cross-country, the Daily Mile, Track and Field athletics, Sports day events, Multi-sports*		
	Gymnastics, trampolining or cheerleading	Gymnastics, Trampolining (including in a garden, at a trampoline centre, or as part of a club), Cheerleading		
	Swimming, diving and water polo	Swimming (and diving), Water polo*		
	Racket sports	Table tennis/ping pong, Badminton, Tennis, Squash or racketball*, Other racket sports*		
	Combat sports, martial arts or target sports	Boxing, Judo, karate, taekwondo and other martial arts, Archery*, Fencing*, Tai Chi*, Other combat sport or martial art*		
	Adventure or outdoor sports	Climbing (including indoors), Snow sports*, Angling*, Sledging*, Orienteering*, Other adventure or outdoor sports*		
	Ice skating	Ice skating		
	Water sports	Water sports (canoeing, kayaking, sailing, rowing, surfing)		
	Horse riding	Horse riding		
	Golf	Golf*		
	Karting and motorsports	Motorsports*, Karting*		
	Other sport or fitness activity	Leisure games: Snooker, pool, billiards, ten pin bowling, skittles, darts*, Other sport or fitness activity*		
Active play	Active play	Kicking a ball about, Skateboarding, roller skating/blading, Frisbee, throwing and catching or skipping, Playing it, tag, chase, sardines or other running games, Climbing or swinging in the playground, garden or park, Other active play*, Hula hooping*		
	Walking for travel	Walking to get to school or other places		
Walking	Walking for leisure	Going on a walk		
		Walking - type not specified (could be for travel or going on a walk)*		
Dance	Dance	Dancing		
Cycling	Cycling for travel	Cycling to get to school or other places		
	Cycling for fun/fitness	Cycling/riding a bike for fun or fitness		
		Cycling - type not specified (could be for travel or fun)*		
Scooter	Riding a scooter	Riding a scooter		
Fitness activities	Gym or fitness	Gym or fitness (fitness class e.g. yoga, or using exercise machines e.g. rowing machine, exercise bike, running machine), Other fitness or gym*		
Active Travel	Walking for travel	Walking to get to school or other places		
	Cycling for travel	Cycling to get to school or other places		
	Riding a scooter	Riding a scooter		

^{*} These activities were not included in the questionnaire but were backcoded from other answers.

Activities continued

In addition, information on *swimming* has been included. This covers swimming confidence and capability as reported by pupils in year 3-11 and year 1-2 parents, and attitudes to swimming reported by year 1-2 pupils (see previous table for age ranges covered by each question).

Questions about **school travel** were asked to teachers and are included unweighted, presented by two different breakdowns of school type. Note that it is not possible to calculate population estimates and confidence intervals for the teacher measures owing to small sample sizes and the lack of weighting.

- Does your school monitor how pupils travel to school?
- Does the school participate in Walk to School week or other similar initiatives promoting active travel to school?
- Does the school do anything to promote active travel to school?

3. 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.

4. Wellbeing and individual and community development

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) and agree and strongly agree have been combined to give a positive response. 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)

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 other table sets. Here 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.

5. 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.

Key demographic variables

1. 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. Where answers did not appear to indicate a gender other than male or female they were coded as prefer not to say or gender uncodeable. 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.

2. 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 (nor British or English), Mixed race, Asian or British Asian, Black or Black British, None of these. For year 1-2 data reported by the parents Chinese has been coded into other.

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

3. 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). The updated version of the scale was used which asks the following questions. 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.

- 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 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.

4. Disabilities and number of impairments

The questions asked about disability varied by age. Year 3-6 pupils were asked a simpler question about whether they need extra help with a list of tasks which included things like 'moving around including walking and running', 'using your hands for writing or to pick things up'. Parents of year 1-2 and pupils in year 7-11 were asked 'Do you³ have a disability, or a special educational need (e.g. dyslexia) which means you need extra help to do things'. If the answer was yes they were asked 'Does this disability or special educational need affect you in any of the following areas?' A similar list was provided but with more categories and detail than for year 3-6 pupils.

Those who reported they needed help with anything (year 3-6) or said yes to the initial question (year 7-11) were defined as having a disability. The number and type of impairment was derived from the information given about specific things they needed help with. The number of limiting impairments was derived from the question which asked about types of impairment. It should be noted that this is the number of impairments from a set list.

Those in the no disability category are those who reported no need for extra help or no to the disability question. Note that because of the different questions for the two age groups, breakdown by disability is not presented for overall findings, only for findings for specific year groupings. Population estimates are also not presented for disability groups.

³ Or your son or your daughter in parent questionnaire

Note on Terminology

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

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

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About Ipsos MORI's Social Research Institute

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