Employer Pulse Survey

Technical report

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Contents

1. Introduction

The Employer Pulse Survey 2021 gathered information on skills needs and training activity among 5,000 employers in England. It is related to the series of Employer Skills Surveys (which covered England, Wales and Northern Ireland in the last iteration in 2019, and the whole UK prior to that).

From 2010-2017, the Employer Skills Survey (ESS) sat alongside the Employer Perspectives Survey (EPS) to produce insights that complemented each other, with the two surveys running in alternate years (EPS was last conducted UK-wide in 2016). The focus of the Employer Perspectives Survey was primarily outward-looking, covering provision of and engagement with the wider skills system, whereas the Employer Skills Survey had a more inward-looking focus assessing the current skills position and skills needs of employers. For ESS 2019, the content of the two surveys were merged.

The Employer Skills Survey has been a definitive source of intelligence for understanding the skills challenges faced by employers for many years. The current research covers some similar topics to ESS 2019, but is smaller in scope. Some sections of the questionnaire were entirely new, relating to homeworking in response to COVID-19. However, all the other sections kept some of the same questions from ESS 2019, allowing these results to be tracked to the ESS 2019 findings for England (and in some cases earlier surveys in the ESS/EPS series). This technical report provides further detail on how the current questionnaire was developed in relation to the ESS series, in the questionnaire section and appendices.

2. Sampling

Sampling unit

The sampling unit was at an establishment level, rather than at an organisation level. This is in recognition of the influence that local labour markets have on skill issues and the fact that skills issues are felt most acutely at the site level. This mirrored the establishment-based approach adopted in previous UK Employer Skills Surveys and the UK Employer Perspectives Surveys, as well as the legacy skills surveys in each nation.

The individual sought at each establishment was the person who had most responsibility for staff issues such as training, recruitment or resourcing. For smaller establishments this was most often the general manager or owner, and for larger establishments this was most often the HR manager.[1]

Survey scope / eligibility

Replicating the approach adopted in recent Employer Skills Surveys (2013 onwards), the survey population for the 2021 Employer Pulse Survey was establishments that had two or more people on the payroll at the site, regardless of whether or not these individuals were proprietors or not, and excluding the self-employed, outside contractors and agency staff.

The 2011 survey was the first year of transitioning to a UK-wide Employer Skills Survey and so it had 1+ employment coverage to allow comparisons with the preceding national skills surveys in Scotland and Northern Ireland. Note that in Employer Pulse Survey report, where comparisons are made with 2011, this is based on 2011 data that has been re-weighted on a 2+ employment population (as per the approach taken in previous ESS reports).

Only employers in England were eligible for the 2021 Employer Pulse Survey.

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[1] Note that the terms 'establishment', 'employer' and 'business' are used interchangeably throughout the report.

Setting quota targets

Overview

Population statistics used to stratify the business population were established through the March 2020 Inter-Departmental Business Register (IDBR), which was the latest available at the time. The IDBR is administered by the Office for National Statistics (ONS), which holds records of all businesses registered for VAT and all businesses operating a pay as you earn (PAYE) income tax scheme. The IDBR is widely regarded as being the most accurate and comprehensive 'official' source of business population data available, and was used for sampling and weighting in all previous editions of the Employer Skills Surveys and Employer Perspectives Surveys.

Matching the previous iterations of the survey, ESS 2019 adopted a *disproportionate stratified random sampling strategy* such that the quota targets set intentionally oversampled some groups and undersampled others, rather than setting targets in direct proportion to the business population. In practice this means that some smaller sub-groups of employers (such as large establishments) are oversampled to ensure that a sufficiently large number of interviews are achieved to allow for robust sub-group analyses. Oversampling of larger establishments also meant that a larger proportion of the workforce were covered by the survey, which helps improve the robustness of employment-based measures in the survey.

Some of the initial quota targets were adjusted towards the end of fieldwork due to the available sample being exhausted, but sample 'substitutions' (i.e. the introduction of new sample outside of the initial sample drawn) were not made.

Targets were set by size and sector within region as outlined below.

Sector targets

The first step involved establishing national sector targets by allocating half of the total sample in proportion to the population of each sector in the employer population, and dividing the remaining half equally across all sectors. This ensured a balance between representativeness but also achieving robust sample sizes for sector subgroup analyses.

In terms of the definition of sector categories, the quota approach the Employer Pulse Survey matched that of the most recent ESS iterations (2017 and 2019), with sector definitions utilising 13 categories. These sectors, defined using Standard Industrial Classifications (SIC), were:

- Primary Sector and Utilities (SIC 01-03, 05-09, 35-39)

- Manufacturing (SIC 10-33)

- Construction (SIC 41-43)

- Wholesale and Retail (SIC 45-47)

- Hotels and Restaurants (SIC 55-56)

- Transport and Storage (SIC 49-53)

- Information and Communications (SIC 58-63)

- Financial Services (SIC 64-66)

- Business Services (68-82)

- Public Administration (SIC 84)

- Education (SIC 85)

- Health and Social Work (SIC 86-88)

- Arts and other service activities (SIC 90-96)

Further information on the SIC definitions for these sectors can be found in Appendix A.

Size targets

The sector targets established above were subsequently used to set targets by size within each sector, for England. This was achieved by allocating each sector target in proportion to the size profile within each sector using *employment data*. However, given that this approach would have led to extremely large targets among the larger size bands, the targets for the 100-249 and 250+ size groups were purposively capped at 350 and 200 interviews respectively.

The final size by sector targets for England are shown in Table 2-1.

Table 2-1 Size by sector

	2-4	5-9	10-24	25-49	50-99	100-249	250+	TOTAL
Primary & Utilities	100	50	49	38	41	22	11	**311**
Manufacturing	29	36	66	71	83	22	13	**320**
Construction	132	75	82	52	50	30	18	**439**
Wholesale & Retail	86	119	177	118	89	45	27	**661**
Hotels & Restaurants	42	65	129	94	54	29	18	**431**
Transport & Storage	36	35	52	54	71	19	12	**279**
Info & Comms	70	35	62	58	62	23	11	**321**
Financial Services	29	38	59	43	47	18	9	**243**
Business Services	167	122	167	116	131	56	32	**791**
Public Admin	9	11	36	54	77	15	9	**211**
Education	9	10	31	76	111	18	11	**266**
Health and Social Work	18	31	87	90	87	26	14	**353**
Arts & Other	73	71	80	54	54	27	15	374
TOTAL	**800**	**698**	**1,077**	**918**	**957**	**350**	**200**	**5,000**

Geographic quotas

Due to the limitations of the overall sample size of 5,000 interviews, it is not possible to conduct robust analysis of specific size by sector groups within region. Nevertheless, for sampling purposes the sample was stratified this way to maximise representativeness. This involved first setting regional targets by allocating half of the total sample in proportion to the population of each region in the employer population, and dividing the remaining half equally across all regions. The size by sector cell targets for each region were calculating by multiplying the size by sector profile at national level by each regional target.

The overall region targets are shown in Appendix C.

Sample sources

As in previous years, Market Location was chosen as the sample source for the 2021 Employer Pulse Survey.

Sample was ordered from Market Location at an average ratio of around 8:1 against target interviews required. The 8:1 average ratio was chosen to balance maintaining high response rates with fieldwork efficiency, with calculations based also upon research into the efficiency of cells in the 2017 iteration of ESS. Based on these same response rate calculations in ESS 2017, quota cells varied from a sample to target ratio of 5:1 for Education establishments with 5-9 employees, to 23:1 for Public Administration establishments with 100 to 249 employees.

A total of 41,890 records were ordered from Market Location for fieldwork. All sample records were postcode-validated to ensure that geographical regions had been correctly assigned. Checks were also undertaken in instances where duplicate telephone numbers existed within the sample. In certain sectors, such as Retail and Finance, it is common for different establishments to appear under the same centralised telephone number. Such establishments were marked up on the sample – with the address of the sampled establishment displayed on-screen – so that interviewers would be aware that the telephone number they were calling was a centralised switchboard and thus they would need to request to be transferred to a particular site.

After processing the data, 41,705 of the original 41,890 records were loaded for fieldwork.

3. Questionnaire design

From 2010-2017, the Employer Skills Survey sat alongside the Employer Perspectives Survey (EPS) to produce insights that complemented each other, with the two surveys run in alternate years (EPS was last conducted UK-wide in 2016). The focus of the Employer Perspectives Survey was primarily outward-looking, covering provision of and engagement with the wider skills system, whereas the Employer Skills Survey had a more inward-looking focus assessing the current skills position and skill needs of employers. Some new questions were added to the survey and some questions were redeveloped, as detailed in the technical report for ESS 2019.[2]

The Employer Pulse Survey 2021 was smaller in scope than previous ESS research, to avoid burdening employers impacted by the COVID-19 pandemic. The present research *did not* seek detail on:

- Recruitment and recruitment difficulties
- Skills shortages
- Education leavers
- Workforce composition
- Underutilisation
- Upskilling
- National occupation standards

The Employer Pulse Survey also had reduced sections on workforce development and apprenticeships. For the full list of questions which were used from the ESS questionnaire, along with changes made and notes on this, can be found in Appendix B. There were also entirely new questions added to the survey detailed below.

Homeworking in response to COVID-19

This whole section was new and aimed to explore some of the impacts of the COVID-19 pandemic on use of homeworking. The section was screened by a question asking if any staff at the site had ever worked from home. It then asked about whether homeworking had increased in general since the pandemic, and how this had impacted productivity.

This section also sought data on the proportion of staff working from home at the time of the survey, how this level was expected to change, and reasons why the level might increase or reduce again.

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[2]https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/926439/6099_Employer_Skills_Survey_Technical_Report_IFF_DfE.pdf

Workforce development

As well as omissions and minor changes compared to ESS 2019, detailed in Appendix B, some new questions were added to this section.

To explore the impact of the COVID-19 pandemic on training, two new questions asked whether there had been a change in the level of training funded since the pandemic. This was followed up by asking to what extent this was due to the pandemic.

Another set of new questions were added on whether different sources of external training had been "considered" further to the ESS 2019 detail on which sources were used. There were also follow-up statements about the flexibility and suitability of Further Education providers and commercial training providers. These were added to explore any impacts of recent improvements in Further Education. A final question asked about willingness to work with external training providers to identify skills needs.

Apprenticeships

A question was added following on from reasons employers do not offer apprenticeships, in order to check whether employers had experienced two specific issues. The question checked whether employers did not offer apprenticeships due to training providers' lack of flexibility or because training providers did not offer the right skills areas.

T Levels

In addition to previous questions about T levels, a question was added about awareness and knowledge of T levels, as well as asking about interest in them after explaining that employers could receive a cash incentive.

Modularisation

At two points in the questionnaire, respondents were split into modules, in order to test updates to ESS 2019 questions.

In the survey, the off-the-job training question was modularised so that half the sample received the question that has been asked in previous waves of ESS (Version A) and half received a new version of the question (Version B), which sought to refine the definition of off-the-job training.

- **Version A (standard ESS wording):** 'Over the past 12 months have you arranged or funded any off-the-job training or development for employees at this site? By off-the-job training we mean training away from the individual's immediate work position, whether on your premises or elsewhere.'

- **Version B (new wording): '**Over the past 12 months, have you arranged or funded any off-the-job training or development for employees [If multisite: on the payroll at this site]? By off-the-job training we mean training beyond that which takes place on-the-job or as part of their normal work duties. This could be undertaken on your premises, at a provider, at home or elsewhere.'

The purpose of modularising these questions was to ensure that analysis of changes over time could still be conducted (using the standard ESS version), while at the same time providing the opportunity to test new question wording and the extent to which it affected the results. Overall, there was a slight impact; based on weighted results, a quarter (25%) answering the standard ESS version said they had provided off-the-job training, compared with 28% of those answering the new question.

In the reporting, the new wording (version B) was used for presenting 2021 findings, while the 'standard' ESS wording (version A) was used to explore time series comparisons.

The question on knowledge and awareness of apprenticeships was also modularised, using a new version which better aligned with other similar questions in the survey. One version repeated the wording used previously, and was used for time series comparisons, with categories being the employer having very good knowledge of what they involve, good knowledge, some knowledge, knowing them just in name or not having heard of apprenticeships.

The new version was phrased the same but had a good level knowledge as the highest answer. This version was used for 2021 results and for discussing subgroup differences. Overall, 91% of those answering the original question said they had at least some knowledge of apprenticeships, compared to 89% answering the new version, which is not a significant difference at the 95% confidence level. As might be expected, there was a difference when looking at the individual scale points, among those who said at least a good knowledge in the original version (44%: 30% good, 14% very good), compared to 35% who said they had a good knowledge in the new version.

Interview length

The average overall interview length was 20 minutes (compared with 23 minutes in 2019 and 20 minutes in 2017). The length of the shortest interview was 7 minutes 43 seconds and the longest was 55 minutes 34 seconds.

Pilot

Pilot testing was conducted to test the suitability of new questions and changes made to ESS 2019 questions, and to ensure the questionnaire flowed well and was of an appropriate length and nature for CATI-based interviewing.

A total of 50 pilot interviews were completed between Wednesday 4th August and Friday 6th August 2021, with employers from a range of sectors and sizes. Sample was drawn from respondents that agreed to be re-contacted during ESS 2019.

The pilot testing found that overall, the questionnaire worked well. Some adjustments were required to the new homeworking section, to ensure the questions remained relevant and flowed well. The pilot testing also suggested that the questionnaire was running over-length, which meant that some questions needed to be cut before going live. Some repetitious elements of the training section, and lower priority questions were removed.

4. Fieldwork

A total of 5,000 interviews were conducted by telephone using computer-assisted telephone interviewing (CATI) systems by IFF Research. Throughout much of the period since March 2020 to the fieldwork period (August – November 2021), government advice was for staff to work from home where possible.[3] However fieldwork was undertaken *prior* to England moving to Plan B in December 2021, when government advised office workers to work from home where they were able to.

Establishments were not pre-notified that they would be called for the survey, partly due to financial considerations and partly because it was felt that this could lead to a reduction in response rates if head offices potentially opted all the establishments in their organisation out of the survey.

Large multisite organisations and banks were pre-identified during sample processing. This enabled contacts for multisite organisations to be split across a number of sample batches and released sequentially over the course of fieldwork to ensure that the various sites were not contacted within too short a time window. Despite these efforts, there was limited success in reaching banks, in particular due to the use of one centralised number across all sites for each bank. A customer number was often required to get through to an adviser. Previous ESS research had used warm-leads which had provided the majority of completed interviews in this sector.

All interviewers received around a 90-minute briefing via video conference. Prior to the briefing, interviewers were provided with a set of briefing notes, advising them on the background and objectives of the study, how sample information had been sourced and guidance on specific questions. The briefings included a detailed run-through of all survey questions by a senior researcher at IFF Research, to help guide interviewers through more complex questions.

Interviews were conducted with the most senior person at the site with responsibility for recruitment, human resources and workplace skills. Reassurances were provided to re-spondents prior to the survey, including confirmation that data would be reported in a way that would not allow them or their organisation to be identifiable. If after the first contact the respondent or gatekeeper wanted more information about the survey a reassurance email was sent (see Appendix G for a copy of the reassurance email). This reassurance email included a link to the dedicated survey website which was created and hosted by IFF Research. This website provided further background information on the research and a list of frequently asked questions. Fieldwork took place from 31st August to 5th November 2019.

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[3] https://www.gov.uk/coronavirus

5. Response rate

Achieving a high response rate is important for any quantitative survey to help ensure a representative sample is obtained.

Interviewers made most calls during business hours (9 am - 5 pm on weekdays), attempting contact with a total of 40,174 establishments, as shown in Table 5-1. Some sectors such as Construction and Hotels and Restaurants were called earlier (from 8 am) and later (until 6 pm) to try to maximise calling at times when respondents were likely to be available.

Sample was loaded in batches over the duration of the fieldwork period so as not to work all the sample in a given sector or size band too intensively. Where an interviewer received no answer or an answer machine, the record would be called back one week later. Records that were engaged would be tried again after 30 minutes. If an appointment was set with a respondent, they would be called back at the pre-arranged time

Each complete interview took an average of 3.6 contact attempts with that employer. The maximum number of contact attempts was set at seven, although on some size and sector bands which had lower response rates (such as Public Administration) this was extended to ensure the sample was worked fully.

The overall response rate for the survey was 40%, calculated as 'achieved interviews' as a proportion of all 'complete contacts'. This is similar to the response rate achieved in the most recent Employer Skills Survey in 2019 (41%), despite some of the fieldwork challenges mentioned above. Table 5-1 provides a detailed breakdown of survey outcomes. Appendix D shows how response rate varied by size and sector.

Table 5-1 Sample outcomes and response rate

Outcome	Number of contacts	% of all sample	% of complete contacts
Total sample	**40,174**	**100%**	
Ineligible establishments (e.g. just 1 working proprietor at site)	2,933	7%	
'Live' / Out of quota[4]	18,748	47%	
Unobtainable / invalid numbers	3,987	10%	
Contact working from home – no details provided	397	1%	
Contact working from home – email invitation sent but did not participate	1,754	4%	
Total complete contacts	**12,355**	**31%**	**100%**
Achieved interviews	5,000	12%	40%
Respondent refusal	7,082	18%	57%
Quits during interview	273	1%	2%

Regular adjustments were made to the balance of establishments contacted to ensure an even distribution of interviews with employers from different sectors and size bands throughout the fieldwork period. Sample was loaded into fieldwork in proportion to quota targets so that quota progression was as even as possible, and to ensure employers were called and re-called at suitable points without being over-contacted.

During fieldwork, when it became evident that a target quota within a particular cell had become unachievable (i.e. when the number of interviews required to reach the quota target was more than the remaining sample), targets were increased in other cells to compensate.

- In the first instance, targets were increased in the same sector in an adjacent size band.

- If adjacent size bands had also become unachievable then any remaining achievable size bands within the sector were used to compensate.

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[4] This row includes sample which was 'live' at the end of fieldwork – i.e. records for which a final outcome (refusal, completed interview etc.) was not reached.

- In some cases it was preferable to make up the shortfall in a cell within the same size band from a different sector. This would be the case when there was a desire to maximise the number of interviews in that size band irrespective of other characteristics. This was most common in the larger size bands, or where an assessment of progress against overall size targets for a particular region indicated a need to boost interviews in the particular size band.

6. Analysis

Data edits

The Employer Pulse Survey questionnaire involved the collection of some complex data that respondents would possibly struggle to answer. There was also, despite stringent quality control, the chance that interviewers may enter typing errors, for example accidentally entering extra zeros on the end of numerical variables.

Data checks were built into the CATI script to ensure, for example, that the question on the number of staff trained was checked if it was more than double the current staff. However, some data validation needed to occur after fieldwork had finished to ensure no errors were present in the final data. Data editing guidelines can be seen in Appendix E.

Coding

Open ended responses to the survey were coded by the IFF Research coding team. For questions that were asked in previous iterations of the Employer Skills Survey and Employer Perspectives Survey, it was important to maintain consistent codes to enable comparisons over time. However, for some long-running questions new codes were added to reflect topical issues such as COVID-19 and Brexit. For example, 'we were not able to offer placements during lockdowns / COVID' was added as a response code at the question asking non-training employers why they do not currently have anybody undertaking apprenticeships.

Standard Industrial Classifications (SIC) were coded using 2007 standards (the most up to date at the time of the survey), and Standard Occupational Classifications were coded using 2010 standards (also the most up to date available - after the survey had concluded and much of the data prepared, the 2020 Standard Occupational Classification standards were published).

Weighting

Survey data were weighted and grossed up to the total population of establishments and total population of employees, according to the March 2021 IDBR – the latest available business population statistics published by ONS at the time that weighting was carried out. The population data is shown in Table 6-1.

Weights were created in pairs: a **'unit-based'** weight and an **'employment-based'** weight. The unit-based weight was designed for analyses by the number or proportion of establishments; the employment-based weight was designed for use when analysing by

number or proportion of employees (including volume measures of current staff home-working and the number of staff trained). Data dictionary files were created listing each variable with notes and guidance on the correct weight to use.

Weighting was undertaken at national level, with grossing weights applied on a 13 broad SIC sector and seven size band grid (i.e. 91 cells). Cell targets were not interlocked. The employment size bands used were: 2-4, 5-9, 10-24, 25-49, 50-99, 100-249, 250+. The sector categories were the same as for sampling, as discussed in Chapter 2.

Overlaying this grid, RIM (random iterative method) weighted were imposed for English regions. This ensures the survey matched the survey population of each region matched the employer population without further correction for size and sector at this level. The RIM weights were calculated by data processing software which used this method to find a 'best fit' between the data and regional targets.

Due to sufficient sample sizes being achieved in each weighting cell, there was no need for cell merging.

Table 6-1 Number of achieved interviews and employer and employee populations used for grossing weights

	No. of interviews achieved	Employer population (2+ employment)	Employee population (2+ employment)
Total	5,000	1,679,330	25,373,520
Size			
2-4	770	919,800	2,378,600
5-9	775	346,550	2,268,040
10-24	1,116	242,870	3,631,390
25-49	975	90,110	3,089,820
50-99	823	45,320	3,113,190
100-249	359	24,260	3,662,560
250+	182	10,420	7,229,920
Sector			
Primary Sector and Utilities	278	75,730	612,330
Manufacturing	412	86,440	1,962,480
Construction	423	170,660	1,132,860
Wholesale and retail	681	315,970	3,800,390
Hotels and restaurants	424	162,180	1,975,630
Transport and storage	273	60,900	1,250,920
Information and communications	264	82,370	1,055,570
Financial services	236	32,910	867,850
Business activities	774	401,150	4,917,330
Public administration	182	12,950	1,078,750
Education	282	49,770	2,242,490
Health and Social Work	408	108,020	3,338,760
Arts and Other Services	363	120,280	1,138,190
Region			
East Midlands	523	139,020	2,038,540
East of England	681	187,950	2,675,310
London	507	315,770	5,094,170
North East	343	62,300	1,034,130
North West	534	199,380	3,247,720

	No. of interviews achieved	Employer population (2+ employment)	Employee population (2+ employment)
South East	785	281,820	3,981,850
South West	589	179,940	2,436,120
West Midlands	517	163,730	2,521,140
Yorkshire & The Humber	521	149,430	2,344,530

List of tables

Appendix A: Industry coding

Each establishment was allocated to one of 13 sectors, based on their Standard Industrial Classification (SIC). SIC 2007 was used to classify establishments using the following method. Using the four-digit Standard Industrial Classification (SIC) supplied for each record from the Market Location, a description of business activity was read out to each respondent. If they agreed that this description matched the main activity undertaken at the establishment, then the SIC on Market Location's database was assumed to be correct. If, however, the respondent felt the description did not correspond to their main business activity at the site (21% of cases), a verbatim response was collected of their main activity. At the analysis stage this was coded to a four-digit SIC which was then used as the basis for their classification into one of the 13 sectors.

Table A-1 below shows the 13 sectors and their corresponding SIC 2007 definitions.[5]

Table A-1 SIC 2007 definitions of industry sectors

Sector	SIC 2007
Primary Sector and Utilities	A - Agriculture, forestry and fishing (01-03) Including farming, hunting and other related service activities, forestry and logging, fishing and aquaculture B - Mining and quarrying (05-09) Including mining of coal, metals, sand/stone/clay, and extraction of crude petroleum and natural gas D - Electricity, gas, steam and air conditioning supply (35) E - Water supply, sewerage, waste management and remediation activities (36-39) Including electric power generation, transmission and distribution, manufacture of gas and distribution of gaseous fuels, steam and air conditioning supply, water collection, treatment and supply, sewerage and waste collection
Manufacturing	C - Manufacturing (10-33)

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[5] UK Standard Industrial Classification of Economic Activities 2007 (SIC 2007)
https://www.gov.uk/government/publications/standard-industrial-classification-of-economic-activities-sic

Sector	SIC 2007
	Including manufacture of food and beverage, textiles, chemicals and chemical products, basic pharmaceutical products, other mineral products, manufacture of metals and metal products, machinery, computer and electronic products and equipment, motor vehicles and other transport equipment, furniture, and repair and installation of machinery and equipment
Construction	F - Construction (41-43) Including the construction of buildings, civil engineering (constructing roads, railways and other utility projects), demolition, and specialised activities such as electrical installation, roofing and scaffold erection
Wholesale and Retail	G - Wholesale and retail trade; repair of motor vehicles and motor cycles (45-47) Including sale, maintenance and repair of motor vehicles, parts and accessories, non-vehicle wholesale (for example agriculture, food, household goods), and the retail trade of all products whether in stores, stalls, markets, mail order or online
Hotels and Restaurants	I - Accommodation and food service activities (55-56) Including hotels, campsites, youth hostels, holiday centres, villages and other short stay accommodation, restaurants and takeaways, event catering and licensed clubs, pubs and bars
Transport and Storage	H - Transport and storage (49-53) Including land, water and air transport (passenger and freight), warehousing and support activities for transportation, postal and courier activities,
Information and Communications	J - Information and communication (58-63) Including publishing (books, journals, newspapers etc. and software/computer games), television, film and music production, broadcasting, telecommunications, computer programming and consultancy, information service activities (e.g. data processing and hosting)
Financial Services	K - Financial and insurance activities (64-66) Including banks and building societies, activities of holding companies, trusts, funds and similar financial entities, credit granting, pensions, insurance and reinsurance

Sector	SIC 2007
Business services	L - Real estate activities (68) M - Professional, scientific and technical activities (69-75) N - Administrative and support service activities (77-82) Including the buying, selling and renting of real estate, legal activities, accounting, bookkeeping and auditing, management consultancy, architectural and engineering activities, scientific research and development, advertising and market research, specialist design, photographic activities, translation and interpretation, veterinary activities, renting and leasing of tangible goods (motors, household, machinery), employment agencies, travel agencies and tour operations, security and investigation activities, office administration and business support
Public Administration	O - Public administration and defence; compulsory social security (84) Including administration of the State and economic and social policy of the community, provision of services to the community such as defence activities, foreign affairs, justice and judicial activities, fire service and compulsory social security activities
Education	P - Education (85) Including pre-primary, primary, secondary and higher education, other education (such as sports, driving schools, cultural education), educational support activities
Health and Social Work	Q - Human health and social work activities (86-88) Including Hospitals, medical and dental practices, residential care, social work activities
Arts, entertainment, recreation and other service activities	R - Arts, entertainment and recreation (90-93) S - Other service activities (94-96) Including performing arts, libraries and museums, gambling and betting, sports facilities, amusement and recreation activities, activities of membership organisations (religious, political, trade union, professional), personal services (hairdressing, beauty, textile cleaning, well-being activities, funeral activities)
NOT COVERED IN SURVEY	T - Activities of households as employers; undifferentiated goods and services producing activities of households for own use (97-98)

Sector	SIC 2007
	U - Activities of extraterritorial organisations and bodies (99) Including households as employers of domestic personnel, private households producing goods for own use

Appendix B: Questions used from previous ESS 2019 and changes made to questions

Table B-1 Questions used from ESS 2019, including the original question, amendments, and notes

Question Number	ESS 19 question	Question area	Original text (if different) and notes	Question text (minor amendments in bold)
S1	S1	Screener & Firmographics		Good morning / afternoon. Can I just check, is this [COMPANY NAME FROM SAMPLE]?
S2	S2	Screener & Firmographics		*[Interviewer introduction]…* Could I speak to the person at this site who would have the best overview of the skills that your establishment needs its workers to have?
S3	S3	Screener & Firmographics	Minor amendment	IF S2 not 1: *[Interviewer introduction]* The survey aims to help Government and other organisations to assist employers like you, by better understanding your needs in terms of skills, training and employment **and the impact of COVID**. Your co-operation will ensure that the views expressed are representative of all employers in your industry. IF NECESSARY: The interview will take on average [IF SIZE=1-4: 20 minutes] [IF SIZE=5-7: 20 to 25 minutes] depending on the answers given. Would it be convenient to conduct the interview now?

Question Number	ESS 19 question	Question area	Original text (if different) and notes	Question text (minor amendments in bold)
S3a	S3a	Screener & Firmographics		Before we begin, I just need to read out a quick statement regarding GDPR legislation. I want to reassure you that all information collected will be treated in the strictest confidence, and that you have the right to have a copy of your data, change your data or withdraw from the research at any point. In order to guarantee this, and as part of our quality control procedures, all interviews are recorded. Is that OK?
A1	SA3	Screener & Firmographics		First, can I just check, is this establishment..?
A2	SA5	Screener & Firmographics		Approximately how many people work in your organisation across the UK as a whole - By that I mean both full-time and part-time employees on your payroll, as well as any working proprietors or owners, but excluding the self-employed, outside contractor or agency staff.
A3	SA1	Screener & Firmographics		How many people work at this specific site, including yourself, all others on your payroll and any working proprietors or owners, but excluding the self-employed and outside contractor or agency staff.

Question Number	ESS 19 question	Question area	Original text (if different) and notes	Question text (minor amendments in bold)
A3X	SA1X	Screener & Firmographics		Can I just check, are you including yourself in that answer?
A4	SA4NEW	Screener & Firmographics		Is this site the Head Office of the organisation?
A5	SA6	Screener & Firmographics		I have [READ OUT SIC DESCRIPTION ON SAMPLE] as a general classification for your establishment. Does this sound about right?
A6	SA7	Screener & Firmographics		How would you describe the main business activity of this establishment?
A7	SA8	Screener & Firmographics		Would you classify your organisation as one ...?
D1	SF4	Workforce development		Over the past 12 months have you funded or arranged any off-the-job training or development for employees at this site. By off-the-job training we mean training away from the individual's immediate work position, whether on your premises or elsewhere?
D1NW	SF4	Workforce development	Over the past 12 months have you funded or arranged any off-the-job	Over the past 12 months have you arranged or funded any off-the-job training or development for employees at this site? By off-the-job training we mean training beyond that

Question Number	ESS 19 question	Question area	Original text (if different) and notes	Question text (minor amendments in bold)
			training or development for employees at this site. By off-the-job training we mean training away from the individual's immediate work position, whether on your premises or elsewhere? D1 and D1NW were modularised so that 50% of respondents went into each. This was in order to test new wording for the definition of "off-the-job" training, in light of recent increased homeworking, which may have made the previous definition less clear.	which takes place on-the-job or as part of their normal work duties. This could be undertaken on your premises, at a provider, at home or elsewhere.
D1A	SF4a	Workforce development		And have you funded or arranged any on-the-job or informal training and development over the last 12 months. By this I mean activities that would be recognised as training by the

Question Number	ESS 19 question	Question area	Original text (if different) and notes	Question text (minor amendments in bold)
				staff, and not the sort of learning by experience which could take place all the time.
D3	SF6	Workforce development	Minor amendment	Which of the following types of off the job training have you funded or arranged for employees at this establishment over the past **12 months**?
D3A	SF7a	Workforce development	Minor amendment	And how much of the training that you have funded or arranged has been for health & safety or **basic** induction training **new staff receive when they start the job**?
D5	SF7b	Workforce development		Have you arranged or funded any training for staff in the last 12 months which has involved…
D7	SF7	Workforce development		And has your establishment done any of the following to aid the development of your employees in the last 12 months?
D8	SF8	Workforce development		Thinking about both on- and off-the-job training, over the last 12 months how many staff employed at this establishment have you funded or arranged training and development for, including any who have since left?
D8chk	SF8chk	Workforce development		You said you have xx employees but you have trained xx staff in the past 12 months. Is this correct?

Question Number	ESS 19 question	Question area	Original text (if different) and notes	Question text (minor amendments in bold)
D8chk2	SF8chk2	Workforce development		Were these all your current staff?
D11	ESS19/ PD6b	Workforce development		Has your site [IF MULTISITE or organisation] provided any EXTERNAL training for employees in the past 12 months? By external training we mean any training that has been delivered by people who are not immediate employees of your organisation.
D12	ESS19/ PD8	Workforce development		Which of the following external sources of training has your site used in the past 12 months…?
D15	PD1	Info/advice on training	In the past 12 months, as far as you know, has anyone at this establishment sought or received information, advice or more practical help on skills or training-related issues from people external to your organisation? D15 was edited so that it only asked about those that received information/advice,	In the past 12 months, as far as you know, has anyone at this establishment **received** information, advice or more practical help on skills or training-related issues from people external to your organisation?

Question Number	ESS 19 question	Question area	Original text (if different) and notes	Question text (minor amendments in bold)
			rather than those that sought or received information. D15A then followed up to ask whether they sought information, and D15B asked whether they had experienced the need for information/advice.	
D15B	PD1a	Info/advice on training	And has your establishment experienced any skills or training-related issues in the last 12 months where you might have needed information, help or advice?	Has your establishment had any skills or training-related issues in the last 12 months where information, help or advice might have been useful?
D17	PD2	Info/advice on training	Has anyone at this site received advice or help on skills and training related issues in the last 12 months from any of the following?	Has anyone at this establishment sought [D15=1: or received] advice or help on skills and training related issues in the last 12 months from any of the following?

Question Number	ESS 19 question	Question area	Original text (if different) and notes	Question text (minor amendments in bold)
E1	PD22	Apprenticeships & Traineeships		I'd now like to ask some questions about Apprenticeships. By Apprenticeships I mean those which follow a formal framework and lead to a nationally recognised qualification. Do you currently have any staff undertaking Apprenticeships at this site?
E2	PD23	Apprenticeships & Traineeships		Do you currently offer Apprenticeships at this site?
E2A	PD23i	Apprenticeships & Traineeships		Has your site previously offered Apprenticeships in the last 3 years?
E3	PD28	Apprenticeships & Traineeships		Which of the following would you say best describes your knowledge of Apprenticeships?
E3NW	PD28	Apprenticeships & Traineeships	E3 and E3NW were modularised so that 50% of respondents went into each. This was in order to test an altered scale compared to ESS, removing the option "very good knowledge" to	Which of the following would you say best describes your knowledge of Apprenticeships?

Question Number	ESS 19 question	Question area	Original text (if different) and notes	Question text (minor amendments in bold)
			more closely mirror the scales used in the traineeships and T levels questions.	
E4	PD33	Apprenticeships & Traineeships		Why does your establishment not currently offer Apprenticeships?
F1	PD35a	Apprenticeships & Traineeships		Which of the following best describes your awareness of Traineeships?
F2	PD35b	Apprenticeships & Traineeships		In the last 12 months have you had anyone undertake a Traineeship at this site?
F3	ND38	Apprenticeships & Traineeships		What are the main reasons you decided to take someone on to do a Traineeship?
F4	ND39	Apprenticeships & Traineeships		What are the main reasons why you have not taken on anyone at this site to do a Traineeship?

Question Number	ESS 19 question	Question area	Original text (if different) and notes	Question text (minor amendments in bold)
G1	PC17	Work Experience & Inspiration		Now thinking about activities related to work experience, thinking about people of all ages, in the last 12 months has this site had anyone in for
G3	PC23	Work Experience & Inspiration		I'd now like to ask about other ways that employers might engage with schools, colleges or universities. This may involve things such as hosting site visits for students, talking to students about careers, or conducting activities such as mock interviews to improve the employability of students. During the past 12 months has your establishment engaged with schools, colleges or universities to provide such activities to students?
G4	PC27	Work Experience & Inspiration		You mentioned that your site has not had any work placements or internships in the last 12 months, or engaged with educational institutions to provide other forms of work-related experience to their students. What would you say are the main reasons for not doing so?
H2	NC28	T levels	The Government is introducing new technical education qualifications for 16-19-year olds, called T Levels. As part of these it	I'm going to read out some background information about how employers might engage with these new qualifications then ask about your interest in them. As part of T Levels it will be compulsory for students to complete an industry placement of at least 45 days in

Question Number	ESS 19 question	Question area	Original text (if different) and notes	Question text (minor amendments in bold)
			will be compulsory for students to complete an industry placement lasting at least 45 days in an industry directly relevant to their course... [question continues] The explanation of T levels was shortened to help keep the overall survey time down.	total in an industry directly relevant to their course. The timing and structure of the placement will be flexible to meet employers' needs and it would be at the employer's discretion whether to pay students during their placement. Based on this information, how interested would your site be in providing work placements to T levels students?
H2a	NC29	T levels	T levels	Thinking about your site's capacity for offering placements to T levels students, how easy or difficult would it be for you to offer these types of placements?
I1	SI1	Recontact		Thank you very much for taking the time to speak to us today. Occasionally it is necessary to call people back to clarify their answers; may we please call you back if required?
I2	SI2	Recontact		If the Department for Education and their partners in this survey wish to carry out follow-up research within the next 2

Question Number	ESS 19 question	Question area	Original text (if different) and notes	Question text (minor amendments in bold)
				years on related issues, would it be ok for them or their appointed contractors to contact you?
I2A	SI2A	Recontact		Would it be OK if the selection for this follow-up research is based on your responses to this survey?
I3, I4,I4a	SI3B, I3C, I3D, I3E, I4, I6	Recontact		Confirming/collecting contact information
If	SI7	Recontact		Finally, it is sometimes possible to link the data we have collected with other government surveys or datasets to enable further statistical analysis. Would you be happy for this to be done?

Appendix C: Region targets

Table C-1 Soft targets by region

Region	Achieved	Target	% of target
East Midlands	528	371	142.3%
East of England	683	573	119.2%
London	510	499	102.2%
North East	348	481	72.3%
North West	532	526	101.1%
South East	782	560	139.6%
South West	587	744	78.9%
West Midlands	513	698	73.5%
Yorkshire and the Humber	517	548	94.3%

Appendix D: Response Rates by subgroup

Table D-1 Interviews achieved and response rate broken down by size and sector

	Interviews achieved	Response Rate
Total	**5,000**	**41%**
Size		
2-4	700	29%
5-24	1,704	42%
25-49	969	47%
50-99	1,065	45%
100-249	353	39%
250+	209	35%
Sector		
Primary Sector and Utilities	311	35%
Manufacturing	323	39%
Construction	435	33%
Wholesale and retail	665	40%
Hotels and restaurants	431	50%
Transport and storage	278	36%
Information and communications	285	34%
Financial services	246	31%
Business activities	803	40%
Public administration	190	37%
Education	282	69%
Health and Social Work	370	61%
Arts and Other Services	381	46%

Appendix E: Edits specification

Table E-1 Specification of edits applied to the data

Edit Number	Objective of edit	Condition	Force/Action
EDIT 1	Check that all SICs given at A6 are valid SIC07 codes	If A5 = 2	Any records where A5=2 will need to have the SIC at SA7 validated. Recode where possible, recontact if necessary.
EDIT 2	To check that public sector ('local or central government financed body') definition given at A7 is consistent with SIC code	If A7 is '3' or '4' and first two digits of SIC are not '84', '85' or ''86'	Each record to be judged on an individual basis by company name and activity.
EDIT 3	To check legitimacy of high numbers of employment	If A3 is greater than 1500	Each record to be judged on an individual basis. Call-backs may be necessary if number of employees seems excessively high for business activity.
EDIT 3	To check high values of training	Check if D8 > 1.5 X A3 or more	Each record to be judged on an individual basis. Call-backs may be necessary .
EDIT 4	To ensure all postcodes given by respondents are valid	If I4=2	Check that postcode is valid and given in full. Each record must have a full valid postcode in the final data file.
EDIT 5	Check legitimate use of the "Head Office" code	A4=1 but uses a head office code e.g. At D6, F4, G4	Remove use of the Head Office code if establishment is a single site. Force to DK if Head Office code only one selected
EDIT 6	Check for unnecessary use of 'Don't	Any questions where DK is added as a code	Force DK to zero for specific records if DK is combined with other codes.

Edit Number	Objective of edit	Condition	Force/Action
	Know' code once coding is added in		
EDIT 8	Check those who say offer apprentices but also say have not heard of them	E2A=1 and E3/E3NW	Force any that meet this condition to E3/E3NW=DK
EDIT 9	Homeworking section, if respondent says higher or lower than before the pandemic but gives a contradictory proportion of workforce working from home now.	C2= 100% and C1A=1 and C3A=2	Force any that said 100% at C2 and "yes" at C1A to "higher than before the pandemic" at C3A.
EDIT 10	Check that those who were coded to only induction training or health and safety training were forced to 100%	D3 = Other and coded to only Health and Safety OR induction	Force D3A to 100%.

Appendix F: Sampling error and statistical confidence

Sampling errors for the survey results overall and for key sub-groups are presented in Table F-1 below. Figures have been based on a survey result of 50% (the 'worst' case in terms of statistical reliability), and have used a 95% confidence level. Where the table indicates that a survey result based on all respondents has a sampling error of ±1.38%, this should be interpreted as follows: 'for a question asked of all respondents where the survey result is 50%, we are 95% confident that the true figure lies within the range 48.62% to 51.38%'.

As a note, the calculation of sampling error has taken into account the finite population correction factor to account for cases where we are measuring a significant portion of the population universe (i.e. even if two sample sizes are the same, the sampling error will be lower if in one case a far higher proportion of the population was covered).

These confidence intervals are based on the assumptions of probability random sampling and a normal distribution of responses.

Table F-1 Sampling error (at the confidence 95% level) associated with findings of 50%

	Population	Number of interviews	(Maximum) Sampling Error
Total	1,679,330	5,000	± 1.38
Size			
2-4	919,800	770	± 3.53
5-9	346,550	775	± 3.52
10-24	242,870	1116	± 2.93
25-49	90,110	975	± 3.12
50-99	45,320	823	± 3.38
100-249	24,260	359	± 5.13
250+	10,420	182	± 7.20
Sector			
Primary Sector and Utilities	75,730	278	± 5.87
Manufacturing	86,440	412	± 4.82
Construction	170,660	423	± 4.76
Wholesale and retail	315,970	681	± 3.75
Hotels and restaurants	162,180	424	± 4.75
Transport and storage	60,900	273	± 5.92

	Population	Number of interviews	(Maximum) Sampling Error
Information and communications	82,370	264	± 6.02
Financial services	32,910	236	± 6.36
Business activities	401,150	774	± 3.52
Public administration	12,950	182	± 7.21
Education	49,770	282	± 5.82
Health and Social Work	108,020	408	± 4.84
Arts and Other Services	120,280	363	± 5.14

Source: Inter-departmental Business Register 2021. Population figures are rounded,

Appendix G: Reassurance Email

SURVEY REFERENCE: [KEY NUMBER]

Employer Pulse Survey

Thank you for considering participating in this important research.

The Employer Pulse Survey 2021 is being conducted on behalf of the Department for Education (DfE). The project is being conducted by IFF Research, an independent market research organisation.

The project aims to help Government and other organisations to help employers, by better understanding their skills, training and employment needs, particularly in response to the COVID-19 pandemic. The survey specifically aims to gather information on homeworking and other changes to working arrangements, staff training, engagement with the skills system and the use of government initiatives. Your co-operation will ensure that the views expressed are representative of all employers in your sector.

Your organisation has been selected from Market Location's Business Database (which combines 118 and Thomson data) and we hope very much that you are able to take part. Participation will involve a telephone interview with an IFF interviewer lasting around 20 minutes at a time that is convenient for you.

More information about the survey (including FAQs) can be found at https://www.employerpulsesurvey.co.uk.

If you have any queries concerning the format or content of the interview, please contact us at employerpulsesurvey@iffresearch.com, or call our freephone helpline on 0808 164 4731.

Your replies will be treated in the strictest confidence under the Code of Conduct of the Market Research Society, and in accordance with the Data Protection Act (2018) and the General Data Protection Regulations (GDPR).

Thank you for your assistance.

Yours sincerely,

Sam Selner
Associate Director

Department
for Education

For any enquiries regarding this publication, contact us at:
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