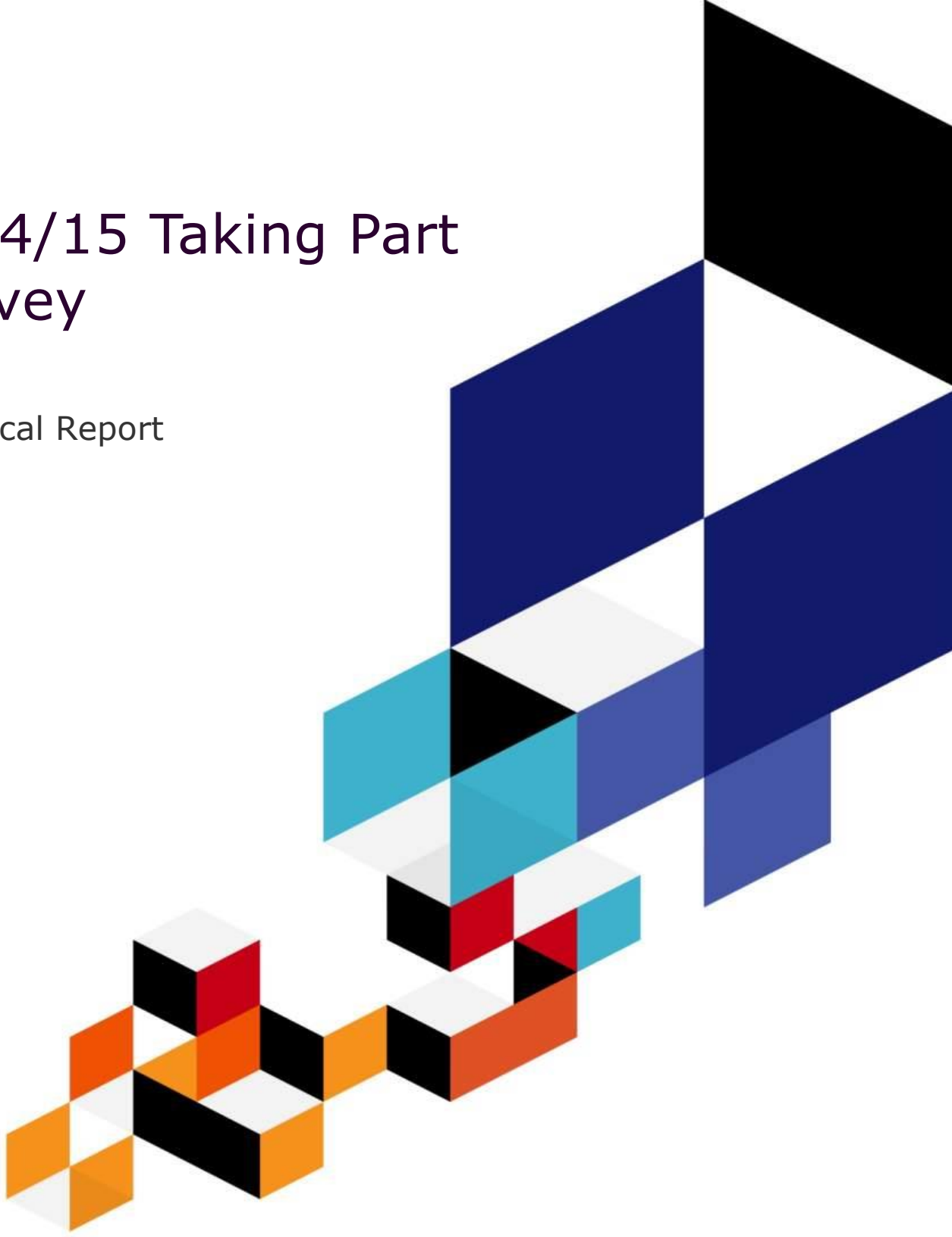
2014/15 Taking Part Survey

Technical Report



TNS BMRB

JN 260123069

Department for Culture Media & Sport

Contents

1. Introduction

1.1 Background, including Aims and Objectives

Taking Part, the flagship survey for the Department for Culture, Media and Sport, was first commissioned in 2005. Since this time it has been running on a continuous basis and the 2014/15 survey is the 10th year of fieldwork. Since 2012/13 (Year 8), a longitudinal element has been included in the survey.

The survey originated in response to a need for consistent, high quality national data on people's engagement with culture and sport and collects detailed information on a plethora of different parameters of leisure, culture and sport engagement, such as arts, heritage, museums and galleries, libraries, archives and sport, as well as extensive socio-demographic information on respondents. It has also been used to gain further insight on specific topics of interest, such as The Olympics and First World War Centenary commemoration events.

Taking Part serves as the key evidence source for DCMS and subsequently is relied on considerably by DCMS and its three partners; Arts Council England, Historic England[1], and Sport England which form the Taking Part steering group. The data produced are used to measure and inform departmental indicators, inform the development and impact of DCMS policy, and to better understand the drivers and barriers of participation in cultural and sporting activities in England. This is achieved through the collection of data around issues exploring participation in culture and sport; satisfaction and enjoyment with culture and sport; social capital; engagement with culture and sport whilst growing up; volunteering; internet/TV use and radio access; the London 2012 Olympic and Paralympic Games; First World War centenary events; attitudes to heritage/the arts, and demographics. In addition to this, the longitudinal aspect of the survey is used to capture change by revisiting the same individuals over time and understanding how changes in circumstances and other life events can help or hinder participation, and for how long.

Taking Part has been certified as a National Statistic by the UK Statistics Authority and is compliant with the Code of Practice for Official Statistics.

The data outlined above helps the survey to achieve its 3 main objectives. Taking Part aims to:

[1] Previously English Heritage

- Provide a central, reliable evidence source that can be used to analyse cultural sporting engagement, portraying clear evidence of why people do or do not engage
- Meet the needs and interests of everyone who uses Taking Part, including relevant public bodies and the public
- Underpin further research on driving engagement and the value and benefits of engagement

Taking Part is a random probability survey of adults aged 16+ and of children aged 5-15 in England. In 2014/15, 9,817 adults and 721 children aged 11-15 were interviewed. Information was also collected from parents or guardians of 1,104 children aged 5-10. Interviews were conducted face-to-face in home by specially trained interviewers working on behalf of TNS BMRB using Computer Assisted Personal Interviewing (CAPI).

The sample was issued on a monthly basis, with the first sample issued in April 2014 and the final sample issued in March 2015.

In 2014/15, DCMS and the Department for Education (DfE) commissioned a boost survey of 1,750 interviews with children aged 11-15 at secondary school. The sample was taken from the DfE's National Pupil Database (NPD). The aim was to capture detail about the child's participation in sports activities both in and out of school and about their school's sports provision. Further detail can be found in the Child Boost technical note.

1.2 Summary of Outputs

The four key outputs for Taking Part 2014/15 were:

- SPSS data files used for cross-sectional analysis – quarterly and annual adult (aged 16+) datasets and an annual child (aged 5-15 years) dataset. The adult SPSS file, produced on a quarterly basis, contains the key participation data which forms the basis of the quarterly statistical reports published by DCMS. The quarterly file contains rolling data dating back to the beginning of the survey in July 2005. The adult and child annual datasets contain all questionnaire variables for the specific survey year. In the 2014/15 survey year, the datasets contained data based on the date the interview took place, rather than the sample issued date[2].

[2] Datasets based on date of interview were introduced at the beginning of the 2011/12 survey.

- SPSS data file used for longitudinal analysis – dataset containing all data from longitudinal respondents first interviewed in 2011/12, 2012/13 and 2013/14. The dataset is due to be issued in October 2015.
- Statistical spreadsheets – TNS BMRB produced a number of reports (in Excel format) for DCMS based on the SPSS quarterly and annual data file. The reports were provided in Excel and include participation figures for the current rolling 12 month period and the figures for each survey year. The data also included the confidence intervals and range and any statistically significant changes from the first year the data variable was collected are highlighted. These reports were published by DCMS and form the basis of the quarterly statistical report.
- Visualisations – TNS BMRB produced 11 infographics (eight based on adult data and three based on child data) containing top level participation data for the various DCMS sectors.

1.3 Structure of the Technical Report

The report documents the technical aspects of the 2014/15 Taking Part Survey. Data collection is the major task for TNS BMRB so this forms the central part of this report.

The report is structured as follows:

- Chapter two provides a detailed description of the sample design;
- Chapter three focuses on the 2014/15 adult questionnaire, providing an overview of the stages involved in its development, the changes implemented and a summary of the topics covered in the final 2014/15 questionnaire;
- Chapter four covers fieldwork – this includes all fieldwork and management procedures and a summary of fieldwork performance;
- Chapter five covers all aspects of the child surveys;
- Chapter six, the final chapter, covers data processing and outputs, including weighting and design factors.

The report has been written by members of the project team at TNS BMRB – Joel Williams (Project Consultant), George Kyriakopoulos (Lead Statistician), Angela Charlton (Project Manager), and Marta Matusiak (Research Executive).

2. Sample Design

2.1 Survey Population and Sample Frame

The survey was designed to yield a representative sample of 10,000 adults aged 16+ who are normally resident in England. Relevant adults were also asked to provide information about co-resident children aged 5-10 and to facilitate direct interviews with a sample of co-resident children aged 11-15.

For practical purposes, residents of institutional accommodation (armed forces barracks, student halls of residence, hospitals, care homes, prisons etc.) were excluded as is normal practice for household surveys due to the obstacles in drawing a sample and reaching these populations.

The 2014/15 sample is a mixed sample, evenly divided between fresh sample cases and re-interview cases. For the fresh sample, TNS BMRB utilised the 'small user' Postal Address File (PAF) as the sample frame. This provides a list of almost all private residential addresses in the UK and is the most comprehensive frame available. Because it lists addresses, not individuals, interviewers were required to randomly select respondents from among those eligible.

2.2 Key Features of the Sample Design

For the 2014/15 survey, the intention was to generate 5,000 interviews from newly sampled addresses (the 'fresh sample') plus 5,000 re-interviews from individuals first interviewed in 2011/12, 2012/13 or 2013/14 (the 'longitudinal sample').

As far as the 'fresh sample' is concerned, a new sample of addresses was drawn from within each of the 724 primary sampling units used in 2011/12. This method was employed instead of sampling new units to avoid sample dispersion over time.

The number of 'fresh' addresses sampled in each primary sampling unit was a function of (i) its target number of interviews (this varied between strata, see table 2.2 below) and (ii) expected conversion rates:

Fresh sample addresses to issue in PSU x =

(Target number of interviews in PSU x for 2014/15) * (1 / expected address conversion rate in PSU x).

Evidence for the 'expected' address conversion rate was derived from an analysis of field data from the 2011/12 to 2013/14 survey period. On average, it was 53%.

The number of addresses sampled in each primary sampling unit was then inflated by 20% to generate a reserve pool of addresses. One in six sampled addresses was allocated to this pool. In the event, none of these addresses were used.

For the longitudinal sample, re-interviews were sought from all individuals that were re-interviewed in 2013/14 and had agreed to be re-contacted to take part in the survey again. These individuals had been sampled for their first interview in either 2011/12 or 2012/13. The vast majority (97.3%) of those who were re-interviewed in 2013/14 agreed to be re-contacted again for the following survey year.

In addition, re-interviews were sought from a 34% subsample of individuals initially sampled in 2013/14 who had agreed to be re-contacted. This sampling fraction was calculated after estimating the number of re-interviews expected from individuals first sampled in 2011/12 or 2012/13, to give an expected total of 5,000 re-interviews from the longitudinal sample for 2014/15.

Given the lack of specific Taking Part data, TNS BMRB used prior experience to estimate the expected number of *fourth* interviews from the pool of cases sampled in 2011/12. An 81% conversion rate was assumed. This conversion rate is the number of fourth interviews expressed as a proportion of the number of third interviews.

Based on field data from the 2013/14 survey period the expected third interview conversion rate was estimated at 75%. This conversion rate is the number of third interviews expressed as a proportion of the number of the second interviews.

By adding the expected total number of fourth and third interviews to the 5,000 'fresh sample' interviews, the target number of *second* interviews from the pool of cases first sampled in 2013/14 was calculated:

Target number of second interviews from the pool of cases sampled in 2013/14 = 10,000 – (5,000 + 3,173 + 881) = 946

Field data from the 2012/13 and 2013/14 survey periods was used to estimate the expected second interview conversion rate of 53%. This conversion rate is the number of second interviews expressed as a proportion of the number of the first interviews.

The target number of cases to sample was therefore:

946 / overall expected second interview conversion rate (53%) = 1,785.

Once the target number of cases to sample was known, it was simple to calculate the sample fraction as 1,785 divided by the total number of first interviews from this pool (5,121). This sample fraction was applied equally in every PSU for those agreeing to be re-contacted; 85.0% of individuals first sampled in 2013/14 agreed to be re-contacted.

In total, 9,196 fresh addresses (11,495 before removing 1 in 6 as reserve sample) and 6,557 second, third and fourth interview addresses were issued in 2014/15.

In some cases the re-interview required a change to the data collection tool. Fifteen year olds in 2013/14 switched from the child to the adult questionnaire in 2014/15, while ten year olds who had been covered by a proxy adult interview in 2013/14 were approached for a direct interview in 2014/15. Finally, all four year olds in 2013/14 became eligible to be covered by a proxy adult interview in 2014/15.

Section 2.3 provides details of the original 2011/12 sample design for reference.

2.3 The 2011-12 Sample Design

2.3.1 PSU formation

Taking Part employs a two-stage address sample design in which a sample of addresses is drawn from within a sample of postal sectors. Postal sector areas are defined using the first half of a postcode plus the first digit of the second half (e.g. L19 3 is the postal sector containing the postcode L19 3QU). For survey purposes, postal sectors with a very small number of addresses in 2003 were combined to form the primary sampling units (PSUs) used by TNS BMRB. Table 2.1 shows descriptive statistics for these primary sampling units in 2011.

Table 2.1 Descriptive statistics for primary sampling units

PSU information	Counts
Total number of PSUs	7,152
Mean number of addresses per PSU	3,157
Minimum number of addresses per PSU	259
Maximum number of addresses per PSU	10,434
Standard deviation in number of addresses per PSU	1,434

The statistical efficiency of two-stage samples is primarily a function of the variance in primary sampling unit-level survey estimates. Analysis of

previous editions of Taking Part showed that this variance was greatest in areas of high population density and smallest in areas of low population density. This variance can be mitigated through smaller interview totals per primary sampling unit. Consequently, after allocating each primary sampling unit to one of three 'address density' strata, TNS BMRB set approximate interview targets of 10 per primary sampling unit (high density stratum), 12 per primary sampling unit (mid density stratum) and 17 per primary sampling unit (low density stratum).

Furthermore, historical data suggested that some variation in address conversion rates (interviews as a proportion of addresses sampled) could be expected. In order to maximise the likelihood of meeting interview targets in each primary sampling unit, the ratio of sampled addresses to target interviews varied between regions[3]. Although this means that the address sample is not an equal probability sample, it is anticipated that the *net* weight applied to each case (a combination of sampling weight and response propensity weight) will have lower variance than would be the case with an equal probability design. Table 2.2 shows the address sample totals for each primary sampling unit classification.

Table 2.2 Address sample totals for each primary sampling unit classification

Region(s)	Address density Stratum	Sampled addresses per PSU	Expected number of interviews per PSU
All except West Midlands and London	High	18	10
All except West Midlands and London	Medium	22	12
All except West Midlands and London	Low	32	17
West Midlands	High	20	10
West Midlands	Medium	24	12
West Midlands	Low	36	17
London	High	26	10
London	Medium	32	12
London	Low	44	17

[3] Historically, response rates have been lower in West Midlands and, especially, in London. Consequently, more addresses are issued per PSU to achieve the same average interviewer total per PSU.

Twenty-seven sample strata were formed from the interaction of region (nine categories) and address density (three categories). TNS BMRB calculated an initial target number of primary sampling units for each stratum *a* using the following formula:

$(((N_a/N)*10{,}000) / E(\text{ints per PSU})_a)*1.2$

Where N_a = number of address in stratum *a*

N = number of addresses across all strata

E = "expected"

The formula included an inflation of 20% to provide a reserve sample of primary sampling units. This initial figure was rounded to an integer and then further adjustments were made to maximise the likelihood of achieving the overall target of 10,000 adult interviews. Table 2.3 shows the final number of PSUs sampled from each stratum.

Table 2.3 Final number of PSUs sampled for each stratum

	Address density			
Region	**High**	**Medium**	**Low**	**Total**
NE England	27	31	20	78
NW England	50	46	22	118
Yorkshire & the Humber	30	34	24	88
East Midlands	18	29	27	74
West Midlands	35	37	19	91
East of England	22	32	32	86
London	114	17	2	133
SE England	37	51	36	124
SW England	23	26	28	77
Total	356	303	210	869

2.3.2 Additional Sample Stratification

Within each explicit stratum, primary sampling units were further sorted by a set of three 'factor' variables designed to be correlated with the key frequency data collected in the survey.

To achieve this, a set of regression models was produced using historic Taking Part data, one for each of the five sectors covered in the survey. The predictors in the model were limited to region and ACORN distribution (a neighbourhood classification produced by CACI) available for each primary sampling unit. The resulting regression equations were then applied to every primary sampling unit to produce a simple 'predicted frequency' for each of the five sectors.

These variables were further reduced into three 'factors' using a principal components extraction method combined with the 'varimax' rotation method to ensure that the three factors are not correlated with each other. This transformation should maximise the value of this data when stratifying the population of primary sampling units. The factors were ranked based on the proportion of variance (across the original sector 'predicted frequencies') each accounted for.

Within each explicit stratum, five strata were produced based on factor 1, three sub-strata based on factor 2, and finally primary sampling units were sorted by factor 3. In all, this led to 405 strata although only the primary strata were used as explicit strata (i.e. a target number of PSUs was not computed for all 405 strata, just for the primary 27). Nevertheless, the final sort order will be used to form 'variance strata' to ensure that standard error estimates reflect the sample design as accurately as possible.

Primary sampling units were sampled with a probability proportionate to address count. Sampling a fixed number of addresses in each sampled primary sampling unit ensures an equal probability address sample within each of the classes described in Table 2.2. The address sampling probability varies *between* classes but not within each class.

2.3.3 Allocation of Primary Sampling Units to sample Month

Once the 869 primary sampling units had been sampled, one in six was systematically allocated to the reserve pool, leaving 724 to be allocated to a time period.

Taking Part samples are issued on a monthly basis. First, the 724 'main sample' primary sampling units were systematically allocated to a quarter using the following string pattern:

1-2-3-4-2-3-4-1-3-4-1-2-4-1-2-3

Repetition of this pattern produces a balanced sample in each quarter. The starting position within the string pattern was randomly generated.

Within each quarter, primary sampling units were systematically allocated to months in the same way but using the following string pattern:

1-2-3-2-3-1-3-1-2

2.3.4 Sampling of Individuals at Sampled Address

At each sampled address, the interviewer would randomly sample one dwelling unit (if more than one), then randomly sample one household (if more than one) within the sampled dwelling unit. Interviewers used unique Kish Grids assigned to each address to assist them in this process.

The same Kish Grid was also used to randomly sample individuals within the household.

Interviews were sought with1 adult aged 16+, and 1 child aged 11-15 (if resident)

Any parents or guardians of 5-10 year olds who were interviewed for the adult survey were asked to provide information about one randomly sampled child in this age range.

3. Questionnaire Development and Design

3.1 Overview of Questionnaire

The questionnaire allowed DCMS to collect robust fresh sample measurements of engagement across the DCMS sectors and also provided valuable longitudinal evidence to enable the Department and its partners to understand and demonstrate the impact and value of engagement in its sectors. In addition, the longitudinal elements also helped DCMS to identify factors driving engagement, so that policies could be developed to influence behaviour change, particularly among children and young people. By revisiting the same respondents year-on-year, the longitudinal survey also allowed DCMS to capture change over time with a greater degree of insight, to understand how changes in circumstances and life events might impact upon participation levels, and gain further insight on changing attitudes towards the cultural and sporting sectors.

3.2 Cognitive Testing

After launch of the 2014/15 survey TNS BMRB cognitively tested a number of potential new questions for inclusion in the questionnaire from Q2.

Cognitive testing was carried out by a small team of researchers from TNS BMRB at a suburban London location on Friday 6th June 2014. A day of hall-testing was completed, paying explicit attention to the mental processes adopted by respondents to answer the survey questions. These processes included:

Comprehension	e.g. do respondents understand the same thing as we intended when we designed our questions?
Judgements	e.g. what do they take into account when responding to the questions?
Responses	e.g. will the survey instrument allow them to express their responses correctly?

Although there are a number of parallels with the approach used in qualitative interviewing, the objective is very different. In qualitative work, an exploration into actual attitudes and behaviour is implemented, whereas cognitive testing aims to delve into the specific respondent thought process used to answer survey questions.

The questions tested covered attitudes to and awareness of First World War Centenary commemoration events, and payments received in the last year.

During the cognitive testing, a total of 32 in-depth interviews were completed amongst the following profile of respondents:

Table 3.1 Profile of Respondents

		Interviews completed
Sex	Male	18
	Female	14
Age group	16-29 years	13
	30-49 years	8
	50+ years	11
Working status	Employed (FT/PT)	11
	Unemployed/Student/Retired	21

Respondents were recruited for interview by recruiters working in the street. Interviewers followed the same procedure each time, briefly introducing the survey, DCMS, and how long the interview was likely to take, before bringing them into the central venue to be interviewed face to face by one of three TNS BMRB researchers. A guide quota was used to ensure variation in gender, age and working status. Each respondent received a £5 high street voucher as an incentive for participating.

Interviews lasted between 10 and 15 minutes with the range in time strongly dependent on the answers provided by the respondent. Interview length was also accentuated by interviewers using extensive probing of respondents in order to ensure as much information as possible was collected. Follow up questions were complemented with detailed probing of respondents in order to gain an appreciation of the comprehension and understanding of key terms and concepts within the question text and answer codes. This gave researchers a better understanding of the content and construct validity of each of the questions being tested and informed changes required to rectify any confusing questions or risks of alternative interpretation.

A great deal was learned from the cognitive testing stage, resulting in amendments to the question text and the adaptation of the response codes. The full report can be found in Appendix K.

3.3 Overview of the Structure of the Questionnaire

Following on from the cognitive testing, DCMS, in collaboration with TNS BMRB, finalised the design of a 45-minute questionnaire for the Taking Part adult survey in 2014/15. A full overview of the questions included in the survey can be found in this section of the technical report.

3.3.1 Adult Questionnaire

The three main versions of the adult questionnaire were:

- A fresh sample questionnaire which was asked to all respondents completing the survey for the first time (either fresh sample adults or longitudinal respondents who had graduated to the adult questionnaire. These respondents were interviewed on the 11-15 survey in the previous year)
- A longitudinal questionnaire for longitudinal adult respondents, who were completing the survey for the second, third or fourth time.
- A short household interview, to be asked in situations where the child respondent no longer lived in the same household as the named adult respondent from the previous year. Further details of this can be found at the end of this chapter.

The main sections of the 2014/15 adult questionnaire were as follows with differences between the fresh sample and longitudinal surveys highlighted throughout:

Household information (Asked of fresh sample and longitudinal respondents)

The initial section of the questionnaire on household information collected details about the various members of the household, including names, sex, ages, and relationship to the respondent, in addition to the number of people living in the household. Furthermore, this section also included a question asking the respondent their month of birth and which school year they are currently in, if the respondent was aged between 16 and 19. The section finished with a couple of questions for fresh sample respondents only, asking how long the respondent had been continuously living in England. For respondents on the longitudinal survey, some of the information that was collected in the previous year's interview, such as month born and school year was not asked about again.

Subjective well-being (Asked of fresh sample and longitudinal respondents)

Three questions covering life satisfaction, extent things done in life are worthwhile and anxiety.

Socialisation Questions (Asked of fresh sample respondents only)

The Socialisation section of the questionnaire collected information relating to what the respondent did whilst they were growing up (aged 11 – 15), how often they participated in these activities and also who they did the activities with. This section was used to enable comparisons to be made between childhood and current participation levels in an array of different activities. This section was asked to just fresh sample respondents and longitudinal respondents who had graduated to the adult interview, and were therefore completing the adult questionnaire for the first time.

Screeners and frequencies (Asked of all fresh sample and longitudinal respondents unless specified)

The screeners and frequencies section of the questionnaire formed a substantial section of the survey and was answered by all respondents. This section explored in detail the types of activities that the respondent does nowadays, defined as the last 12 months. For the entirety of this section, there was no geographic restriction on where the respondent could have taken part in these activities (including outside England).

For all of the activities in this section except sport, respondent's participation or attendance in the activity was measured over the past 12 months. For each of the activities that the respondent had taken part in, respondents were asked whether they did this activity in their own time, for paid work, for academic study, as part of voluntary work or for some other reason.

In those cases where the respondent stated that they did the activity in their own time and/or for the purpose of voluntary work they were asked how often they had done the activity in question in these two settings, in each case reminded not to include times that they may have also done the activity as part of paid work, academic study or as part of a school organised activity. There is one exception to this rule with regards to Heritage based activities, where academic study and school organised activities were also included in follow up questions.

The heritage and museums sections included questions on where the visit had taken place and in addition the heritage section included questions on

who the respondent attended a heritage site with, heritage organisation membership, whether the respondent had taken any holidays in the last 12 months and participation in metal detecting.

The sports/physical activity questions were asked on the premise that participation has occurred in the past four weeks and asked how many days in this four week period respondents had participated in each of the sporting/physical activities selected. This section started by asking about walking and cycling activity before moving onto the main sports participation questions. The sports screening question was asked unprompted, with interviewers coding any sports that the respondent mentioned they had done.

This was followed up by a prompted section. This section contained a read out question and response list with the response list containing main sports and physical recreation activities. Respondents were asked to mention if they had done any of them in the four weeks prior to interview. The prompted question was asked of all respondents, regardless of whether they had previously said that they had done any sport within the last four weeks. If the respondent selected a sporting activity, they were then asked questions relating to the frequency, duration and intensity of the activity, which helped to determine whether or not the session was of benefit to their health.

Following on from the sports/physical activity screener and frequency questions were a selection of questions centred on organised sport (involvement in clubs, competitive sport and tuition) and respondents' perceived sporting ability in comparison to people of their own age and gender. This section closed with questions on swimming and cycling competency.

Details of participation (Levers) (Asked of all fresh sample and longitudinal respondents unless specified)

The questionnaire then progressed to ask respondents further details about those activities mentioned in the previous section and sought to examine respondents' satisfaction with their experience. Respondents were asked follow-up questions about one randomly selected activity that they stated they had done in the screeners and frequencies section. If only one activity was mentioned then it was this activity that was followed-up, and if no activities were mentioned, no questions were asked. Respondents were required to think back to the last time they did the activity.

Respondents were asked how much they enjoyed the activity, how likely it is that they will do it again, and whether they would recommend it to friends and family. For the libraries questions in this section, enjoyment questions were replaced by questions ascertaining respondents' satisfaction with the service provided on their last visit.

There were a few addition questions in the sports module of this section for longitudinal respondents. These questions explored the satisfaction of respondents overall sporting experience in the last 12 months and their likelihood to participate in sport when other factors got in the way.

Barriers to participation (Asked of fresh sample respondents only)

This section was asked for each sector (arts participation; arts visits; visiting libraries; sites of historic interest; museums and galleries; and sports/physical recreation) that the respondent had **not** participated in during the last 12 months. New for this year, the questions on visiting archives were omitted from the questionnaire in response to the need to reduce the overall time of the questionnaire as highlighted in the pilot.

For each sector, it was established whether they ever participated at any point in the past. If respondents had ever done the activity, a question was asked to establish how frequently they did the activity in the past.

Life events (Asked of longitudinal respondents only)

This section asked respondents if they had experienced any of a long list of events in the last 12 months, considered to be major "lifestage" events related to family, work, education, friends and other significant areas of life. This section comprised two long response list questions administered through showcards, with the first containing less sensitive potential life-stage events (such as moving home, leaving school or university and retiring) and the second containing more sensitive potential life-stage events (such as getting engaged or married, serious illness or injury and death of a close family member, spouse or friend). These events were all deemed as potential influencing factors to respondents' level of participation in the DCMS sectors which may have changed over the course of the previous year.

Changes to participation (Asked of longitudinal respondents only)

Feeding on from the preceding life events section, this section addressed why respondents had either increased or decreased their participation in each of the DCMS sectors. The questions explored whether or not the numerous factors mentioned in the life events section (if any) or any sector specific reasons were accountable for contributing to an increase or

decrease in activity. Like earlier sections of the questionnaire, questions on change were divided into each of the DCMS sectors; arts participation; arts attendance; visiting libraries; visiting archives; visiting museums or galleries; visiting heritage sites; and finally sports participation.

Dependent on whether or not the respondent had either increased or decreased their involvement in each sector, a question was asked exploring why they had done more or less (combining responses given at the life-stage questions and a list of sector specific reasons) and, if more than one reason was selected, a question to establish which of the previously mentioned factors was the main reason why more or less activity had been done.

"Change in participation" was calculated using responses given at the screeners and frequencies questions during the current interview, compared to responses given at the same questions in the previous year. The different levels of change required in order to move into a new threshold of participation frequency were specific to each DCMS sector. The thresholds of participation were as follows:

- Arts participation: 0 activities; 1 activity; 2 activities; 3+ activities in the last year
- Arts attendance: 0 activities; 1 activity; 2 activities; 3+ activities in the last year
- Library usage: at least once a week; less often than once a week but at least once a month, less often than once a month; but at least once a year; has not visited
- Archive visits: been to an archive in the last 12 months; not been to an archive in the last 12 months
- Museum attendance: at least once a week; less often than once a week but at least once a month; less often than once a month; but at least once a year; has not visited
- Heritage attendance: at least once a week; less often than once a week but at least once a month; less often than once a month but at least 3-4 times a year; 1-2 times in the last 12 months; has not visited
- Sports participation: no sport – 0 days (no intensity measures); less than 4 days at 30mins+ (no intensity measures); 4-11 days at 30 mins+ (no intensity level); 12 plus days (no intensity level)

Factors affecting participation (Asked of 'new' longitudinal respondents only)

This section began by asking about the extent to which physical health or pain had interfered with their normal daily activities. Questions were then

asked about the extent to which the respondent would feel a "real loss" if they were forced to give up their participation in each of the DCMS sectors and also, how confident and at ease they would feel in each of the DCMS sector environments. This was then followed by questions on respondents' opinions about different types of activity and their family and friends' level of participation in each of the DCMS sectors.

Internet use (Asked of fresh sample and longitudinal respondents)

This short section of the questionnaire explored respondents use of the internet and the extent to which respondents use the internet to look at websites in accordance with the areas of activity covered in the survey (arts participation; arts attendance; visiting libraries; visiting archives; sites of historic interest; museums and galleries; and sports/physical recreation). For each of the website types selected at the beginning of this section, respondents were subsequently asked how these sites are used, with response codes tailored to each individual website type. The section also asked a couple of questions ascertaining where and how the respondent accesses the internet, along with a question to establish whether or not the respondent had a currently active email address. The section concluded with questions on social media, which asked which social networking sites and applications the respondent accessed, how often they were accessed and finally, the ways in which they were accessed and used.

Volunteering (Asked of all fresh sample and longitudinal respondents unless specified)

This section determined whether the respondent had done any voluntary activity in the past 12 months. If respondent stated that they had participated in voluntary activity, further details were collected such as the types of things they had done, whether or not it was connected to any of the areas of activity covered in the survey (arts participation; arts attendance; libraries; archives; museums and galleries; and sports/physical recreation) and the amount of time devoted to voluntary activity in the past 4 weeks.

Charitable giving (Asked of all fresh sample and longitudinal respondents unless specified)

The objective of this section of the questionnaire was to seek whether or not the respondent had given any money to charity by any means in the last 12 months. The section asked respondents in which ways they had donated money in the last 12 months, before follow up questions in relation to giving to DCMS sectors (the arts, heritage, museums and

galleries and sporting sectors) were asked. If indeed respondents had donated at all to any of the DCMS sectors, fresh sample respondents were asked how much money they had given to each. Furthermore, respondents were asked whether they believe they will generally give more, less or the same amount of money as they did to charities in the arts, culture and sporting sectors in the next 12 months. Finally, attitudes to charitable giving were also captured, with respondents asked their opinions on a battery of attitude statements.

Community cohesion/belonging (Asked of fresh sample respondents only)

The community cohesion section consisted of three short questions relating to how strongly the respondent felt they belonged to their local area and Britain, and to what extent they believed that their area is a place where people from different backgrounds get on well together.

Public participation (Asked of fresh sample respondents only)

The public participation section of the survey sought to determine how respondents felt about their local area. Firstly, respondents were asked about whether or not they felt they have an influence over sporting and cultural facilities in their area, as well as the quality of their local environment. The section progressed by asking whether or not any organisations had asked the respondent how they felt about local sporting facilities, local cultural facilities or the quality of their local environment before asking whether or not the respondent had taken any action to try to get something done about each of these three components of their local area, and what they did to try and achieve their desired outcome. To conclude the section, questions on local planning decisions, involvement in these, and the local environment were asked to 50% of fresh sample respondents.

Olympics (Asked of all fresh sample and longitudinal respondents)

The Olympics section asked respondents whether or not the UK hosting the 2012 Olympic and Paralympic Games had encouraged them to do more sport/recreational or cultural activity, in addition to whether or not it had encouraged the respondent to do more voluntary work.

First World War Centenary commemoration events (Asked of fresh sample and longitudinal respondents from July 2014)

This new section asked about respondents' awareness of events commemorating the First World War centenary in general as well as specific events. Respondents were asked whether they were for or against

the commemoration in general and whether they did or intend to follow any of the events specifically.

Broadcasting (Asked of fresh sample and longitudinal respondents)

This short section included questions regarding TV and radio ownership as well as newspaper readership. Respondents were asked questions around whether or not they had digital television, their main television systems provider, whether they were likely to covert to digital in the next 12 months, how many digital radios they own, and the newspaper they read most often.

Demographics (Asked of all fresh sample and longitudinal respondents unless specified)

The final section of the questionnaire, collected detailed demographic information about the respondent and household. Information was collected regarding respondents' education, their employment, income, household tenure, vehicle ownership, phone access, health, sexual identity, national identity, ethnicity, religion and happiness. If the selected respondent was not the Household Reference Person, then questions relating to the Household Reference Person's employment and income were also asked. In July 2014, questions were added to ask whether respondents received any payments since April 2011 (i.e. pension, life insurance, significant win, redundancy, personal accident claim or another payment) and if so how much they received. In addition there were questions asked of respondents with a disability or long term illness or condition, about barriers to participation in cultural and sporting activity. Also a women aged between 16 and 54 were asked whether they had been pregnant or provided maternity to a child under six months old in in the previous 12 months.

Longitudinal respondents were asked all the above demographic questions with the exception of sexual identity, national identity, religion and whether or not English is their first language.

Re-contact questions (Asked of all fresh sample and longitudinal respondents unless specified)

The questionnaire concluded with several questions to establish whether or not the respondent would be happy to be re-contacted in the future for similar research. The respondent was asked whether they would be happy to be re-contacted by TNS BMRB, as well as by other research organisations working on behalf of DCMS. This enabled TNS BMRB and DCMS to increase their panel of respondents for future waves of the Taking Part survey.

Sample A and Sample B respondents (fresh sample respondents only)

To ensure the set interview length was adhered, several questions continued to be asked of a sub sample of fresh sample respondents in 2014/15. Respondents in "Sample A1" were asked the charitable giving attitudinal questions and the arts and heritage attitudinal questions, while those in "Sample B1" were asked about their involvement in local planning decisions and a selection of the public participation questions. All fresh sample respondents were randomly allocated to either "Sample A1" or "Sample B1" at the beginning of the CAPI questionnaire.

The Household Interview (Applicable longitudinal respondents only)

In situations where the child respondent no longer lived in the same household as the named adult respondent from the previous year, a short household adult interview was conducted with a parent or guardian of the named child. This was completed to ensure that various household-based factors that may influence a child's opportunity to participate in each of the DCMS sectors were accounted for, such as income, local area, vehicle ownership and parent/guardian NS-SEC.

The short interview collected information on some basic details about the new adult respondent, including name, relationship to the child, gender, age and marital status to name but a few. Furthermore, questions collecting details of the children in the household were also included, with the exception of month born and school year. After collecting an email address, the household interview concluded with a selection of questions from the adult demographic section, namely, household reference person employment, income , tenure, vehicle ownership and finally important re-contact details.

4. Fieldwork

4.1 Introduction

This chapter documents all aspects of the 2014/15 data collection process, specifically regarding fieldwork procedures, the management of fieldwork across the year, quality control procedures and response rates achieved.

4.2 Briefings

During the 2014/15 fieldwork period, there were six survey briefings for new interviewers. Two of these briefings were full briefings of the fresh sample and longitudinal survey, attended by 20 interviewers. A further two briefings lasted half a day and covered the fresh sample. Sixteen interviewers attended these briefings. The other two briefings were shorter in length and covered the longitudinal aspect of the survey. Twenty-three interviewers attended these briefings.

In total, 273 interviewers worked assignments for Taking Part during the 2014/15 survey year.

4.3 Fieldwork Dates and Fieldwork Management

During 2014/15, the fieldwork for the Taking Part survey was managed on a monthly basis. Assignments were generally distributed evenly throughout the year, and were issued on a monthly basis, at the beginning of each month. The fieldwork dates for each monthly sample issue for 2014/15 are noted in Table 4.1.

Table 4.1 Fieldwork dates for each sample month

Month	Fieldwork start	Fieldwork end
April 2014	9th April 2014	7th December 2014
May 2014	5th May 2014	7th December 2014
June 2014	1st June 2014	7th December 2014
July 2014	11th July 2014	9th March 2015
August 2014	5th August 2014	9th March 2015
September 2014	1st September 2014	9th March 2015
October 2014	3rd October 2014	25th May 2015
November 2014	1st November 2014	25th May 2015
December 2014	1st December 2014	25th May 2015
January 2015	2nd January 2015	27th July 2015
February 2015	1st February 2015	27th July 2015
March 2015	1st March 2015	27th July 2015

Interviewers were advised to post the advance letters, introducing the survey, to addresses in their assignments two or three days before starting their fieldwork, and to spread their work out across the six weeks given to complete their assignment.

Once all the issued addresses had been covered the Address Contact Sheets were returned to Head Office and a decision was taken about re-issuing non-productive outcomes. As a general rule all non-productive addresses (non-contacts, refusals, broken appointments, etc.) were re-issued unless there was a specific reason not to or it was considered not to be cost effective (e.g. only one or two addresses in an assignment). Once the first re-issue period had been completed a decision was taken about whether to re-issue addresses that were still non-productive for a second or third time. Full details of the re-issuing of sample in 2014/15 are shown in Section 4.6.

There was a time lag between addresses being issued and interviews being achieved, due to the length of time that assignments stayed open, particularly when re-issued. As such, the time period covered by the

2014/15 issued sample and the time period covered by the 2014/15 achieved sample are different. Although the sample for the survey was issued between April 2014 and March 2015, the actual fieldwork dates during which interviews were achieved ran from April 2014 to July 2015. This means that for each quarter of the year not all interviews were achieved in the quarter of issue.

The questionnaire used in the field was aligned to the survey year, rather than being aligned to the sample issue. This meant that when changes were made to the questionnaire, all open survey months would be updated at the same time, so that all interviews achieved at any given time would be on the same questionnaire. This change was initially implemented for the 2011/12 survey. In years prior to this, updates to the questionnaires were only issued to new sample (not to all surveys in field at the time of change).

In 2014/15 all interviews carried out between 1st April 2014 and 31st March 2015 were therefore done with the 2014/15 questionnaires, irrespective of the time period in which the sample was issued. The advantage of this is that the questionnaire is in line with the way in which the data are reported.

4.4 Supervision and Quality Control

Several methods were used to ensure the quality and validity of the data collection operation.

A proportion of interviewers, particularly those less experienced, were accompanied in the field by supervisors. Any interviewers working on the survey for the first time were accompanied by a supervisor on the first day of their assignment.

A proportion of respondents were re-contacted to verify that an interview had taken place. In total, 1,185 addresses interviewed between April 2014 and March 2015 were re-contacted in 2014/15 to verify that the interviewer had contacted someone and whether or not an interview was completed. Addresses for back checking were selected on the basis of TNS Operations overall field quality procedures, whereby all interviewers have their work checked at least twice a year.

These back checking procedures were mainly carried out by telephone. Where no telephone number was available a short postal questionnaire was sent to the address to collect the same information. Of the back checks completed, 91% (1,079 cases) were validated by telephone and 9% (106 cases) by post.

4.5 Fieldwork Procedures and Documents

4.5.1 Advance Letter and Leaflet

All selected addresses were sent an advance letter and a Taking Part respondent leaflet from DCMS in advance of an interviewer calling at the address. Interviewers sent out the letters themselves, two or three days before starting their assignment. For the 2014/15 survey, two versions of the advance letter and the leaflet were used – one for "fresh sample" households – those households sampled for the first time in this survey year, and one for longitudinal respondents who had participated in the survey originally during 2011/12, 2012/13 or 2013/14 and were being re-contacted for the first, second or third time.

The letters and leaflets explained a little about the survey, why the address had been selected and informed occupants of the address that an interviewer would be calling round in the next couple of weeks. The letters also stressed the importance of the respondent taking part, the confidential nature of the survey and the respondent incentive for taking part. The letters were despatched on DCMS headed paper and signed by the project manager at DCMS to authenticate the survey.

The main differences between the fresh sample letter and leaflet, and those used for the longitudinal versions, were that the longitudinal versions focused less on basic information about the survey background, and more about reminding the respondent of their previous participation, the fact that they agreed to be re-contacted, that they had been selected to take part again, and the reasons for doing so. The longitudinal letters were also addressed directly to the individual who previously participated, rather than to "the resident", as the fresh sample letter was addressed.

There were also two 'reissue' letters – one for those addresses where the initial interviewer was unable to make contact at the address and one for those where a refusal had occurred. Both were despatched on TNS BMRB headed paper and signed by the project manager at TNS BMRB.

The letters included a telephone number and email address for people to contact if they required more information about the survey, to make an appointment for an interviewer to call, or to opt out of the survey. Over the course of the year, 352 people, representing 2.2% of addresses issued, opted out of the survey by contacting TNS BMRB, Kantar Operations or DCMS.

Copies of the letters and the leaflet can be found in Appendix B and Appendix C respectively.

4.5.2 Address Contact Sheet (ACS)

Interviewers were issued with a paper Address Contact Sheet (ACS) for each sampled address. This was the key document that allowed interviewers to carry out the different tasks that make up each Taking Part assignment and to record and manage their own calling strategies for each address. In 2014/15, two versions of the ACS were used – one for fresh sample households, and the other for longitudinal respondents.

The Address Contact Sheets are crucial documents to the management of the survey, both at the level of the individual assignment and for the management of the survey overall. The primary functions of the ACS are as follows:

- To allow interviewers to record the days and times that they called at an address. Additionally, there is space for interviewers to record details or comments that may be useful should the address be re-issued to another interviewer.
- To provide a record of all the outcomes achieved at the address. The ACS allows the outcome at each re-issue stage to be recorded separately, so that there was a complete record of outcomes for each address. Although these outcomes were recorded by interviewers on the paper ACS, they were also reported electronically to Head Office on a daily basis so that overall progress could be monitored and managed.

The fresh sample ACS allowed interviewers to carry out the following procedures at each address:

- To carry out any selection procedures on fresh sample cases and record the details. Where an interviewer found more than one dwelling unit at an address they had to carry out a procedure to randomly select one dwelling unit for interview. Similarly, where more than one eligible adult was found at an address, interviewers had to randomly select one person for interview.
- To allow the interviewer to carry out the screening process for the 5-10 proxy and 11-15 youth surveys the ACS had step-by-step instructions for interviewers and also allowed them to record the screening outcomes for every address. As with the final response outcomes, all screening outcomes were reported back to Head Office on a daily basis.

The longitudinal ACS differed from the fresh sample ACS, as no selection was required for respondents who had taken part previously. The longitudinal ACS covered the following:

- Details of the named adult respondents, including alternative contact details if they had provided them in their last interview.
- Establishing whether the named adult or child respondent was still resident at the address, and if they had moved, whether their new address could be established, and an interview conducted there.
- Screening for any children in the household aged five (not including those already included in the longitudinal proxy survey). This screening was conducted to ensure that if there was a child aged five in the household, they were interviewed, in order to maintain the levels of children in the longitudinal survey year-on-year.
- Screening of named child proxy and 11-15 survey respondents, to check whether they were still eligible for the same version of the survey, or whether they should progress to the next stage of the survey because they had turned 11 since the last interview (and should no longer be part of the 5-10 proxy sample, moving onto the 11-15 survey instead), or turned 16 since the last interview (and should no longer be part of the 11-15 sample, moving onto the adult interview instead).
- Screening that the child respondents and adult respondent still lived in the same household. If they did not (for example, if the adult respondent had moved out, but the children still lived at the address, or vice-versa), the ACS included screening for a parent/guardian in the household of the child respondents, so that they could complete a short interview of household information to supplement the data collected in the child interview(s).

For both fresh sample addresses and longitudinal households, interviewers made a minimum of eight calls before regarding it as a non-contact, recording details of these on the ACS. Calls had to be made on different days of the week and at different times of day: at least two of the calls had to be made on a weekday evening (after 7.00 p.m.) and at least one call at a weekend (10.00 a.m. – 9.00 p.m.), in order to make contact with households where everyone was working.

Examples of the two versions of the ACS are included in Appendix D.

4.5.3 Movers

In the longitudinal element of the survey, interviewers were required to try and obtain details of a follow-up address in the event that, when attempting to make contact with a named respondent at an address, it was established that they had moved.

In some cases, respondents gave alternative address (or "stable address") details when they were interviewed during 2013/14, which helped to track them down in the event of them moving. If this detail had been obtained, it was printed on the ACS for interviewer reference. In situations where the respondent had moved, yet no alternative contact details had been provided, interviewers were instructed to obtain new address details wherever possible from the current residents at the address.

Interviewers were briefed to attempt to trace respondents to their new address, and to gain an interview with them at this new address if it fell within, or close to, their original assignment area. Interviewers were advised to speak to a member of the fieldwork management for advice if they were not sure whether the address the respondent had moved to was within their catchment area. Wherever possible, in situations where the respondent had moved outside of the interviewer's area, the contact was passed onto another interviewer working closer to that area. Any respondent who had moved outside of England, or to institutional accommodation, were not followed up.

Interviewers were advised to probe for as much detail as possible when attempting to establish a respondent's new address, but also to understand when sensitivity and discretion was required, and it was not suitable to either probe for the address, or attempt to follow-up at the address for interview.

4.5.4 Non-English Speakers

In cases where the selected person had limited or no English, interviewers were permitted to use another person to interpret, provided such a person was appropriate (e.g. a close relative). The minimum age for an interpreter was set at 12 years old.

4.6 Maximising Response

4.6.1 Reissues

In order to maximise response to the survey, addresses with non-productive outcomes were re-issued, where a decision was made that this was appropriate.

In total across the year, 16,134 addresses were issued, with 3,110 addresses being re-issued, representing 19.3% of the original sample. Of these, 210 addresses were re-issued for a second time (1.3% of all addresses) and 12 for a third time (0.07% of all addresses). Of all the

addresses re-issued, 13.6% were converted into productive outcomes (i.e. an interview), at some stage. Generally, addresses where the original outcome had been a refusal were less likely to be converted than those that had been a non-contact or some other unproductive outcome (e.g. broken appointment, away, etc.).

4.6.2 Incentives

The survey was incentivised in two stages. Every address in the sample was sent an unconditional incentive of a book of six first-class stamps that were included with the advance letter. Additionally, each household that completed an interview(s) received a £5 high-street voucher.

No additional incentive was provided for the child surveys at fresh sample addresses. However, any children taking part in the longitudinal 11-15 survey (being interviewed for the second or third time), received a £5 high-street voucher to thank them for their participation.

4.7 Fieldwork Outcomes

The fieldwork outcomes, including response rates, are detailed in this section. The figures reflect the sample year, not the survey year, and as such the figures are different to those in the 2014/15 dataset, which only reflects interviews gained over the period April 1st 2014 to March 31st 2015. The fieldwork outcomes list all figures up to the close of the final survey in field with 2014/15 sample, which closed in July2015. The fieldwork outcomes have been split between fresh sample and longitudinal surveys.

4.7.1 Adult Fresh Sample

Table 4.2 shows the fieldwork outcomes for the adult fresh sample issued in 2014/15 for Taking Part. The final contact rate was 92.0%[4] and the final co-operation rate was 61.5%[5]. The (unadjusted) response rate was **56.5%**.

It is standard practice to assume that a proportion of the outcomes classified as 'Residential address but no contact with anyone at address' is actually deadwood. This proportion is equal to the proportion of other outcomes that is classified as deadwood.

[4] (Interviews + Refusals + Other unproductive)/ Total non-deadwood.

[5] Interviews / (Interviews + Refusals + Other unproductives).

9,578 (total number of fresh sample outcomes) minus 595 (total residential non-contacts) = 8,983 outcomes, of which 897 are deadwood (10%).

595 * 10% = 59 assumed deadwood addresses among the residential non-contacts.

This increases the total deadwood count to 956 (897 + 59) and the total non-deadwood outcomes is reduced to 8,622 (9,578 – 956).

The *adjusted* response rate = **56.9%.**

Table 4.2 Fieldwork outcomes (adult fresh sample)

Outcome	No. of cases	% of total issues	% of non-deadwood
Deadwood	897	9.4%	-
Not yet built/under construction	*20*		
Derelict/demolished	*20*		
Vacant/empty housing	*551*		
Non-residential address	*106*		
Communal establishment	*28*		
Address residential & occupied but not main residence	*92*		
Other ineligible	*40*		
Inaccessible	*23*		
Unable to locate address	*17*		
Non contact	698	7.3%	8.0%
Residential address but no contact with anyone at address	*595*		
Person selected but no contact with selected person	*101*		
No contact with parent to get parental permission	*2*		
Refusal	2,283	23.8%	26.3%
Information about occupants refused	*771*		
Office refusal	*201*		
Parent refused permission to interview	*5*		
Refusal by selected person	*1035*		
Proxy refusal	*271*		
Other unproductive	792	8.3%	9.1%
Broken appointment	*213*		
Selected person ill at home during survey period	*69*		
Selected person away or in hospital throughout survey period	*72*		
Selected person physically or mentally unable	*93*		
Selected person has inadequate English	*62*		
Contact made with respondent but no appointment made	*136*		
Other unproductive	*147*		
Productive	4,908	51.2%	56.5%
Full interview	*4,908*		
TOTAL	9,578		

4.7.2 Adult longitudinal sample

Table 4.3 shows the fieldwork outcomes for the adult longitudinal sample issued in 2014/15 for Taking Part. The final response rate was **80.8%**, with a contact rate of 97.6%[6] and a co-operation rate of 82.8%[7]. This response rate calculation defines untraced movers as 'out of scope'. If untraced movers are included as non-contacts, the response rate would be **76.8%**[8].

The conversion rate for the re-contact sample issued in 2014/15 was **76.1%**[9].

[6] (Interviews + Refusals + Other unproductive)/ Total non-deadwood.

[7] Interviews / (Interviews + Refusals + Other unproductives).

[8] Only 'named respondent has died' and 'named respondent has moved outside of England' included as deadwood

[9] Interviews / Total sample issued

Table 4.3 Fieldwork outcomes (adult longitudinal sample)

Outcome	No. of cases	% of total issues	% of non-deadwood
Deadwood	386	5.9%	-
Named respondent has died	*48*		
Address inaccessible	*2*		
Unable to locate address	*-*		
Named respondent has moved from England	*13*		
Other ineligible	*10*		
Respondent moved and follow-up address not obtained	*300*		
Respondent has moved outside of assignment area	*9*		
Respondent has moved to armed forces or other institution	*4*		
Non contact	150	2.3%	2.4%
No contact with anyone at address	*103*		
No contact with named respondent	*46*		
No contact with parent to get parental permission	*1*		
Refusal	668	10.2%	10.8%
Information about occupants refused	*24*		
Office refusal	*150*		
Parent refused permission to interview	*-*		
Refusal by named respondent	*441*		
Proxy refusal	*53*		
Other unproductive	366	5.6%	5.9%
Broken appointment	*132*		
Selected person ill at home during survey period	*40*		
Selected person away or in hospital throughout survey period	*42*		
Selected person physically or mentally unable	*22*		
Selected person has inadequate English	*-*		
Contact made with respondent but no appointment made	*68*		
Other unproductive	*62*		
Productive	4,986	76.1%	80.8%
Full interview	*4,982*		
Partial interview	*4*		
TOTAL	6,556		

Table 4.4 shows the fieldwork outcomes for new 16 year old adults in the longitudinal sample issued in 2014/15 for Taking Part.

Table 4.4 Fieldwork outcomes (New 16 year olds in the adult longitudinal sample)

Outcome	No. of cases	% of total issues	% of non-deadwood
Deadwood	3	2.8%	-
Respondent moved and follow-up address not obtained	*3*		
Non contact	7	6.5%	6.7%
No contact with named respondent *No contact with anyone at address*	*6* *1*		
Refusal	13	12.1%	12.5%
Office refusal *Parent refused permission to interview* *Refusal by named respondent* *Proxy refusal*	*1* *1* *10* *1*		
Other unproductive	20	18.7%	19.2%
Broken appointment *Selected person away or in hospital throughout survey period* *Contact made with respondent but no appointment made* *Other unproductive* *Unable to complete Child Youth screening*	*1* *3* *-* *8* *8*		
Productive	64	*59.8%*	*61.5%*
Full interview *Partial interview*	*63* *1*		
TOTAL	107		

4.8 Re-contact rates

The vast majority (97.2%) of adults giving a second, third or fourth interview agreed to be contacted again for the study in future. In addition, 84.8% of individuals sampled for the first time in 2013/14 agreed to be re-contacted.

4.9 Interview Length

In 2014/15 the mean adult fresh sample interview length was 51 minutes 41 seconds (median 49 minutes 24 seconds).

The mean adult longitudinal sample interview length was 47 minutes and 10 seconds (median 44 minutes and 12 seconds).

The figures are calculated after capping the lower and upper extreme values. In the fresh sample, the lower 0.8% and the upper 1.4% of interviews have been removed due to extreme values. In the longitudinal

sample, the lower 0.6% and the upper 1.3% of interviews have been removed. Extreme lower (including negative) and upper values are likely to have arisen from interviews being split into two or more sessions, since the computation is not date-sensitive (e.g. if an interview was concluded on a subsequent day but earlier in the day, the difference between relative start and end times could be negative, or unexpectedly small).

5. Child Surveys

5.1 Introduction to the Child Surveys

In addition to the main adult survey, Taking Part also incorporated a child survey element. This included a child proxy interview, where respondents who had been randomly selected to participate in the adult fresh sample survey were asked a series of questions about one child aged 5-10 in their household and also a youth interview, where children aged 11-15 were interviewed directly on a separate survey.

The longitudinal survey also included the child survey, interviewing either the adult participant from the previous year about their 5-10 year old, or the 11-15 year old child who participated in the previous year (and sometimes both). The longitudinal child survey was designed to allow children to move through the different questionnaires as they progressed to the next age level. A child who was originally asked about in the 5-10 survey, but had turned 11 by the time the 2014/15 survey was conducted, would be approached to take part in the 11-15 survey, while a child who was part of the 11-15 sample previously, but had since turned 16, would be moved to the adult questionnaire. In 2012/13, an additional survey of 5-year-olds in longitudinal households was introduced, to ensure that the longitudinal sample continued to include 5-year-olds in it (without this, respondents aged five last year would mostly now be aged six, and the sample would progressively get older year-on-year). In 2014/15, new 5-year-olds identified in the previous year were followed up and asked about in the 5-10 survey, regardless of whether there was already another 5-10 proxy interview in the household. Additionally, screening for new 5-year-olds was conducted in all longitudinal households.

Based on previous experience and the expected incidence rates of eligible children in the households where adult interviews were conducted, it was expected that approximately 1,200 interviews with parents / guardians about their 5-10 year old and 900 interviews with children aged 11-15 from the sampled address, could be achieved during the 2014/15 fieldwork. These figures included estimates for both fresh sample addresses and longitudinal households. The figures are, however, dependent on the actual incidence rate of children aged 5-10 and 11-15 observed from the addresses in the sample, together with the response rate of longitudinal respondents.

The child surveys allowed national estimates to be collected on the engagement of children aged 5-15 in a variety of different DCMS sectors, while in 2012/13, there were some new questions added for longitudinal respondents which would facilitate analysis of the change in children's attitudes and behaviour over time.

5.2 Sample (including an overview of the screening process)

For the fresh sample survey, respondents for both the child proxy (5-10) and youth (11-15) elements were obtained from the list of addresses randomly selected for the main adult survey. Child screening was carried out at all addresses in the fresh sample, however there were a number of procedures that interviewers adhered to when conducting the child screening.

Firstly, whether or not child screening was needed was dependent on the outcome code achieved for the adult interview. For example, various situations where no child screening was possible were:

- Where the address sampled was deadwood
- Where no contact was made with anyone at the address (after a minimum of 8 calls)
- Where contact was made with an adult at the address, however they refused to do an interview
- Where there was an office refusal

In addition, because it was important not to jeopardise the adult interview, it was advised that interviewers left the child screening until after the adult interview had been completed. If however, a respondent mentioned the child survey before the adult interview was completed (the child survey was mentioned in the survey leaflet), then it was deemed acceptable to do the child screening at that point.

For the longitudinal survey, any children who were eligible to take part were mentioned by name on the advance letter sent to adult respondents, and had their name printed on the ACS so that the interviewer knew who to ask for. If the child was no longer in the same household as the adult respondent, the interviewer was required to try and follow-up at their new address in order to obtain an interview.

The longitudinal survey also required interviewers to screen for a new 5-year-old in all households where a longitudinal interview took place, in order to maintain the levels of 5-year-olds in the longitudinal sample. This screening occurred regardless of whether any children were already part of the longitudinal survey in the household, adding a possible fifth interview to the survey for any given household.

5.2.1 Child Aged 5-10 Interview

Once the adult interview was completed, in fresh sample households, interviewers were instructed to ask how many children aged 5-10 were living in the household and whether or not the main adult selected for this interview was the parent / guardian of the 5-10 year old. If these conditions were met, and there was one child aged 5-10 living in the household, a proxy child interview was completed with the parent of the child. If there was more than one child aged 5-10 living in the household, one child was randomly selected using the following procedure:

- The name of each child aged 5-10 was listed in alphabetical order
- The Kish grid (as explained in section 2.5) was then used to identify which child to interview the adult about

This process ensured that just one child aged 5-10 was randomly selected for each applicable household.

For longitudinal respondents, the name of the 5-10 child who was to be asked about in the proxy interview was listed on the contact sheet, together with a prompt for the interviewer to check that the child was still eligible for the 5-10 survey, or if they had turned 11 since the last interview and should graduate to the 11-15 survey.

The interviewer also checked that the 5-10 year-old was still resident in the same household as the adult respondent. If this was not the case, then the interviewer was required to find a follow-up address for the child respondent and attempt to gain an interview there. The interviewer was asked to identify an adult within the child's new household who could complete the proxy interview on their behalf, and also complete a short interview providing basic household information, required for analysis of the child data, which is usually collected during the full adult interview.

5.2.2 Child Aged 11-15 Interview

In addition to screening for a 5-10 child in each fresh sample household, interviewers were also instructed to screen for any children aged 11-15 in the household. If there was one child aged 11-15 in the household, then interviewers attempted to complete a child 11-15 interview once parental permission had been obtained from a parent or guardian. A signed record of parental permission for every child 11-15 interview was collected on each relevant address contact sheet. If there were 2 or more children aged 11-15 in the household, then one child was randomly selected using the same method as outlined above in section 5.2.1 for the Child aged 5-10 interview. Once again, it was essential that parental permission was obtained before attempting to complete a child 11-15 interview.

All things considered, this meant that at any one fresh sample address, a total of 3 interviews could be conducted, with 2 different respondents:

1) Parent / Guardian: Adult interview + Child by proxy interview (5-10)

2) Child living in household: Child 11-15 interview.

Respondents completing the child surveys on the fresh sample survey were not issued with incentives, meaning a maximum of £5 was issued to each participating fresh sample household.

For longitudinal respondents, the name of the 11-15 year-old who took part in the interview in the previous survey year was listed on the contact sheet, together with a prompt for the interviewer to check that the child was still eligible for the 11-15 survey, or if they had turned 16 since the last interview and should graduate to the main adult survey.

As with the longitudinal 5-10 proxy survey, the interviewer checked that the 11-15 year-old was still resident in the same household as the adult respondent. If this was not the case, then the interviewer was required to find a follow-up address for the 11-15 survey respondent and attempt to gain an interview there. The interviewer was asked to identify an adult within the child's new household who could provide parental permission to approach the child for interview, and complete a short interview providing basic household information, required for analysis of the child data, which is usually collected during the full adult interview.

Unlike in the fresh survey, all named respondents that were interviewed in the longitudinal households, including children aged 11-15, received an incentive.

5.2.3 New 5-year-old Interview

In every longitudinal household, interviewers screened for the presence of a five year-old child (not including those who were already included in the longitudinal survey through participation in the 5-10 proxy survey last year). This addition to the longitudinal survey was designed in 2012/13 to combat the issue of an ageing sample each year – if the sample was not topped up with new respondents from the youngest age band eligible for the survey, then each year there would be a shortfall of interviews with this age group.

The screening for a five year-old followed the same approach as for the fresh sample screening of 5-10 year olds, although only children aged five were eligible.

Additionally new five year olds identified in 2013/14 were followed up using the same approach as the longitudinal 5-10 survey.

This approach in 2014/15 meant that in longitudinal households, a total of six interviews could be conducted.

5.3 Questionnaire Development and Design

5.3.1 Questionnaire Development

For 2014/15, the questionnaires for the child surveys remained largely the same as the previous year. Questions about school sports provision were added to be in line with the child boost questionnaire. Specific questions about swimming and cycling were removed from the questionnaire to limit interview length.

5.3.2 Overview of the Child Questionnaires

TNS BMRB and DCMS worked together to produce the two different child questionnaires. The 11-15 interview was approximately 25 minutes and the 5-10 proxy interview 11 minutes in length and remained largely the same as they were in the 2013/14 survey. The questionnaires were designed to capture detail about the child's participation in cultural and sporting and activities.

5.3.3 Overview of the 5-10 Child by Proxy Questionnaire

The 5-10 child proxy questionnaire was conducted directly after the adult interview in all applicable households. This questionnaire asked the parent or guardian of the 5-10 year old about the activities the child participated in outside of school. This included any activities organised by the school but done outside of normal school hours and also any activities done by the child on holiday. The 5-10 child survey did not ask about any activities that the child does at school, as it was considered too difficult for the parent or guardian to be able to report this detail accurately on behalf of their child.

The following sections were covered in the 5-10 child by proxy questionnaire:

Household

This section included questions about the household i.e. the number of dwelling units, number of adults and number of children aged 5-10 and the name, age and sex of the child that the interview related to.

School and school year

These questions collected information on which school the child went to and which school year the child was in at the time of interview. Alternatively, if the child did not attend school (for example they were in receipt of home education or had not yet started school) then this information was also collected at this point.

Lifestage question

This multiple choice question was asked of longitudinal respondents to the 5-10 proxy survey. It aimed to establish whether the child the interviewer was asking about had been through any major changes in their life since the last interview. The question asked about aspects of life relevant to a 5-10 year-old, such as whether they had started school, moved to a new school, started attending a club, made new friends or had a new brother or sister.

Activities and frequencies

This section was initiated with questions asking the parent / guardian about things that their child may have done or places they may have visited in the past 12 months. These activities all linked to DCMS cultural areas of interest, as sport was covered in a later section.

For each type of activity e.g. dance activities, music activities etc. a list of different qualifying activities were provided in order to help establish which different areas the child had participated in outside of school during the past 12 months. Showscreen questions were used at each screener (with the exception of museums and libraries questions which used a showcard). These sections included any volunteering that the child may have done, and a showcard was included for respondents who had trouble defining the types of things the term 'volunteering' included. The following groups of activities were asked about:

- Dance activities
- Music activities
- Theatre and drama activities
- Reading and writing activities
- Arts crafts and design activities
- Street arts, circus, carnival or festival activities
- Film and radio activities
- Other media activities (Radio and computer activities)
- Visited a library
- Visited a museum
- Visited any historic or important modern places, buildings or public spaces.

For each group of activities that the child had participated in outside of school, follow up questions on the frequency of participation and whether the child had done the activity outside of school in the last 7 days were also asked.

Activities were grouped into 3 categories: arts, libraries and museums and heritage and these sections were rotated in the questionnaire.

Sport

This section aimed to ascertain the child's level of sport participation and began with a question asking which sports the child had done in the last 4 weeks. This question was administered using a showcard. This was followed by a question asking which sports (of those selected at the first question) the child had participated in during the last 7 days, before asking about the number of days in the last week that the child had spent participating in sport for a minimum of 30 minutes.

Competitive sport

In addition to the questions on sports participation, five new questions about competitive sport were also asked. These questions collected data on the types of activities that the child took part in organised by the school and not organised by the school in the past 12 months.

Most frequent activity

Each of the activities that the respondent said their child had done were listed together in one question, and the respondent was asked which of those activities they felt the child spends the most time doing. This question was asked of all respondents, fresh sample and longitudinal.

Olympics

The Olympics section of the 5-10 child by proxy asked whether the Olympics had encouraged their child to take part in more sport, and where relevant, in which ways they had achieved this.

Demographics

This final section of the questionnaire included a few standard questions on the health and ethnicity of the child. All other detailed demographic information was collated from the accompanying adult interview. A question asking for the date of birth of the child was also included.

5.3.4 Overview of the 11-15 Child Questionnaire

On the whole, the structure of the 11-15 questionnaire was largely the same as the 5-10 questionnaire. The key difference in this survey in terms of content was that the 11-15 questionnaire collected data on the activities that the respondent did both in school lessons **and** in their spare time. This specific questionnaire therefore included activities that had been done at any time, and once again included activities that had been done on holiday. Moreover, in 2014/15 a number of new questions were added to the 11-15 questionnaire to take into account the 11-15 child boost survey. The new questions asked about sports provision at schools and the type of school that the child attended.

Household

This section included questions about the household i.e. the number of dwelling units, number of adults and number of children aged 11-15 and the name, age and sex of the child.

School and school year

These questions collected information on which school the child went to and which school year the child was in at the time of interview. Alternatively, if the child did not attend school (for example they were in receipt of home education or had not yet started school) then this information was also collected at this point.

Lifestage questions

Longitudinal respondents in the 11-15 survey were asked two questions about life stage changes that may have occurred since they were last interviewed. The first of the two questions concerned issues related to school, studies and education, while the second question related to more personal issues such as involvement in groups and clubs, making new friends, being given more freedom in going out alone, or more money from parents, or having a new brother or sister.

Activities, frequencies and satisfaction

Once again, this section started with questions about things that the child had done or places they had visited in the past 12 months. These activities all linked to DCMS cultural areas of interest, as sport was covered in a later section.

For each type of activity e.g. dance activities, reading and writing activities etc. a list of different qualifying activities were provided in order to help establish which different areas the child had participated in

outside of school during the past 12 months. Showscreen questions were used at each activity screener question (with the exception of museums and libraries questions which used a showcard). These sections included any volunteering that the child may have done, and a showcard was included for respondents who had trouble defining the types of things the term 'volunteering' included. The following groups of activities were asked about:

- Dance activities
- Music activities
- Theatre and drama activities
- Reading and writing activities
- Arts crafts and design activities
- Street arts, circus, carnival or festival activities
- Film and radio activities
- Other media activities (Radio and computer activities)
- Visited a library
- Visited a museum
- Visited any historic or important modern places, buildings or public spaces.

A series of follow up questions were asked for each activity, if the child respondent had participated in any of the things listed in each activity screener question. Follow up questions for each activity type then collected information on whether the respondent had done the activity during school lessons, during their spare time (which included out of school lessons, break times, and lunchtimes during school) or both. In addition, data on how frequently they had done the activity in each setting and whether they had participated in the activity in the past 7 days were also asked.

Activities were grouped into 3 categories: arts, libraries and museums and heritage and these sections were rotated in the questionnaire.

Sport

This section aimed to establish the child's level of sport and began with a question asking which sports the child had done either in school lessons or in their spare time in the last 4 weeks. This question was administered using a sport prompt pack consisting of a comprehensive list of sports. This was followed by a question asking which of these sports the child had participated in during school lessons and then, in their spare time in the last 4 weeks. Each section ended by asking about the number of days in

the last week that the child had spent participating in these sports for a minimum of 30 minutes in school lessons and their own time.

Competitive sport

The sports participation section progressed by asking a couple of questions about competitive sport. These questions collected data on the types of activities that the child took part in organised by the school and not organised by the school in the past 12 months.

Sport provision at school

In the sports provision section the child was asked which sports were offered by their school, both during school lessons and as part of activities outside of school hours. This section also collected information on sports which respondent would like to do but were not currently offered by their school. This was followed by a question asking whether the child had received specialist sports coaching from external coaches or specialist sports teachers at school, from coaches or teachers, other than their regular PE or games teachers.

Olympics

The Olympics section of the 11-15 questionnaire asked whether the Olympics had encouraged them to take part in more sport, and where relevant, in which ways it had increased their motivation to do this.

Well-being

This section was added to the 11-15 questionnaire in April 2013 and included one question asking about subjective level of happiness. The child was asked to rate how happy they were taking all things together, using a scale of 1-10 where 1 meant 'extremely unhappy' and 10 meant 'extremely happy'.

Demographics

This final section of the questionnaire included a few standard questions on the health and ethnicity of the child as well as the type of school they attended. All other detailed demographic information was collated from the accompanying adult interview. A question asking for the date of birth of the child was also included.

5.4 Fieldwork

There were two parts to the child fresh sample survey:

- 5-10 interview carried out by proxy with the adult respondent if they were the parent or guardian of the 5-10 year old;
- 11-15 interview carried out with the child, following parental consent being granted.

The longitudinal survey also contained a 5-10 proxy interview and an 11-15 interview, while additional proxy interviews about a new 5-year-old identified last year and a new 5-year-old identified this year were included in longitudinal households, in order to keep the longitudinal sample topped up with 5-year-old respondents.

5.4.1 Fieldwork Procedures and Documents

Screening for the fresh child surveys took place at all addresses in the sample. Screening occurred after the adult interview, as interviewers were advised not to screen for the presence of children in the household before conducting the adult interview, unless absolutely necessary, as the adult interview was not to be jeopardised as a result of additional screening.

If an eligible child aged 5-10 was identified in the fresh sample household, then a 5-10 proxy survey was carried out immediately after the main adult interview. This survey was only carried out if the adult respondent was the parent or guardian of the 5-10 year-old.

If an eligible 11-15 year-old was identified in the fresh sample household, an 11-15 youth interview was conducted. This took place after the main adult interview, and was carried out with the child directly. It was recommended that the 11-15 interview should be conducted during the same visit as the adult interview if possible, though appointments for a re-visit could be made for the 11-15 interview if necessary.

There were screening instructions for both the 5-10 proxy interview and the 11-15 interview on the main address contact sheet. Once the selection of any children aged 11-15 had been made, the interviewer was required to obtain written parental permission before proceeding with the interview. The adult was shown the Parental Permission Card (see Appendix E) to indicate what the interviewer would be asking the child, and asked to sign the "parental/guardian permission" section of the address contact sheet. This was not required with the 5-10 proxy interview as this was completed by the parent on behalf of the child.

For longitudinal child respondents, interviewers were required to establish whether the child was still eligible for the same age group interview, and also that they still lived in the same household as the adult respondent. If they no longer lived in the same household, then the interviewer was required to attempt to gain a follow-up address, and attempt to interview

the child (or adult, about the child, for a 5-10 proxy interview), at their new address.

If the child had moved to a new age group since their last interview, then the interviewer was instructed to interview them using the appropriate script. If the child who was asked about for the 5-10 proxy survey the previous year had since turned 11, then this involved approaching them directly for interview using the 11-15 script, while if an 11-15 year old from the previous year had since turned 16, they would be interviewed using the full adult script.

The same rules regarding conducting interviews on the fresh sample 5-10 proxy and 11-15 survey, were also applied for the longitudinal versions, with interviews taking place after the adult interview wherever possible, and interviewers seeking written consent from the parent or guardian before approaching any children aged 11-15 for interview.

5.4.2 Fieldwork Outcomes

This section details the fieldwork outcomes for the child surveys. The 5-10 proxy survey and the 11-15 youth survey outcomes are reported separately. These are also split by fresh sample, and longitudinal sample surveys. If a longitudinal respondent moved to a new survey age group (5-10 survey to the 11-15 survey or 11-15 survey to the adult survey) the outcome was reported as part of the sample it originated from.

5.4.2.1 5-10 Fresh Sample Survey

Table 5.1 shows the fieldwork outcomes for the 5-10 child proxy survey. The final contact rate should be **100%** as screening for the 5-10 child interview by proxy should only take place with households co-operating with the main (adult) survey and when the person participating in the adult interview is the parent or guardian of the child aged 5-10.

The final co-operation rate was **88.3%**[10]. There were no non-contacts for the 5-10 proxy survey, so the response rate is the same as the co-operation rate: **88.3%**.

As a general formula, the *cumulative* response rate for the 5-10 survey is adult response rate * child response rate = 56.5%*88.3% = **49.9%.**

[10] (Interviews / (Interviews + Refusals + Other unproductives)

Table 5.1 Fieldwork outcomes (5-10 fresh sample survey)

Outcome	No. of cases	% of total issues	% of non-deadwood
Deadwood	8963	93.6%	
No child aged 5-10 in household or main interview not with parent of 5-10 year old	*5014*		
Information for child screening refused	*7*		
Unable to complete child screening (non-response/deadwood in adult survey)	*3942*		
Non contact	-	0.00%	0.00%
Residential address but no contact with anyone at address (when seeking child interview)	-		
Child selected but no contact (or re-contact) with parent of child	-		
Refusal	49	0.5%	8.0%
Selection information refused	-		
Office refusal	-		
Refusal by selected person	*43*		
Proxy refusal	*6*		
Other unproductive	23	0.2%	3.7%
Broken appointment	*2*		
Contact made but no appointment made	*5*		
Selected person ill at home during survey period	*16*		
Productive	543	5.7%	88.3%
Full interview	*543*		
TOTAL	9,578		

5.4.2.2 11-15 Fresh Sample Survey

Table 5.2 shows the fieldwork outcomes for the 11-15 child survey. The final contact rate was **89.9%**[11] and the final co-operation rate was **72.9%**[12]. The response rate was **65.5%**. It should be borne in mind that the request for an interview with an 11-15 year old could only be made in households co-operating with the main (adult) survey request. As a general formula, the *cumulative* response rate for the 11-15 child survey is adult response rate * child response rate = 56.5%*65.6% = **37.1%**.

[11] (Interviews + Refusals + Other unproductive)/Total non-deadwood

[12] (Interviews / (Interviews + Refusals + Other unproductives)

Table 5.2 Fieldwork outcomes (11-15 fresh sample survey)

Outcome	No. of cases	% of total issues	% of non-deadwood
Deadwood	9,024	94.2%	
No child aged 11-15 in household	*5,075*		
Information for child screening refused	*7*		
Unable to complete child screening (non-response/deadwood in adult survey)	*3,942*		
Non contact	56	0.6%	10.1%
Child selected but no contact with selected child	*55*		
No contact with parent to get parental permission	*1*		
Refusal	110	1.1%	19.9%
Selection information refused	*-*		
Office refusal	*-*		
Parent refused permission to interview	*72*		
Refusal by selected child	*26*		
Proxy refusal	*12*		
Other unproductive	25	0.3%	4.5%
Broken appointment	*6*		
Contact made but no appointment made	*2*		
Selected child ill at home during survey period	*1*		
Selected child away or in hospital throughout survey period	*2*		
Selected child physically or mentally unable	*2*		
Other unproductive	*12*		
Productive	363	3.8%	65.5%
Full interview	*363*		
TOTAL	9,578		

5.4.2.3 5-10 Longitudinal Survey

Table 5.3 shows the fieldwork outcomes for the longitudinal 5-10 proxy survey. The final co-operation rate was **70.7%**[13]. There were no non-contacts for the longitudinal 5-10 proxy survey, so the response rate is the same as the co-operation rate: **70.7%**. This response rate calculation defines untraced movers as 'out of scope'. If untraced movers are included as non-contacts, the response rate would be **62.8%**[14].

The conversion rate for the 5-10 re-contact sample issued in 2014/15 was **66.4%**[15].

[13] (Interviews / (Interviews + Refusals + Other unproductives)

[14] Only 'Named respondent has moved from England' included as deadwood

[15] Interviews / Total sample issued

As a general formula, the *cumulative* response rate for the longitudinal child proxy survey is adult response rate * child response rate = 80.8%*70.7% = **57.1%**.

It should be noted that the outcome 'unable to complete child screening due to unproductive adult contact' was included as an unproductive outcome in the analysis. This results in a much lower response rate for the longitudinal sample than the fresh sample (for the fresh sample, the 'unable to complete child screening' outcome was included as deadwood).

Table 5.3 Fieldwork outcomes (5-10 proxy longitudinal survey)

Outcome	No. of cases	% of total issues	% of non-deadwood
Deadwood	37	6.1%	
Respondent has moved and follow-up address not obtained	*35*		
Respondent has moved from England	*2*		
Non contact	-	0%	0%
No contact with named respondent after 8+ calls	-		
Refusal	10	1.6%	1.8%
Parental permission needed but refused	-		
Refusal by selected person before interview	*9*		
Proxy refusal other than by parent guardian	*1*		
Other unproductive	157	25.9%	27.5%
Unable to complete child screening due to unproductive adult contact	*134*		
Broken appointment	*4*		
Contact made but no appointment made	*2*		
Other unproductive	*17*		
Productive	403	66.4%	70.7%
Full interview	*327*		
Full interview (new 11 year old)	*76*		
TOTAL	607		

5.4.2.4 11-15 Longitudinal Survey

Table 5.4 shows the fieldwork outcomes for the longitudinal 11-15 survey. The final co-operation rate was **73.1%**[16] and the response rate was **71.6%**. As with the other re-contact samples, this response rate calculation defines untraced movers as 'out of scope'. If untraced movers are included as non-contacts, the response rate would be **69.3%**[17].

The conversion rate for the 11-15 re-contact sample issued in 2013/14 was **69.1%**[18].

As a general formula, the *cumulative* response rate for the longitudinal child proxy survey is adult response rate * child response rate = 80.8%*71.6% = **57.9%**.

[16] (Interviews / (Interviews + Refusals + Other Unproductives)

[17] Only 'Named respondent has moved from England' included as deadwood

[18] Interviews / Total sample issued

As with the 5-10 sample, for the purposes of the 11-15 longitudinal response analysis, the outcome 'unable to complete child screening due to unproductive adult contact' was included as an unproductive outcome.

Table 5.4 Fieldwork outcomes (11-15 longitudinal survey)

Outcome	No. of cases	% of total issues	% of non-deadwood
Deadwood	17	3.4%	
Respondent has moved and follow-up address not obtained	*16*		
Respondent has moved from England	*1*		
Non contact	10	2.0%	2.1%
No contact with named respondent after 8+ calls	*10*		
Refusal	25	5.0%	5.2%
Parental permission needed but refused	*5*		
Refusal by selected person before interview	*15*		
Proxy refusal other than by parent guardian	*5*		
Other unproductive	102	20.4%	21.2%
Unable to complete child screening due to unproductive adult contact	*84*		
Broken appointment	*4*		
Contact made but no appointment made	*1*		
Selected person away or in hospital throughout survey period	*2*		
Selected person physically or mentally unable	*-*		
Other unproductive	*11*		
Productive	345	69.1%	71.6%
Full interview	*285*		
Full interview (new 16 year old)	*60*		
TOTAL	499		

5.4.2.5 New 5 Year Old Survey

Table 5.5 shows the fieldwork outcomes for the new 5-year-old survey. The final contact rate should be **100%** as screening for the new 5-year-old should only take place with households co-operating with the main (adult) survey and when the person participating in the adult interview is the parent or guardian of the child aged 5.

The final co-operation rate was **80.6%**[19]**.** There were no non-contacts for the new 5-year-old survey, so the response rate is the same as the co-operation rate: **80.6%.**

As a general formula, the *cumulative* response rate for the new 5-year-old survey is adult longitudinal response rate * new 5-year-old response rate = 80.8%*80.6% = **65.1%.**

Table 5.5 Fieldwork outcomes (New 5-year-old survey)

Outcome	No. of cases	% of total issues	% of non-deadwood
Deadwood	6,401	97.6%	-
No child aged 5 in household or main interview not with parent of 5 year old	*5,146*		
Unable to complete 5 year old screening (non-response/deadwood in adult survey)	*1,255*		
Non contact	-	0.0%	0.0%
No contact with named respondent after 8+ calls	*-*		
Refusal	8	0.1%	5.2%
Refusal by selected person	*8*		
Other unproductive	22	0.3%	14.2%
Broken appointment	*1*		
Other unproductive	*21*		
Productive	125	1.9%	80.6%
Full interview	*125*		
TOTAL	6,556		

5.4.2.6 5/6 Year Old Follow Up Survey

Table 5.6 shows the fieldwork outcomes for the longitudinal 5-10 proxy survey about a child identified as a new 5 year old in 2013/14 or 2012/13. The final co-operation rate was **72.2%**[20]. There were no non-contacts for the new 5-year-old survey, so the response rate is the same as the co-operation rate: **72.2%**. This response rate calculation defines untraced movers as 'out of scope'. If untraced movers are included as non-contacts, the response rate would be **65.1%**[21].

[19] (Interviews / (Interviews + Refusals + Other unproductives)

[20] (Interviews / (Interviews + Refusals + Other unproductives)

[21] Only 'Named respondent has moved from England' included as deadwood

The conversion rate for the 5-10 re-contact sample issued in 2014/15 was **65.1%**[22].

As a general formula, the *cumulative* response rate for the longitudinal child proxy survey is adult response rate * child response rate = 80.8%*72.2% = **58.3%**.

Table 5.5 Fieldwork outcomes (5/6-year-old follow-up survey)

Outcome	No. of cases	% of total issues	% of non-deadwood
Deadwood	19	9.7%	-
Respondent has moved and follow-up address not obtained	*18*		
Respondent has moved outside of assignment area	*1*		
Non contact	-	0.0%	0.0%
No contact with named respondent after 8+ calls	*-*		
Refusal	5	2.6%	2.8%
Refusal by selected person	*5*		
Other unproductive	44	22.6%	25.0%
Unable to complete child screening due to unproductive adult contact	*36*		
Broken appointment	*3*		
Other unproductive	*5*		
Productive	127	65.1%	72.2%
Full interview	*127*		
TOTAL	195		

5.4.3 Interview lengths

The mean interview length for the 5-10 proxy survey, including the new 5-year-old survey, was 10 minutes 45 seconds (median 9 minutes 51 seconds).

The mean interview length for the 11-15 youth survey was 25 minutes 30seconds (median 23 minutes 26 seconds).

The interview lengths for the child surveys have been calculated after capping the lower and upper extreme values. For the 5-10 proxy survey, the lower 0.5% and the upper 0.2% were capped. For the 11-15 youth survey, the lower 1.2% and the upper 1.4% were capped. Extreme lower

[22] Interviews / Total sample issued

(including negative) and upper values are likely to have arisen from interviews being split into two or more sessions, since the computation is not date-sensitive (e.g. if an interview was concluded on a subsequent day but earlier in the day, the difference between relative start and end times could be negative, or unexpectedly small).

6. Data Processing and Outputs

6.1 Introduction

Outputs were provided to DCMS on a quarterly basis. This output included a SPSS file and a number of statistical reports which were used to produce quarterly statistical bulletins by DCMS. The section provides further details of the outputs, outlining the data processing procedure and the quality checks conducted at each stage of the process.

6.2 Coding Open-ended Questions

The Taking Part adult and child questionnaires have a number of full and partial open-ended questions.

For full open-ended questions, the verbatim provided by respondents were reviewed by the Coding team and a code frame was created so frequently recurring responses could be easily used in analysis.

Partial open-ended questions have response lists with an 'other specify' option. For the partial-opened questions, the coders were provided with the code frames used in the questionnaire as a starting point. The Coding team check whether any of the verbatim responses could actually be coded in one of the pre-coded response options (this exercise is commonly known as back coding). If necessary, new codes are added to the code frame.

Since most of the questions have been used in previous years of the survey, the code frames in 2014/15 were already well developed and there was little need to add new codes to the frames. All new or amended code frames were signed-off by the research team and DCMS.

The coding of open-ended questions was carried out using a web-based package called Ascribe by an experienced team of coders. Five per cent of open-ended answers were checked by senior coders. New coders had 100% of their work checked until the required standard was reached and thereafter their work was systematically spot-checked. On questions where the "Other" answer category exceeded 10%, answers were also reviewed.

The coding team also code socio-economic data for this survey to produce Standard Occupational Classification (SOC2010) and National Statistics Socio-economic Classification (NS-SEC) categorisation, from a series of standard questions which were designed for NS-SEC and SOC categorisation.

TNS BMRB researchers kept in close contact with the coding team throughout fieldwork to ensure that coding was carried out at regular intervals. At least every quarter of the survey year the coding was accessed by the TNS BMRB research team to check the quality of the coders' work in terms of what had been back-coded to each answer category, and to see what sort of answers had been left in "Other".

A list of all of the code frames used on open-ended and partially open-ended questions in 2014/15 can be found in Appendix J.

6.3 SPSS Outputs

6.3.1 Overview

The main delivery was a rolling quarterly SPSS file which contained all new data from interviews collected within the latest quarter, added to a master data file containing all cases and key variables since 2005. The variables contained in this dataset were agreed with DCMS at the beginning of the survey year. This file was used to produce the rolling annual estimates required for the quarterly DCMS statistical bulletin. In addition to this, an annual dataset was provided at the end of the survey year.

In 2014/15, all reporting was based on date of interview rather than date of sample issue[23].

Datasets were provided to DCMS, five weeks after the end of each quarterly fieldwork period.

6.3.2 Quarterly Datasets

At the end of the 2014/15 survey, the quarterly dataset contained 151,815 cases. The relevant annual samples at the end of each quarter are identified using the variable filters for each period (e.g. Q34Q37filter).

Table 6.1 includes the sample size for each rolling annual dataset within the 2014/15 survey year.

[23] Reporting based on date of interview was introduced during the 2011/12 survey. In the period of transition, interviews achieved in April 2011 using 2010/11 issued sample (from February and March 2011) were included in both the 2010/11 dataset, and the 2011/12 dataset.

Table 6.1 Annual sample size at the end of each quarter

Period	Total Sample size	Fresh sample size	Longitudinal sample size (including 'new' 16 year olds)
July 2013 – June 2014 (Q34Q37filter)	10,045	5,053	4,992
October 2013 – September 2014 (Q35Q38filter)	9,375	4,670	4,705
January 2014 – December 2014 (Q36Q39filter)	9,687	4,757	4,930
April 2014 – March 2015 (Q37Q40filter)	9,817	4,769	5,048

The rolling quarterly dataset provided during the 2014/15 survey year contained a subset of the variables provided in the annual dataset. The variables covered the following topic areas:

- Demographics and area information
- Culture and sport participation (a selection of questions and summary variables based on the data required for the statistical bulletins)
- Swimming and cycling competency
- Internet and social media use
- Volunteering
- Charitable Giving
- Public Participation
- Olympics
- First World War Centenary Commemoration
- Involvement in Planning decisions
- Broadcasting
- Barriers to participation amongst those with a disability

6.3.3 Annual datasets

6.3.3.1 Adult dataset

The annual dataset contained 9,817 interviews. Table 6.2 contains the breakdown of interviews from fresh and longitudinal interviews. Interviews completed on each type of sample can be identified by filtering the dataset using the variable "cscreen".

Table 6.2 Breakdown of interviews in the annual dataset

Type of interview	Screen number (dataset variable "cscreen")	Number of interviews
Fresh sample interview	0	4,769
Longitudinal sample interview	1	4,930
'New' 16 year old interview	2	118

Each respondent is identified in the dataset using a unique 7 digit identifier ("scrser") which contains details of the interviewing area, the year in which the sample was issued (e.g. Year 7, Year 8, Year 9 or Year 10), a number identifying the address within an interviewing area and the type of sample (screen number).

The dataset contained all variables in the questionnaire, along with a number of derived variables and area variables. Details are provided in Appendix F (questionnaire) and Appendix G (list of all additional variables). In general, variables are included in the dataset in questionnaire order.

6.3.3.2 Child dataset

An annual child dataset was provided at the end of the survey year. The dataset contained a total of 1,825 interviews – 1,104 5-10 interviews and 721 11-15 interviews. Table 6.3 contains the breakdown of interviews from fresh and longitudinal interviews. Interviews completed on each child survey can be identified by filtering the dataset using the variable "cscreennew" or "cscreen" (5-10 interviews use "cscreen" = 5, 6, 8, 15 or 25; 11-15 interviews use "cscreen" = 4, 7 or 9).

Table 6.3 Breakdown of child survey interviews by type of sample

Type of interview	Screen number (dataset variable "cscreennew")	Number of interviews
New 11-15 interviews from longitudinal sample (previously 5-10 proxy interview)	4	166
New 5 year old proxy interviews from longitudinal sample	5	121
5-10 proxy interviews from longitudinal sample	6	326
11-15 interviews from longitudinal sample	7	202
5-10 proxy interviews from fresh sample	8	533
11-15 interviews from fresh sample	9	353
Additional 5 year olds proxy interviews from longitudinal sample	15 / 25	124

Variables based on questions asked of only the 5-10 sample or 11-15 sample, are clearly identified in the variable and value labels (eg. c5danceY or c11danceY). The unique serial number of the associated adult interview is also included in the dataset so users are able to merge household variables from the adult data into the child dataset if required.

As with the adult dataset, the child dataset is generally in questionnaire order. The child survey questionnaires are included in Appendix H and the additional variables are listed in Appendix I.

6.3.4 Note on Data Checking Process and Quality Checking

The process for checking the adult and child datasets involved the following:

- The investigation of any duplicate cases in the data. Before the data are received by the TNS BMRB team, Data Processing and Field investigate any duplicate cases (whether the data includes several

cases with same serial number/screen number combination) and any genuine duplicates are removed[24];
- Comparing SPSS frequency counts with 'top level' output generated by the questionnaire program itself (Dimensions software);
- Checking coding counts with SPSS frequency counts;
- The investigation of any unexpected missing data and the assigning of error codes to every affected variable;
- Running cross-tabulations of any derived variables (including NS-SEC) with their source variables to make sure there are no inconsistencies (this includes the creation of 'test' variables where necessary, all removed from delivered dataset);
- Checking any additional area-based variables against original sample file;
- Checking of coded 'open-ended' data for sports frequencies to make sure back-coding has been applied correctly for the 'Sportxx' variables and that back-coded data can be linked to follow-up data (e.g. breathe, sweat, spotime etc.) (this process includes the creation of derived variables via SPSS to test those created via the Dimensions software);
- Checking that weighted proportions match the target weights set for sex-age, ethnic group, and region;
- Ensuring all missing values are correctly assigned across the dataset (largely lo thru -3);
- The modification of variable labels/value labels to clarify output (though the Data Processing team use a general specification document which outlines the 'rules' for labelling plus any re-coding required - for instance, all "Don't know" answers are recoded -1, all "Refused" answers are recoded -2 etc.);
- The tidying up of variable names, labels and values to ensure they are consistent with previous datasets.

Finally all new syntax for derived variables is validated by another member or the TNS BMRB team and sent to DCMS.

6.4 Statistical Release Data

6.4.1 Overview

The statistical spreadsheets were provided to DCMS on a quarterly basis and were used by DCMS to produce the quarterly statistical bulletin. The spreadsheets contained the annual estimates for each topic area, with the

[24] Duplicates generally occur when an interviewer realises after conducting an interview that the interview has been conducted with the wrong person in the household or at the wrong address.

12 month rolling estimates updated at the end of each quarter. In addition to the estimates, the spreadsheets included confidence intervals and all significant differences were highlighted (latest data against earliest available data).

Table 6.4 summarises the spreadsheets provided to DCMS in 2014/15.

Table 6.4 Statistical spreadsheets produced by TNS BMRB in 2014/15

Statistical spreadsheet	Overview of spreadsheet	Dates produced

Arts	■ Arts Overview, including frequency
	■ Proportion who have engaged with the arts once or more in the last year
	  ■ Area level breakdown
	  ■ Demographics
		Quarterly - rolling 12 month data

Archives	■ Archives Overview, including purpose and frequency
	■ Proportion who have been to an archive in the last year
	  ■ Area level breakdown
	  ■ Demographics
		Quarterly - rolling 12 month data

Big Society	■ Volunteering overview, including type of volunteering
	■ Volunteering in DCMS sectors, including number of sectors and time spent
	■ Volunteering in the last year
	  ■ Area level breakdown
	  ■ Demographics
	■ Charitable Giving, including frequency and means
	■ Giving to DCMS sectors, including number of sectors and giving intentions
	■ Attitudes to charitable giving
	■ Giving to DCMS sectors in last year:
	  ■ Area level breakdown
	  ■ Demographics
	■ Social cohesion
	  ■ Influence over local sporting and cultural facilities and quality of local environment
	  ■ Involvement in groups, clubs and organisations
		Quarterly - rolling 12 month data

Child engagement	■ Overview and breakdown of specific activities for Arts, Heritage, Libraries, Museums and sport
	  ■ Demographic breakdowns (age, sex and limiting disability)
	■ Competitive Sport
	  ■ Demographic breakdowns (age and sex)
	■ Olympics by age only
		Annual

Digital Participation	■ Digital Participation overview, including whether visited a library, heritage, arts, archives or museums and galleries website and reason for visit
	■ Proportion who have digitally participated in culture in the last year
	  ■ Area level breakdown
	  ■ Demographics
		Quarterly - rolling 12 month data

Heritage	■ Heritage Overview, including frequency
	■ Proportion who have visited a heritage website in the last year
	  ■ Area level breakdown
	  ■ Demographics
		Quarterly - rolling 12 month data

Libraries	■ Libraries Overview, including frequency
	■ Proportion who have visited a public library in the last year
	  ■ Area level breakdown
	  ■ Demographics
		Quarterly - rolling 12 month data

Museums and Galleries	■ Museums and Galleries, including frequency
	■ Proportion who have visited a museums or gallery in the last year
	  ■ Area level breakdown
	  ■ Demographics
		Quarterly - rolling 12 month data

Olympics	■ Attitudes towards the Olympic Games, including motivation to do more sport, culture and volunteering
	■ How followed/got involved in games
	■ Proportion supportive of the UK hosting the 2012 Olympic Games
	  ■ Area level breakdown
	  ■ Demographics
		Quarterly - rolling 12 month data

6.4.2 Data Checking Process and Quality Checking

The statistical spreadsheets were produced by TNS BMRB for the first time in 2011. To ensure the statistical spreadsheets continued to provide accurate and reliable information, DCMS and TNS BMRB agreed a rigorous checking process. The checking process for each individual statistical spreadsheet involved the following steps/checks:

- The re-running of all tables in SPSS. This included a check to ensure that the correct dataset variables were used and all new derived variables were created correctly.
- All figures had been copied from SPSS into the spreadsheets correctly/accurately
- All data from the SPSS output had been copied into the confidence interval and significance testing spreadsheets correctly/accurately (including spot checks on back data)
- The correct design factors had been used
- The confidence intervals had been correctly created and copied into the spreadsheets correctly/accurately

- All significant results were highlighted
- All user notes at the bottom of the spreadsheets had been updated

These checks were completed on all new data added to the spreadsheets. If past data had not been changed, then this was not re-checked.

In addition to the checks completed by TNS BMRB, DCMS also spot-checked the worksheets. Any SPSS syntax used to create derived variables was also submitted to DCMS to validate.

6.5 Visualisations

Based on 2014/15 data, TNS BMRB produced eight infographics based on the annual adult data and three based on the child data. The infographics covered the following:

Adult data

- Cultural participation
- Arts engagement
- Libraries
- Museums and Galleries
- Heritage
- Volunteering and Charitable Giving
- Digital participation
- Equalities

Child data

- Arts forms
- Cultural Participation
- Sports Participation

6.6 Weighting

Each quarterly dataset was weighted to compensate for variations in sampling probability and for variations in response propensity. The fresh address and re-interview samples were weighted separately before being combined using a set mixing ratio.

6.6.1 Fresh sample weighting

The first stage was to calculate the address design weight[25] (N_a/n_a) and use this as a base weight for estimating an address-level response propensity.

The address-level response propensity was estimated using the CHAID algorithm which will produce weighting classes with maximally different response rates. The variables used to stratify the sample (see section 2.3) were used as input variables for the CHAID algorithm (namely region and a set of three 'factor' variables designed to be correlated with the key frequency data collected in the survey).

The address-level response propensity was computed based on the most recent twelve month issued sample for which fieldwork was complete. The 'rules' for weighting class allocation were then applied to the current dataset to form a new address-level weight[26] (N_a/n_a * $1/p(response)_b$).

This new address-level weight was converted into an individual-level weight by multiplying it by the product of the number of dwelling units at the address, the number of households in the sampled dwelling unit and the number of eligible individuals in the sampled household[27] (N_{ca}*N_{dca}*N_{edca}). This was carried out separately for both adults and children aged 11-15, with different values for the N_{edca} term. For children aged 5-10, the adult N_{edca} term was replaced by[28] ((N_{edca}/N_{fedca})*$N_{5\text{-}10}$).

This individual-level weight was used as the base weight for a calibration procedure[29]. For the adults, the calibration procedure forces the single quarter dataset marginal totals of (i) sex/age group and (ii) government office region to match the equivalent 2011 Census-based mid-year 2013 Annual Population estimates, *divided by 4.* By dividing these population estimates by 4, the sum of weights in a dataset containing four quarters will be equal to the total population estimate (43,656,579).

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[25] N_a = total number of addresses in sample stratum *a*; n_a = 2013/14 sampled fresh addresses in stratum *a*.

[26] $p(response)_b$ = estimated address-level response propensity in weighting class *b*.

[27] N_{ca} = number of dwelling units at address *c* in stratum *a*; N_{dca} = number of households at dwelling unit *d* at address *c* in stratum *a*; N_{edca} = number of eligible individuals in household *e* at dwelling unit *d* at address *c* in stratum *a*.

[28] N_{fedca} = number of adults with a formal parental relationship with the child; N_{edca} = number of individuals aged 16+ in the household, and $N_{5\text{-}10}$ = number of 5-10 year olds that the sampled adult has a parental relationship with.

[29] The linear regression calibration method was employed, using a Stata script.

For children aged 5-15, the calibration procedure aligns the annual marginal totals of (i) sex/age group and (ii) government office region to match the equivalent 2011 Census-based mid-year 2013 Annual Population estimates, with a total population estimate of 6,795,108.

For sex/age group, fourteen classes were defined for adults, based on seven age groups (16-24; 25-34; 35-44; 45-54; 55-64; 65-74; 75+). For the 5-15 year olds, eight classes were defined, based on four age groups (5-7;8-10;11-13;14-15). Tables 6.5 and 6.6 present the annual population totals used in calibration for age by gender and government office region, respectively.

Table 6.5.: Annual population totals used in calibration for age by gender

Age band	Males	Females
5 to 7 years old	1,009,619	961,815
8 to 10 years old	922,291	879,322
11 to 13 years old	904,544	863,475
14 to 15 years old	642,566	611,476
16 to 24 years old	3,176,715	3,050,979
25 to 34 years old	3,672,381	3,694,976
35 to 44 years old	3,559,027	3,600,040
45 to 54 years old	3,732,528	3,810,759
55 to 64 years old	2,979,587	3,074,408
65 to 74 years old	2,418,603	2,604,970
75 years old or above	1,767,288	2,514,318
Total	24,785,149	25,666,538

Table 6.6: Annual population totals used in calibration for government office region

Government office region	5 to 15 years old	16 years old or above
North East	311,042	2,147,658
North West	894,306	5,768,688
Yorkshire and Humber	673,094	4,330,535
East Midlands	572,169	3,749,546
West Midlands	743,661	4,567,527
East of England	756,830	4,823,969
London	1,078,721	6,716,533
South East	1,128,554	7,116,541
South West	636,731	4,435,582
Total	6,795,108	43,656,579

6.6.2 Re-interview sample cases

For weighting purposes, there are three different sets of re-interview cases:

(a) Fourth interview cases (cases initially sampled in 2011/12)
(b) Third interview cases (cases initially sampled in 2012/13)
(c) Second interview cases (cases initially sampled in 2013/14)

6.6.2.1 Fourth interview cases

Fourth interview cases have three previous weights: their Interview 1 weight, their Interview 2 weight, and their Interview 3 weight.

- The Interview 1 weight was the product of a sampling weight, an area-based non-response factor and a calibration factor.
- The Interview 2 weight was the product of the Interview 1 weight and a new calibration factor.
- The Interview 3 weight was the product of an *updated* Interview 2 weight and a calibration factor.

This updated Interview 2 weight incorporated a non-response weight based on the modelled probability of obtaining an Interview 2 given that an Interview 1 had been obtained and was equal to:

- Interview 1 weight * 1/p(interview 2|interview 1) * interview 2 calibration factor

The *original* Interview 2 weight did not include the middle component p(interview 2|interview 1) because the data was not available to compute it at that time. The p(interview 2|interview 1) component was estimated by means of a logistic regression model based on all cases interviewed for the first time in 2011/12. The model coefficients are presented in Section 6.6.2.4.

The Interview 4 weight is the product of an updated Interview 3 weight and a calibration factor.

The updated Interview 3 weight includes a non-response weight that is based on the modelled probability of obtaining an Interview 3 given that an Interview 2 was obtained, calculated as:

- Interview 2 weight * 1/p(interview 3|interview 2) * interview 3 calibration factor

To estimate the p(interview 3|interview 2) term a logistic regression model based on all cases interviewed for the first time in 2011/12 was employed. The candidate predictor variables were drawn from Interview 1. Key model parameters are shown in Section 6.6.2.4.

6.6.2.2 Third interview cases

Third interview cases have two previous weights (their Interview 2 weight and their Interview 1 weight). The process for computing these weights is identical to that for the Interview 3 weight as described in Section 6.6.2.1.

6.6.2.3 Second interview cases

Finally, the second interview cases have one previous weight (the Interview 1 weight). The process for computing the interview 2 weight is the same as that for the updated Interview 2 weight, outlined in Section 6.6.2.1.

6.6.2.4 Probabilities of obtaining repeat interviews

The tables below present key parameters of the models that were constructed to estimate the probability of obtaining an Interview 3 given that an Interview 2 has been obtained (Table 6.7) and the probability of obtaining an Interview 2 given that an Interview 1 has been obtained (Table 6.7). Both predictive models are based on information that was recorded at Interview 1 and have been built by means of logistic regression analysis.

Table 6.7: Conditional probability of obtaining interview 3, given Interview 2 was achieved - logistic regression coefficients and their confidence intervals (C.I.)

Variable (recorded at Interview 1)	Odds ratio	Lower 95% C.I. for odds ratio	Upper 95% C.I. for odds ratio
Constant	3.170		
Whether used a public library service at least once during the last 12 months - Yes [vs. No]	1.223	1.075	1.392
Whether achieved 1x30 MIS per week - Yes [vs. No]	0.761	0.668	0.867
Whether have done any voluntary work during the last 12 months - Yes [vs. No]	1.427	1.229	1.656
Age - 16-24 years old [vs. 45 to 64 years old]	0.542	0.445	0.662
Age - 25-44 years old [vs. 45 to 64 years old]	0.659	0.561	0.773
Age - 65-74 years old [vs. 45 to 64 years old]	1.176	0.910	1.520
Age - 75 years old or older [vs. 45 to 64 years old]	0.904	0.698	1.172
ONS Harmonised tenure status - Social rented sector [vs. Owners]	0.774	0.646	0.927
ONS Harmonised tenure status - Private rented sector [vs. Owners]	0.699	0.591	0.827
Ethnic group for PSA measurement – Non-white [vs. White]	0.657	0.535	0.806
ONS standardised Government Office Region - North East [vs. London]	1.861	1.300	2.663
ONS standardised Government Office Region - North West [vs. London]	1.480	1.163	1.883
ONS standardised Government Office Region - Yorkshire and Humberside [vs. London]	1.051	0.819	1.349
ONS standardised Government Office Region - East Midlands [vs. London]	1.363	1.033	1.799
ONS standardised Government Office Region - West Midlands [vs. London]	1.162	0.906	1.490
ONS standardised Government Office Region - East of England [vs. London]	1.086	0.849	1.391
ONS standardised Government Office Region - South East [vs. London]	1.075	0.861	1.342
ONS standardised Government Office Region - South West [vs. London]	1.249	0.965	1.617

Table 6.8: Conditional probability of obtaining interview 2, given Interview 1 was achieved- logistic regression coefficients and their confidence intervals (C.I.)

Variable (recorded at Interview 1)	Odds ratio	Lower 95% C.I. for odds ratio	Upper 95% C.I. for odds ratio
Constant	0.808		
Whether done/attended at least one arts participation/arts event in last 12 months - Yes [vs. No]	1.241	1.111	1.387
Whether used a public library service at least once during the last 12 months - Yes [vs. No]	1.141	1.041	1.251
Whether supports the Olympics - Yes [vs. No]	1.136	1.039	1.243
Whether participated in virtual culture - Yes [vs. No]	1.261	1.145	1.389
Whether have done any voluntary work during the last 12 months - Yes [vs. No]	1.329	1.196	1.476
Ethnic group for PSA measurement – Non-white [vs. White]	0.716	0.616	0.831
Type of area - Rural [vs. Urban]	1.194	1.057	1.349
Age - 16-24 years old [vs. 45 to 64 years old]	0.725	0.624	0.843
Age - 25-44 years old [vs. 45 to 64 years old]	0.811	0.727	0.906
Age - 65-74 years old [vs. 45 to 64 years old]	1.324	1.131	1.550
Age - 75 years old or older [vs. 45 to 64 years old]	0.987	0.837	1.164
ONS Harmonised tenure status - Social rented sector [vs. Owners]	0.889	0.766	1.031
ONS Harmonised tenure status - Private rented sector [vs. Owners]	0.598	0.530	0.675
Personal earnings in the last year before tax and other deductions – Refused [vs. Under £2,500]	0.543	0.437	0.676
Personal earnings in the last year before tax and other deductions - Don't Know [vs. Under £2,500]	0.736	0.571	0.949
Personal earnings in the last year before tax and other deductions - 2,500 - 4,999 [vs. Under £2,500]	0.813	0.650	1.018
Personal earnings in the last year before tax and other deductions - 5,000 - 9,999 [vs. Under £2,500]	1.105	0.905	1.349

Variable (recorded at Interview 1)	Odds ratio	Lower 95% C.I. for odds ratio	Upper 95% C.I. for odds ratio
Personal earnings in the last year before tax and other deductions - 10,000 - 14,999 [vs. Under £2,500]	1.066	0.868	1.309
Personal earnings in the last year before tax and other deductions - £15,000 - 19,999 [vs. Under £2,500]	0.985	0.793	1.224
Personal earnings in the last year before tax and other deductions - £20,000 - 24,999 [vs. Under £2,500]	1.039	0.828	1.305
Personal earnings in the last year before tax and other deductions - £25,000 - 29,999 [vs. Under £2,500]	0.930	0.733	1.180
Personal earnings in the last year before tax and other deductions - £30,000 - 34,999 [vs. Under £2,500]	0.935	0.721	1.212
Personal earnings in the last year before tax and other deductions - £35,000 - 39,999 [vs. Under £2,500]	1.221	0.896	1.664
Personal earnings in the last year before tax and other deductions - £40,000 - 44,999 [vs. Under £2,500]	1.139	0.824	1.573
Personal earnings in the last year before tax and other deductions - £45,000 - 49,999 [vs. Under £2,500]	0.796	0.549	1.156
Personal earnings in the last year before tax and other deductions - £50,000 or more [vs. Under £2,500]	0.925	0.711	1.203
Personal earnings in the last year before tax and other deductions - £No work or scheme [vs. Under £2,500]	0.954	0.740	1.230
ONS standardised Government Office Region - North East [vs. London]	1.659	1.310	2.101
ONS standardised Government Office Region - North West [vs. London]	1.174	0.983	1.402
ONS standardised Government Office Region - Yorkshire and Humberside [vs. London]	1.288	1.067	1.555
ONS standardised Government Office Region - East Midlands [vs. London]	1.121	0.920	1.366
ONS standardised Government Office Region - West Midlands [vs. London]	1.624	1.343	1.964
ONS standardised Government Office Region - East of England [vs. London]	1.458	1.210	1.758
ONS standardised Government Office Region - South East [vs. London]	1.079	0.911	1.279
ONS standardised Government Office Region - South West [vs. London]	1.155	0.955	1.396
ACORN category - Wealthy Achievers [vs. Comfortably off]	0.966	0.856	1.090

Variable (recorded at Interview 1)	Odds ratio	Lower 95% C.I. for odds ratio	Upper 95% C.I. for odds ratio
ACORN category - Urban Prosperity [vs. Comfortably off]	0.748	0.635	0.881
ACORN category - Moderate Means [vs. Comfortably off]	0.955	0.832	1.098
ACORN category - Hard-pressed [vs. Comfortably off]	1.098	0.952	1.267

6.6.2.5 Calibrating the second, third and fourth interview cases

The second, third and fourth interview cases were *combined* before calibrating the samples to the same population totals as for first interview cases. They were combined because the separate sample sizes were too small for granular calibration.

For second interview cases, the base weight for calibration was:

- Interview 1 weight * 1/p(interview 2|interview 1)

For third interview cases, the base weight was:

- Updated Interview 2 weight = Interview 1 weight * 1/p(interview 2|interview 1) * interview 2 calibration factor

Finally, for fourth interview cases, the base weight was:

- Updated Interview 3 weight = Updated Interview 2 weight * 1/p(interview 3|interview 2) * interview 3 calibration factor

The base weights were scaled so that the mean base weight was the same for both second, third and fourth interview samples[30].

6.6.3 Combining the two sample sources

Once weighted, the fresh sample and the re-interview sample datasets have the same properties in the sense that they are both probability

[30] Note that new entrants to the re-interview datasets (5 year olds to the child dataset, and 16 year olds to the adult dataset) were given the mean base weight due to missing prior information. Five year olds lack any previous weight, while sixteen year olds may have a previous weight but are not covered by the p(interview 2|interview 1) and p(interview 3| interview 2) models.

samples with identical marginal profiles in terms of gender, age and region. Any mixture of the two will produce an unbiased dataset in these terms. TNS BMRB chose to weight each sample proportionate to its effective sample size, an approach which should maximise statistical efficiency. For simplicity, the effective sample size was defined as:

- n * / (1+(CVw2))

CV_w = the 'coefficient of variation' for the weights: the standard deviation of the weights divided by the mean weight. $1+(CV_w^2)$ is essentially the design effect if stratification and clustering effects are ignored as well as any correlation between the size of the weight and responses to a specific variable. These have been ignored because they are expected to be approximately the same in both samples.

It is important to note that for children aged 5-15, the re-interview and the fresh sample cases were *not* weighted separately before being combined (due to the limited number of cases within the two sample types). For the fresh sample cases, the inverse of the product of a case's sampling probability and an area based response propensity weight serve as the base weight for the calibration. For the re-interview sample cases, the base weight is equal to the weight assigned to a case's previous interview but scaled so the mean base weight matches that for the fresh sample.

6.7 Design Factors

Significance tests assume that the achieved sample is a simple random sample from the survey population. The design factor takes into account the actual complexity of the sample design, reflecting the compromises necessary for real world survey practice. A standard error calculated using simple random sample assumptions should be multiplied by the design factor to obtain a robust standard error that properly reflects the sample design.

For Taking Part, the design is affected by clustering, weighting and stratification. Stratification usually helps to narrow the margin of error around estimates, while clustering and weighting increase the margin of error around estimates.

For the Taking Part Survey, a series of design factors are generated for the different sectors that the survey covers (arts, heritage, libraries, museums, galleries and archives, sport). The main reason different design effects are used for different sectors is due to the differential impact of the sample clustering.

For the statistical data that are produced for the Taking Part Survey, variable-specific design factors have been generated. For other variables within the sector, a *typical* design factor for that sector is provided. Where possible, variable-specific and sector-typical design factors have been calculated for sub-groups.

6.7.1 Design Factors for the Adult Survey

Table 6.8 details the typical design factors – and design effects - for each DCMS sector. The design effect is equal to the square of the design factor and shows how much bigger the sample would have to be to match the precision of a simple random sample.

Table 6.8 Typical design effects and design factors by sector

Sector	Representative variable	Design effect	Design factor
Arts	ARTPSA2	1.99	1.41
Libraries	LIBPSA	1.80	1.34
Museums, galleries and archives	MUSPSA	1.98	1.41
Heritage	HERPSA	2.29	1.51

Table 6.9 details the typical design factors for a number of key sub-groups.

Table 6.9 Typical design factors by sub-group, within sector

Sub-group	DCMS sector			
	Arts activity	Library use	Museum/ gallery/ archive visits	Heritage
All	1.41	1.34	1.41	1.51
Sex				
▪ Male	1.41	1.44	1.46	1.55
▪ Female	1.35	1.19	1.36	1.55
Disability status				
▪ Longstanding illness/disability/ infirmity	1.19	1.11	1.27	1.26
▪ No longstanding illness/disability/ infirmity	1.50	1.37	1.44	1.72
Ethnic group				
▪ BME	1.78	1.49	1.54	1.48
▪ White	1.40	1.35	1.44	1.69
NS-SEC				
▪ NS-SEC 1-4	1.41	1.25	1.37	1.57
▪ NS-SEC 5-8	1.27	1.32	1.36	1.41
Age group				
▪ 16-24	1.65	1.73	1.72	1.77
▪ 25-44	1.43	1.41	1.47	1.54
▪ 45-64	1.23	1.18	1.28	1.29
▪ 65-74	1.04	1.03	0.98	1.05
▪ 75+	1.08	0.96	1.08	1.12

For non-sector variables, an average overall design factor of 1.42 may be used. This average is based on the average of the sub-group design factors for each key DCMS sector variable.

6.7.2 Design factors for the child survey

For the child survey, a similar approach to design factors was taken. Typical design factors were calculated for each DCMS sector, and for key sub-groups within each sector. For the child survey, separate design factors were calculated for the 5-10 proxy survey and the 11-15 youth survey.

Table 6.10 Child survey 'typical' design effects and design factors by sector

Sector	Representative variable	Design effect	Design factor
Arts - Whether done at least one arts activity outside of school in last 12 months (5-10s)	c5anyarts12	1.77	1.33
Libraries - Whether visited in last week (5-10s)	c5wk11	1.53	1.24
Museums - Whether visited in last week (5-10s)	c5wk13	1.33	1.16
Heritage - Whether visited in last week (5-10s)	c5wk14	1.37	1.17
Sport - Whether done at least one sports activity outside of school in last 4 weeks (5-10s)	c5anysport	1.56	1.25
Arts - Whether done at least one arts activity in last 12 months (11-15s)	c11anyarts12	2.44	1.56
Libraries - Whether visited in last week (11-15s)	c11wk11	1.31	1.14
Archives - Whether visited in last week (11-15s)	c11wk12	1.27	1.13
Museums - Whether visited in last week (11-15s)	c11wk13	1.37	1.17
Heritage - Whether visited in last week (11-15s)	c11wk14	1.49	1.22
Sport - Whether done at least one sports activity in last 4 weeks (11-15s)	c11anysport	1.41	1.19

Table 6.11 details the typical design effects and design factors for a number of key sub-groups.

Table 6.11 Child survey design factors by sub-group

Sector	All	Limiting disability	BME	White	Male	Female
Arts - Whether done at least one arts activity outside of school in last 12 months (5-10s)	1.33	1.17	1.75	0.97	1.17	1.18
Libraries - Whether visited in last week (5-10s)	1.24	1.28	1.28	1.14	1.32	1.17
Museums - Whether visited in last week (5-10s)	1.16	0.61	0.82	1.16	1.24	0.92
Heritage - Whether visited in last week (5-10s)	1.17	1.30	1.31	1.11	1.11	1.10
Sport - Whether done at least one sports activity outside of school in last 4 weeks (5-10s)	1.25	1.23	1.35	1.19	1.28	1.19
Arts - Whether done at least one arts activity in last 12 months (11-15s)	1.56	N/A	1.69	1.47	1.50	1.59
Libraries - Whether visited in last week (11-15s)	1.14	1.20	1.16	1.10	1.17	1.09
Archives - Whether visited in last week (11-15s)	1.13	0.77	1.00	1.31	1.00	1.35
Museums - Whether visited in last week (11-15s)	1.17	1.28	1.17	1.16	1.11	1.16
Heritage - Whether visited in last week (11-15s)	1.22	1.09	1.35	1.20	1.10	1.31
Sport - Whether done at least one sports activity in last 4 weeks (11-15s)	1.19	1. 08	0.79	1.27	1.42	1.16

7. Appendix

A Interviewer Instructions

B Respondent letters

- B1A – Advance Letter for Longitudinal Sample (+child)
- B1B – Advance Letter for (no child)
- B2 – Advance Letter for Fresh Sample
- B3 – Reissue Letter
- B4 – Reissue Letter (non-contacts)

C Respondent leaflets

- C1 – Leaflet for Longitudinal Sample
- C2 – Leaflet for Fresh Sample

D Address Contact Sheet

- D1A – Address Contact Sheet for Longitudinal Sample (short)
- D1B – Address Contact Sheet for Longitudinal Sample (long)
- D1C – Address Contact Sheet for Longitudinal Sample (New 16's)
- D2 – Address Contact Sheet for Fresh Sample

E Parental Permission Card

F 2014/15 Adult Questionnaire

G 2014/15 Additional Adult Dataset Variables

H 2014/15 Child Questionnaires

- H1 – 5-10 Child Questionnaire
- H2 – 11-15 Child Questionnaire

I 2014/15 Additional Child Dataset Variables

J 2014/15 Code Frame Documents

- J1 – 2014/15 Adult Survey Code Frames
- J2 – 2014/15 Child Survey Code Frames

K Cognitive Pilot Report