Official Statistics OSR18/2012

Research Report DfE-RR240b

Department for Education

Childcare and Early Years Providers Survey 2011 Technical Report

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TNS BMRB

This research report was commissioned before the new UK Government took office on 11 May 2010. As a result the content may not reflect current Government policy and may make reference to the Department for Children, Schools and Families (DCSF) which has now been replaced by the Department for Education (DfE).

The views expressed in this report are the authors' and do not necessarily reflect those of the Department for Education.

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1. Questionnaire Design

The questionnaires were developed by the research team at TNS-BMRB in consultation with representatives from the Department for Education (DfE). The 2011 questionnaires were broadly similar to questionnaires from previous years. However as 2011 was a 'shortened questionnaire' survey year a host of questions were removed from the 2010 survey, bringing it in more line with the 2009 survey.

The Childcare and Early Years Provider Survey measures some key statistics in the sector and as such questions have tended to change little from year to year allowing a time series of statistics.

In total there were five different questionnaires; two sample building questionnaires and a main questionnaire for each of the three main groups.

1.1 Sample building survey

The sample building survey was conducted primarily for determining the types of care that a setting provided. This was to provide the information that had been indicated on the Ofsted database in previous years, but was not available for the 2010 or 2011 surveys. Therefore the 2011 sample building survey was identical to the 2010 sample building survey. The sample building stage allowed for the derivation of population estimates which meant that survey data could be weighted to be nationally representative (by grossing up the proportion of sample building respondents offering each type of care to reflect the total number of providers in the database).

The sample building stage also helped to identify whether out of school providers (both school run and non school) should be identified as an 'after school club' or a 'holiday club' in the main sample.

It also meant that the sample for each of the different provider types used for main survey interviews could be drawn using the information gathered during the sample building stage in a similar manner to that employed in previous years. Names of senior managers, or head teachers was collected and used for the advance letter sent to all settings and for the questionnaire script.

Settings were asked if they provided any of the four types of provision covered in the main stage of the survey, and then several follow up questions were asked to confirm that the care they provided did meet the required specifications and to reduce any error due to over or under claiming or misunderstanding of provision types.

Sample building surveys were carried out between the 1st September and the 23rd September 2011. Computer assisted telephone interviews (CATI) were carried out by Kantar Operations[1] telephone interviewers in Ealing and Hull.

1.2 Main questionnaire

The research for the main stage survey was divided into three surveys:

- Childcare survey
    - Full day care
    - Sessional day care
    - Out of school (after school clubs and holiday clubs)
    - Children's centres
- Early years survey
    - Primary schools with nursery and reception classes
    - Primary schools with reception but no nursery classes
    - Nursery schools
- Childminder survey
    - Childminders

The main survey covered topics such as the number of childcare places and the number of children attending, the number of staff, their qualifications and pay, and the providers' profitability. The full questionnaire can be found in an accompanying document, 'Survey Materials'.

[1] Kantar Operations provide the operational resources and capabilities for all Kantar's UK companies (including TNS-BMRB).

2. Sample Design

The sample design for the 2011 survey was identical to that of 2010[2]. There were three sections of interest for the analysis, which covered nine setting types in total, and is reflected in the way the sample was built. The sample for each setting came from different sample sources which was then split out or combined to form the appropriate sample frame for each setting.

There were two broad stages to the sampling process. The first stage involved a short sample building stage in order to help determine population estimates by Region[3] and also to obtain appropriate contact details where necessary. This sample building stage was not always necessary, and where it was not applicable, the step was skipped. The second stage was the main stage, where sample members were asked to undertake the full survey.

The three main sections of the survey are outlined below, along with the settings from which they are comprised.

1) **Childminders**

2) **Early Years**
   - Nursery only
   - Primary with nursery (i.e. nursery and reception)
   - Primary with reception only

3) **Childcare**
   - Out of school
     - After school (comprising school run only and non-school run only providers)
     - Holiday club (comprising school run only and non-school run only providers)
   - Full day care
   - Sessional
   - Children's centres

No single sample source existed that covered all the settings in the survey. As a result, the various settings were sampled from a range of sources, including the School Census, the children's centres database and Ofsted.

Change to Sampling Method in 2010

The 2011 survey sampling methodology was identical to that employed in 2010. However there were notable changes between the 2010 survey and previous years.

In previous years, the Ofsted database contained all institutions eligible for the out of school providers group. In 2010, there was a change in coverage of the Ofsted database, which meant that schools that ran out of school provision were no longer

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[2] The sampling design changed between 2008 and 2009 as well as 2009 and 2010. A short summary is given a few paragraphs down. Please see the 2010 Technical Report for more details.
[3] 'Region' previously was known as Government Office Region (GOR).

recorded on Ofsted. To ensure these providers were covered it was decided to use the School Census to identify which schools had 'school-run only' after school and holiday clubs.

Additional changes to Ofsted's database in 2008 also meant that the provision type (e.g. full day care, sessional, out of school or crèche) was no longer recorded. Instead the provider (excluding childminders) was recorded as being 'childcare on non-domestic premises'. These changes had two notable consequences on the methodology of the survey in 2010[4].

Firstly, multiple sample sources were required to ensure the same coverage as previous years, and to allow comparability. Secondly, the absence of detail on the Ofsted sample as to which provision type was available at each setting meant that a sample building stage had to be carried out in order to determine an estimate for the population, and also ensure that there were sufficient numbers for the various provider types.

Furthermore the early years sample was previously taken from EduBase, but DfE confirmed that the School Census was a more appropriate dataset for getting up-to-date details for primary and nursery schools. On the School Census a school may have been eligible for any of the early years survey groups, but was allocated to only one.

2.1 Overview of sample sources, settings and screening

The sample sources used for each setting, and whether or not they were screened is indicated below. As mentioned in section 2.4.2 of the main report, screening was required among some settings. The sample building stage served two purposes; to obtain population figures and to gather contact details for the person best placed to answer the questions in the survey.

2.1.1 Ofsted

- Childminders (no sample build)
- Childcare on non-domestic premises (screened in to the following categories)
  - Full day care
  - Sessional
  - Out of school
    - After school (non 'school-run only' providers)
    - Holiday clubs (non 'school-run only' providers)

2.1.2 School Census

- Early years (no sample build)
  - Nursery
  - Primary with nursery
  - Primary with reception only
- Out of school (screened into the following categories)
  - After school (school-run only)

[4] As 2009 was a recontact sample survey, the effects only applied to 2010 and beyond.

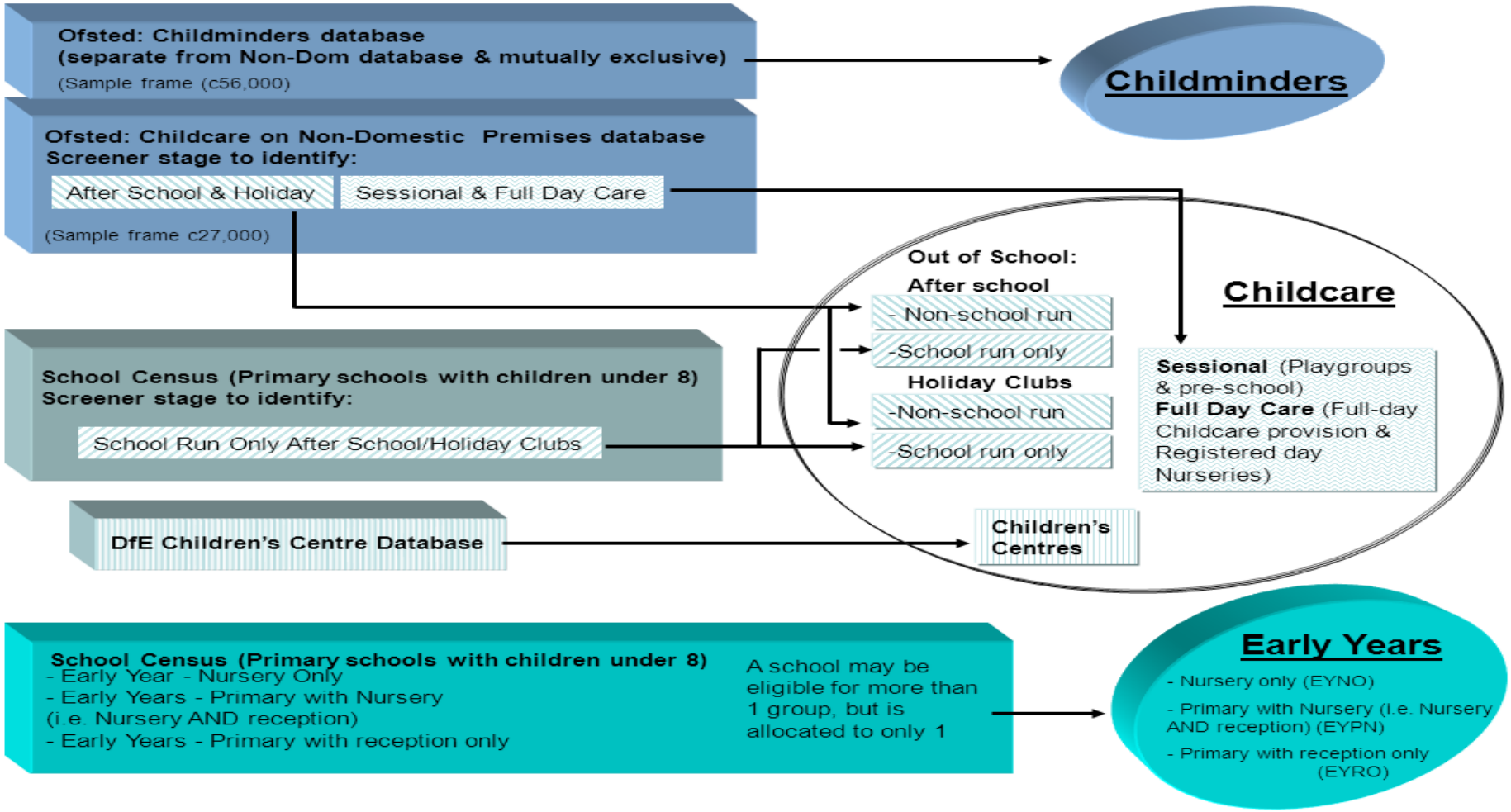
- Holiday club (school-run only)

2.1.3 Children's centres database

- Children's centres (screened)

Figure 2.1 on the next page shows how the sample sources and the settings used in the analysis fit together diagrammatically.

Figure 2.1 Sample sources and their combinations



The following sections describe how the sampling was carried out for each of the settings covered in the survey.

2.2 Sampling processes

There were two broad stages to the sampling process. The first stage involved a sample building stage in order to determine population estimates by Region and to obtain contact details where necessary. In the second stage the sample was issued into field to undertake the full survey.

The sample building stage was not required for all groups. The early years settings and childminders went straight through to the main stage of the survey.

2.3 Sample building stage

Sample building was necessary among the Ofsted sample frames as well as among the out of school element of the School Census.

2.3.1 Ofsted – childcare on non-domestic premises

Until the 2010 survey, the provision type (e.g. full day care, sessional, out of school or crèche) had been identifiable on the Ofsted database. Changes in 2008 meant that the provision type was no longer recorded in the Ofsted database. Instead the provider (excluding childminders) was recorded as being 'childcare on non-domestic premises'. As a result, no population information on the number of full day care and sessional providers were available, and hence a screener had to be carried out in order to determine estimates for the population of these providers by Region.

Other changes to the eligibility of providers recorded on the database meant that schools providing after school and holiday care were no longer recorded on the same database (as had been the case prior to 2010). Providers of out of school services (after school and holiday clubs) were still included on the Ofsted database if they were non school-run[5]. For continuity between 2010 and earlier surveys, it was important that both 'school run only' and non-'school run only' provisions were covered in the sample frame available for the out of school element of the survey. This approach was maintained for the 2011 survey.

To ensure sufficient sample sizes for the main stage, the screening exercise also estimated prevalence of 'school run only' and non-'school run only' providers of after school and holiday clubs. More detail on how the 'school-run only' out of school sample was identified is detailed in section 2.3.2.

At the screener stage details were recorded as to whether the provider offered

1) Full day care
2) Sessional
3) After school (non-'school run only')
4) Holiday clubs (non-'school run only')

[5] Non school-run means that the provider is run by a private, voluntary or independent person or organisation

This served two purposes; to obtain penetration estimates of provision types, as well as obtain contact information for the person best placed to answering information required for the survey, so that a datasheet could be sent in advance to accompany and aid the telephone element of the survey.

A sample of 11152 cases was sampled from the Ofsted database of childcare on non-domestic premises. The following table displays the results from the sample building stage including the number offering the different types of provision:

Table 2.1. The number of cases by provision type

Sample issued for sample build	Number cooperating at sample build	Eligible sample available[6]	Full day care	Sessional	After school	Holiday clubs
11152	9773	9489	6577	2967	2447	2438

For the purposes of the main survey, providers were only asked about one type of care. However as providers could offer more than one type of care it was necessary to allocate those providing multiple care into one type of provision. Since the sample had to be allocated across different settings, further stages were required to assign a case to one of the four groups of sample. The number of cases needed to be assigned to each provision type was dependent on the number of eligible cases available for the out of school 'school run only' sample. Cases were disproportionately[7] assigned, so that the following number of cases were assigned to each provision type. This enabled the minimum sample sizes required to be met.

Table 2.2. Sample allocation by provision type

Provision	Number of cases available for each provision type	Number of cases assigned to each provision type before sub-sampling for main stage
Full day care	6577	4594
Sessional	2967	2059
After school (non school-run)	2447	1152
Holiday (non school-run)	2438	1366
All providers	9171	9171

The probabilities of being allocated to each group were recorded, and this information was used for the weighting stage[8].

Once cases were assigned to the associated sample group, new samples were created, so that they were relevant to the setting type being surveyed. Please see section 2.4.1 for more detail about how the samples were combined and sub-sampled.

[6] Ineligible cases comprised of businesses that had closed down or those that no longer provided any care at all

[7] Cases were randomly assigned to each sample group, from within each combination of care offered as identified by the screener stage.

[8] Please see chapter 4 for more information on the weighting.

Section 2.4 gives more detail about the total number of cases issued per provision type, while Sections 4.1.1 discusses how the population figures were obtained.

2.3.2 School Census

The school census formed the sample frame for early years settings, as well as for the 'school run only' element of the out of school settings. The five settings covered by the school census are:

- Early years – nurseries
- Early years – primary schools with nurseries
- Early years – primary schools with reception only
- Out of school – after school clubs (school run only)
- Out of school – holiday cubs (school run only)

The School Census was reduced to a list of eligible records. Eligibility at this stage was defined as the setting/ school providing for children under 8 and belonging to one of the above groups. The eligible cases were divided into a number of groups based on the combinations of where their eligibilities might exist.

The School Census recorded which schools offered extended services and the types of extended services they offered, and this information was used to allocate records to its associated category.

The 12 possible combinations were:

1) Early years – nursery school
2) Early years – primary schools with nurseries – no school run only
3) Early years – primary schools with reception only – no school run only
4) Early years – primary schools with nurseries – after school clubs only
5) Early years – primary schools with nurseries – both after school and holiday clubs
6) Early years – primary schools with nurseries – holiday clubs only
7) Early years – primary schools with reception only – after school clubs only
8) Early years – primary schools with reception only – both after school and holiday clubs
9) Early years – primary schools with reception only – holiday clubs only
10) No early years – after school only
11) No early years – after school and holiday clubs
12) No early years – holiday clubs only

Table 2.3 Sample allocation among early years and school run only out of school club

		Sample groups for issuing					
		Early Years – Nursery (EYNO)	Early Years - Primary with Nursery (EYPN)	Early Years - Primary with Reception Only (EYRO)	School Run only -After School clubs(AS)	School Run only - Holiday Clubs (Hol)	
	Sample Available	422	6722	8643	14183	4923	
	Number to issue	330	1858	1661	1948	1852	Total sample selected
Sample frame Combination							
1 EY- Nursery school - No School only run	422	330					330
2 EY - Primary w Nursery - No School only run	922		255				255
3 EY - Primary w Reception only - No School only run	1293			248			248
4 EY - Primary w Nursery - School After only	3502		968		481		1449
5 EY - Primary w Nursery - School Both	2246		621		308	845	1774
6 EY - Primary w Nursery - School Hol only	52		14			20	34
7 EY - Primary w Reception only - School After only	5131			986	705		1691
8 EY - Primary w Reception only - School Both	2183			420	300	821	1541
9 EY - Primary w Reception only - School Hol only	36			7		14	20
10 No EY - School After only	720				99		99
11 No EY - School Both	401				55	151	206
12 No EY - School Hol only	5					2	2

Some tweaking was required to the numbers of cases allocated to each sample group to ensure the overall target numbers for each of the five samples were met, but the probabilities of being allocated to the eventual sample group was recorded to enable suitable design weighting.

Cases were stratified by the groups above and ordered by Region, local authority, phase[9] and total number of pupils.

Schools were sampled at random from each of the 12 categories in line with the total numbers in the right hand column. Early years – nurseries (EYNO) required no further sub-sampling, but for the remaining cases, schools had to be allocated into

[9] Phase is associated with the school years, but also refers to the type of school. The categories are nursery, primary, middle deemed primary and secondary.

one of the four sample groups (EYPN, EYRO, after school and holiday clubs). In some instances, this meant allocating to two or three sample groups.

Looking across each row in Table 2.3 and referring up to the headings at the top it is possible to see the number of schools allocated and the sample group into which they were allocated. Allocations were assigned at random into sample groups. This was done by assigning a random number, and then within strata, cases were sorted by the random number. Within each stratum (12 categories) the first n cases were assigned to each sample group, followed by the next n, as appropriate. Since a random number was assigned, there was no systematic bias in the way in which cases were allocated from within each of the 12 categories into each of the five sample groups. Section 4.1.2 discusses how this information was used for the weighting.

Once the five separate sample groups were drawn, contact details were merged onto the records. The two out of school samples were screened to determine eligibility as to which provisions were on offer and whether or not they were school run only. The early years samples were not screened. See section 2.4.5 for more detail about the number of early years cases issued at the main stage.

The out of school samples were screened in order to determine schools that were eligible for the survey that would have been included on Ofsted in previous years. It became apparent that the information recorded on the School Census did not always match up with the information perceived by the person at the screener stage. This meant that there was a lot of crossover between the club type under which they were sampled, and the club type under which they were eventually interviewed.

The number of cases issued and the eligible cases returned from the screener are shown in Table 2.4.

Table 2.4 Numbers of cases issued and returned at screener stage

	Issued sample groups		
	After school club	Holiday clubs	Total sample available
Total Issued	1948	1852	3800
Ineligible	1531	1382	
Eligible returns	417	470	887
After school club only	289	215	504
Holiday clubs only	34	54	88
Both AS and holiday	94	201	295

Once the ‘school run only’ cases were identified they were combined with their out of school counterparts from the Ofsted sample. Section 2.4.1 explains how the two sample sources were combined for the main stage.

2.3.3 Children’s centres

Children’s centres were sampled from the DfE database of children’s centres. Centres were de-duplicated within themselves based on available identifier

information. Centres were ordered by Region, local authority, phase[10] and stage before drawing a sample of 2995 cases.

These were then screened, in order to obtain contact details of the appropriate person, as well as to determine whether the children's centre offered full day care. Of these, information was obtained from 2635 centres. (939 of which offered full day care) These were then sub-sampled for the main stage. More details can be found in section 2.4.3

2.3.4 Duplicates

Prior to drawing the sample, checks were carried out for duplication. At this sample building stage checks were carried out on each of the three samples, but not across them. These checks were based on a setting's reference number and where a postcode *and* telephone number matched another setting.

2.4 Main stage

Once the sample building stage had been carried out, the cases were allocated to sub-samples (where necessary) and issued for the main stage of the survey.

2.4.1 Out of school

Once the cases for the out of school sample had been screened, they then had to be allocated to samples for the main stage of the survey. Prior to this, providers offering both after school and holiday clubs also had to be allocated to one of these two groups. Eligible returns from both the Ofsted and School Census samples were used in conjunction with each other to determine how much sample was needed and how much was available for allocation to the two final sample groups.

It was intended that the out of school cases would be sampled so that they were in proportion to their prevalence in the population and be representative of the proportions of 'school run only' and non 'school run only'. However, after the screening, there were insufficient cases for this to happen.

The distribution of cases from the combined Ofsted and School Census sample is shown here in Table 2.5

Table 2.5: The distribution of eligible screened cases split by sample source for out of school clubs

	After school		Holiday	
	Non 'school-run only' (Ofsted)	'School-run only' (School Census)	Non 'school-run only' (Ofsted)	'School-run only' (School Census)
Estimated population from sample (nearest 100) based on screener returns	6600	3700	6600	1500

[10] Phase used in the context of children's centres has a different meaning to that used in early years settings. Children's centres were originally rolled out in three distinct phases. In the first stage all children's centres were required to provide full day care, but this requirement was removed in the second and third phases of roll out.

% distribution (weighted)[11]	64%	36%	81%	19%
Number of cases after allocation	1153	651	1366	236
Number of cases issued	1153	651	1366	236

2.4.2 Full day care and sessional

The eligible cases that were identified for the main stage of the survey for full day care and sessional (as mentioned in section 2.3.1) had to be sub-sampled to ensure the appropriate sample size for the main stage of the survey.

Within both full day care and sessional sample, cases were ordered by Region and the following number of cases were sampled:

Table 2.6. Sample allocation among full day care and sessional

Setting	Cases available post screener allocation	Cases sampled for Main stage
Full day care	4594	1400
Sessional	2059	1685

2.4.3 Children's centres

Once the children's centres had been screened, datasheets were sent out to the appropriate contacts based on whether or not they offered full day care. Cases were sampled 1 in n, so that a total of 2395 cases were issued.

2.4.4 Childminders

The childminder sample came from the Ofsted register of childminders in England. No screening was required. A total sample of 2070 childminders was sampled 1 in n from an anonymised version of the Ofsted database using a unique identifier. This included a reserve sample of 200 cases, which were subsequently sub sampled, 1 in n, so that all cases had the same probability of being in the sample. The reserve sample was issued during fieldwork.
Prior to sampling, cases were ordered by

a) Local authority
b) Combination of registers of which they were members
c) Number registered places
d) Number of days they had been registered

For the main stage 2070 sampled cases were matched with contact details, and advanced letters were sent, notifying them of intention to contact them regarding the survey. A number of these opted out, and from the remaining sample, 1918 were issued for the survey. A breakdown of fieldwork figures can be found in section 3.3.2.

[11] Cases were weighted by the design weight generated over the various stages of sampling. More detail of this weighting is discussed in chapter 4

2.4.5 Early Years

For the early years sample, no screening was required and the number of cases issued for each sample was as follows:

Table 2.7.Sample allocation within early years

Setting	Number sampled for main stage
Nursery schools	330
Primary School with Nursery (and reception)	1858
Primary school with reception only.	1661

2.4.6 Duplicates

At the main stage all sample groups were checked for duplication within sample group (i.e. where a setting appears twice within a sample type) and where duplicates were found these were removed. They were also checked for duplication across other sample types (i.e. a setting appears in one or more of the sample types). Where this occurred they were randomly allocated to one of the types. For children's centres however, where a duplicate was found in other sample types the setting was removed from the non-children's centre sample.

2.4.7 Target sample sizes and number of cases issued by setting

Target sample sizes were set for all nine setting types. The targets were driven by analysis requirements and the need for sub-group analysis in some of the settings, but were constrained by the amount of sample available. The issued sample size was based on estimated ineligibility rates and response rates.

Table 2.8 Target numbers of interviews and number allocated to main stage

Sample type	Number of cases issued for main stage	Target sample size
Full day care	1400	850
Sessional care	1685	850
After school clubs	1804	850
Holiday clubs	1602	850
Children's centres	2395	1,500
Childminders	2070	850
Primary schools with nursery and reception classes	1858	750
Primary schools with reception but no nursery classes	1661	750
Nursery schools	330	200

3. Fieldwork

The survey was conducted using TNS-BMRB's Computer Assisted Telephone Interviewing (CATI), between 19th September and 12th December 2011. Interviews were carried out by 116 Kantar Operations' fully trained telephone interviewers.

Validation was conducted on a minimum of five per cent of all interviews, monitoring from the introduction through to the close i.e. a full interview. We also attempted to monitor every interviewer on the project.

Childcare survey

For the childcare providers, the senior manager of each setting was sent an advance letter informing them that TNS BMRB would be contacting them and explaining what the research would cover. The letter was addressed to the named senior manager as taken from the sample building survey. In addition to the letter, they were sent a datasheet and a qualification list, which they were asked to complete prior to the interview. The datasheet included a number of detailed questions from the questionnaire that the respondent would need to look up in advance. If when the interviewer spoke to the respondent they said they had not received the advance documents, contact details were taken and duplicate documents issued by post, fax or email. The interviewer then agreed a convenient time to call the respondent back.

Childminder survey

Every childminder was also sent an advance letter, datasheet and a qualification list prior to interview.

Early years survey

For the early years group, advance letters, datasheets and a qualification list were sent to the early years co-ordinator in the case of the primary school groups and the head teacher in the case of the nursery schools. Letters were addressed to the name collected from sample building survey.

3.1 Number of interviews completed

In total 5,472 interviews were carried out with childcare providers in England – 875 with full day care providers, 880 with sessional providers, 882 with after school clubs, 876 with holiday clubs and 1,959 children's centres[12].In total 856 interviews were carried out with childminders.

1,720 interviews were carried out with early years providers in England; 758 with primary schools with nursery classes, 760 with primary schools with reception but no nursery classes and 202 with nursery schools.

[12] These figures are based on the type of provider as flagged on the sample (which was based on the type of provider confirmed at sample building survey). However when interviewers called to conduct the interview, some settings no longer offered the same type of care. In these cases settings were asked what type of care they did offer and they were asked about this instead. If they offered more than one type of care, the CATI script picked one at random.

3.2 Timings

Average interview lengths were:

- Childcare survey ~ 11 minutes
- Childminders survey ~ 7 minutes
- Early years survey ~ 15 minutes

3.3 Response rates

Tables 3.1 to 3.3 show the number of interviews and response rates achieved by provider type

3.3.1 Childcare

Table 3.1 Childcare

	Full day care	Sessional care	After school	Holiday clubs	Children's centres
Issued sample[13]	1,379	1,664	1,797	1,592	2,378
Ineligible[14]	15	19	66	54	37
Eligible sample	1,364	1,645	1,731	1,538	2,341
Bad number	20	44	43	37	36
Contactable sample	1,344	1,601	1,688	1,501	2,305
Refusals	33	10	57	45	38
Non contact	436	711	749	580	308
Achieved	875	880	882	876	1,959
Response rate (on eligible sample)	63.5%	64.1%	53.5%	51.0%	57.0%
Response rate (on contactable sample)	64.8%	65.1%	55.0%	52.3%	58.4%

[13] Following the removal of any opt outs as a result of the advance letters.
[14] Ineligible includes providers which have closed down and those who said they didn't provide any relevant type of childcare.

3.3.2 Childminders

Table 3.2 Childminders

	Childminders
Issued sample[15]	1,918
Ineligible[16]	289
Eligible sample	1,629
Bad number	220
Contactable sample	1,409
Refusals	55
Non contact	498
Achieved	856
Response rate (on eligible sample)	52.5%
Response rate (on contactable sample)	60.8%

3.3.3 Early years

Table 3.3 Early Years

	Primary schools with nursery and reception classes	Primary schools with reception but no nursery classes	Nursery schools
Issued sample[17]	1,858	1,661	330
Ineligible[18]	2	4	4
Eligible sample	1,856	1,657	326
Bad number	40	23	17
Contactable sample	1,816	1,634	309
Refusals	65	76	20
Non contact	993	798	87
Achieved	758	760	202
Response rate (on eligible sample)	40.8%	45.9%	62.0%
Response rate (on contactable sample)	41.7%	46.5%	65.4%

[15] Following the remove of any opt outs as a result of the advance letter
[16] Ineligible includes cases where the respondent was no longer working as a childminder; no longer registered with Ofsted or had died.
[17] Following the removal of any opt outs as a result of the advance letter
[18] Ineligible includes providers which have closed down; providers who said that they didn't provide any relevant type of childcare.

4. Weighting and grossing

Weighting was used to ensure survey respondents are representative of the population to which they are generalising.

Weighting was carried out at various stages to determine population estimates, as well as to account for non-response at the main stage. Grossing weights were also applied so that settings were scaled up to the estimated population total within Region.

There were two main stages to the weighting; design weights and non–response weights.

The design weights take account for the probability of selection at the screener stage; the probability of allocation to an eligible sample group; and the probability of being in the main stage sample. At each stage of sampling, the probability of being allocated to any one of the sample groups was recorded to enable these design weights to be determined.

The non-response weighting was used in the screener stage to deal with any differential response rates to help obtain the population estimates in the absence of the information from Ofsted and the School Census.

These regional population figures were then used as targets for grossing weights so that the weighted numbers are scaled to the number estimated in the population.

4.1 Weighting at the screener stage

Weighting was used at the screener stage to obtain population estimates, which were then used to generate the grossing targets for each Region.

4.1.1 Ofsted screening

The screener carried out on the Ofsted database was used to determine an estimate for the populations of those providing full day care, sessional, out of school clubs (non-'school run only') due to the changes made to the Ofsted database.

When the screener information was returned, the figures were used to generate estimated population figures by Region for the four settings.

Full day care and sessional

The population figures for full day care and sessional were calculated as follows:

- The number of settings reporting they provide full day care/ sessional care at the screener was recorded.
- As only a portion of the entire Ofsted database was screened the proportion of those reporting they provided full day care/ sessional care was grossed up to the full database total.

- A screener eligibility factor was then applied to account for the proportion of providers who mentioned they no longer offered care or had closed down.
- A further eligibility factor was applied after the main stage (for any further settings that were ineligible).

Out of School (Non-'school run only')

The population figures for the out of school sample from Ofsted were calculated in exactly the same manner as above, but was added to the population totals from the School Census out of school sample (below).

4.1.2 School Census

The school census screening was used to identify the out of school 'school run only' element of the out of school clubs.

The population estimates for the out of school 'school run only' element was calculated as follows:

- The number of schools that reported they provided after school / holiday care themselves was recorded
- The design weights which accounted for the probability of allocation to the out of school 'school run only' element sample at the screener stage were applied to these schools.
- The screener eligibility rate was applied to the population figures to give a regional population totals for each setting.
- A further eligibility factor was applied after the main stage (for any further settings that were ineligible).

These were then used as weighting targets for after school and holiday clubs for the 'school run only' element of these groups.

4.2 Weighting for the main stage

Weighting at the main stage involved accounting for differential non-response among certain sub-groups, as well as grossing up to the regional population totals.

4.2.1 Childminders

The population of child minders was based on the data on the Ofsted database of childminders. As with previous years, the rate of ineligible childminders identified during fieldwork was applied to the population total, and then the regional population figures were used as grossing targets for the weighting.

4.2.2 Children's centres

At the main stage, the design weights were applied to account for the probability of being in the main stage, having been through a screener as well. Non response

weights were also necessary to account for differential response rates among those offering full day care and not.

4.2.3 Early years

A similar principle was applied to all three early years samples.

The design weights were applied to account for the probability of allocation to the associated sample for each setting. The sample information from the School Census with regards to the Region[19] was used as grossing targets. Design weights were applied to each case within each setting, and the profile of Region was compared to that of the population figures. Grossing weights were then applied so that the weighted number of each setting by Region matched that of the population.

4.3 Staff weighting

To reduce both the burden on providers and the overall length of interview, settings employing more than a certain number of staff (more than three supervisors or three other paid childcare staff and two qualified teachers, two nursery nurses or two early years support staff for the early years groups) were asked to randomly select members of staff, rather than having to give details for the whole team.

Three members of staff were selected for the childcare groups and two members of staff were selected for the early years groups. When selecting the members of staff respondents were instructed to list them in alphabetical order by surname and pick the first three or two in order to provide a random selection of staff.

While this process should have provided a random selection of staff, staff in those providers that employed more than three or two staff in the relevant groups were underrepresented. To address this, a weight was applied to up-weight those cases where a sample of staff was drawn. For example, if a setting employed six staff, the three staff selected for the interview were up-weighted to represent the six. Separate weights were calculated for the different staff types. These weights were only applied when using the relevant staff type variables (e.g. the supervisory staff weight was only applied when using a supervisory staff variable).

Below is an example of how the supervisory staff weight was calculated in the childcare survey.

[19] Region' previously was known as Government Office Region (GOR).

Table 4.1 Example of staff weighting

	Number of staff selected for inclusion in interview	Total number of staff	Weight (applied to each member of staff)
Setting 1	1	1	1.00
Setting 2	2	2	1.00
Setting 3	3	3	1.00
Setting 4	3	4	1.33
Setting 5	3	5	1.67
Setting 6	3	6	2.00

4.3.1 Capping

The weighting process has an impact on the effective sample sizes for all of the sample groups. As the weights get larger there is a greater impact on the efficiency of the sample. With the staff weights, where a setting employed a large number of staff, the weights became quite large. In order to reduce the impact that the staff weights had on the sample efficiency, the staff weight element of the weight was capped for the full day care, sessional, children's centres and out of school groups, as well as the primary schools with nursery and reception classes and nursery schools. The caps that were used are shown below:

Table 4.2a Capping (childcare)

	Full day	Sessional	After school	Holiday	Children's centre
General weight	N/A	N/A	N/A	N/A	N/A
Supervisory staff weight	5.3	5.0	5.4	5.5	N/A
Other paid childcare staff weight	5.4	2.3	5.5	5.0	N/A

Table 4.2b Capping (early years)

	Primary with nursery and reception classes	Nursery schools
General weight	N/A	N/A
Qualified teacher weight	3.0	N/A
Nursery nurse weight	4.0	7.0
Support staff weight	4.0	4.0

4.4 Actual and effective sample sizes

Table 4.3a Actual and effective sample sizes (Childcare)

	Full day care		Sessional		After school		Holiday clubs		Children's centres	
	Actual sample size	Effective sample size	Actual sample size	Effective sample size	Actual sample size	Effective sample size	Actual sample size	Effective sample size	Actual sample size	Effective sample size
General weight	946	888	875	847	873	691	808	597	1959	1921
Supervisory staff weight	2494	1554	2122	1139	1934	1144	2029	1208	792	576
Other paid childcare staff weight	1604	990	1209	1025	1221	805	1277	731	423	281

Table 4.3b Actual and effective sample sizes (Childminders)

	Childminders	
	Actual sample size	Effective sample size
General weight	855	852

Table 4.3c Actual and effective sample sizes (Early Years)

	Primary schools with nursery and reception classes		Primary schools with reception but no nursery classes		Nursery schools	
	Actual sample size	Effective sample size	Actual sample size	Effective sample size	Actual sample size	Effective sample size
General weight	788	764	729	719	202	196
Qualified teacher weight	1247	1065	573	539	346	267
Nursery nurse weight	1312	1039	572	510	299	287
Support staff weight	926	739	733	638	225	167

Ref: DFE-RR240b-OSR18-2012

ISBN: 978-1-78105-168-9

December 2012