

Department for Work and Pensions

ESF Cohort Study - Technical report

# European Social Fund Cohort Study

Technical report

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A report of research carried out by the National Centre for Social Research on behalf of the Department for Work and Pensions



European Union  
European Social Fund  
Investing in jobs and skills

**DWP** Department for  
Work and Pensions

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# 1 Introduction

This report describes the methodology of the ESF Cohort Study (2008-2010), known as the Skills for Jobs Study in the field. The study was carried out by the National Centre for Social Research (NatCen) on behalf of the Department for Work and Pensions (DWP).

## 1.1 Aims and objectives of the evaluation

The ESF Cohort Study (2008-2010) is a survey of participants of projects funded by the European Social Fund. The study covers England and aims to provide evidence on the longer term outcomes of the support provided by the 2007-2013 ESF programme. The Cohort study will also be used to measure a number of indicators and targets that cannot be captured through respondent monitoring information.

The objectives of the study are as follows:

- To acquire more detailed information on respondents which enables analysis of sub-groups and multiple disadvantages;
- To obtain more detail on the type of support offered and the views of respondents on the support they receive;
- To understand how individuals come to be on ESF training courses;
- To understand what activities they are engaged in on their course; and,
- To understand their aspirations for their training.

The following research questions will also be addressed:

- What difference has ESF made to the employability and skills of respondents?
- What 'soft outcomes' did respondents gain, in addition to jobs and qualifications?
- What are the outcomes six months after respondents leave ESF and have employment outcomes been sustained?
- How effective is ESF for particular disadvantaged groups (e.g. people with a disability or long-term limiting illness, people from ethnic minority groups)?
- Has ESF supported progression at the workplace (e.g. to more skilled and better paid jobs)?

## 1.2 Evaluation methodology

The ESF Cohort Study involves a large scale longitudinal quantitative survey with two waves of interviews. These are mainly telephone interviews supplemented by a small number of face-to-face interviews with more vulnerable respondents. Wave 1 took place between April and September 2009, and Wave 2 took place between January and March 2010.

### 1.3 Report Structure

This report covers the following features of the methodology:

- Sample design (chapter 2)
- Wave 1 :
  - Questionnaire development (chapter 3)
  - Fieldwork (chapter 4)
  - Response (chapter 5)
- Wave 2:
  - Questionnaire development (chapter 6)
  - Fieldwork (chapter 7)
  - Response (chapter 8)
- Weighting (chapter 9)
- Indicative estimates for confidence intervals (chapter 10)

## 2 Sampling

### 2.1 Overview

The population consisted of over 215,000 people who were participating in projects funded by the European Social Fund (ESF). These were classified as being in one of four priorities (1, 2, 4 and 5), depending on the type of project, and the geographic area where it is being delivered. Three types of funding streams were identified; ESF, match and 'other'. Participants in the 'other' category were on projects funded jointly by ESF and match funding, managed by Co-Financing Organisations (CFOs) other than DWP and the Learning and Skills Council. Sampling frames were provided separately from the individual CFOs, identifying participants who were being directly funded by the ESF, and those who were benefiting from the 'match' funding provided by the CFO. Therefore, for the purposes of sampling five funding groups were used (LSC-ESF, LSC-match, DWP-ESF, DWP-match, and Other). The sampling frame for LSC-ESF arrived in two parts. The first was available in March 2009; the second arrived at the end of May 2009.

As a result there were six sampling frames altogether:

- Strand 1: LSC-ESF (early)
- Strand 2: LSC-match
- Strand 3: DWP-ESF
- Strand 4: DWP-match
- Strand 5: Other
- Strand 6: LSC-ESF (late)

Data preparation involved removing duplicate cases and cleaning of some data. Those without contact details were also omitted before sampling to give a study population of over 215,000 individuals. The breakdown by sampling frame and priority is shown in Table 2.1.

**Table 2.1 Population size by sample frame and priority**

	Priority 1	Priority 2	Priority 4	Priority 5	Total
LSC-ESF (early)	6,914	5,798	391	509	13,612
LSC-match	11,076	21,850	16	1,339	34,281
DWP-ESF	21,552	0	1,177	0	22,723
DWP-match	123,285	0	2,005	0	125,296
Other	8,177	900	0	0	9,077
LSC-ESF (late)	5,385	3,391	523	1,160	10,459
<b>Total</b>	<b>176,389</b>	<b>31,939</b>	<b>4,112</b>	<b>3,008</b>	<b>215,448</b>

## 2.2 Selecting the sample

There were some constraints on the sample which meant an equal probability sample could not be chosen.

First, although the funding streams were of vastly different sizes (DWP-match was the largest by far), approximately equal numbers had to be chosen from each. As a result, the LSC samples were heavily over-represented relative to the DWP samples. A second constraint was that the sample was chosen to enable robust analysis within the different priorities. This meant that a very high sampling fraction was chosen in Priorities 4 and 5 (in these priorities almost every person in the sampling frame was chosen), and the sampling fraction had to be higher in Priority 2 than in Priority 1. A third constraint was that regional analysis was thought desirable so some over-sampling of small regions was necessary. Finally, in order to help provide estimates for progress towards achieving specific delivery targets it was also desirable to over-sample women, people from ethnic minorities, those aged over 50, and those with a disability.

The effect of this disproportionate sampling is that it is essential to use weights when analysing the data. It also means that while the sample was designed to be efficient for analysis of key sub-groups, it would not be as efficient for any overall analysis.

A total of 36,020 people were selected for the sample. Table 2.2 presents some key statistics related to the sampling scheme. It can be seen in the table that the DWP-Match sample was under-sampled; and Priority 1 was also under-sampled. It should also be noted that women made up 37 per cent of the population, but 45 per cent of the sample.



## 5 Sampling

The table also shows that the smaller regions were over-sampled. For example, only about 0.7 per cent of the Priority 2 population lived in London, but they comprised 1.7 per cent of the sample.

<b>Table 2.2 Description of the population and issued sample</b>		
	Population	Sample
	%	%
<b>Priority</b>		
P1	81.90%	50.60%
P2	14.80%	34.80%
P4	1.90%	10.40%
P5	1.40%	4.20%
<b>Sampling Frame</b>		
LSC-ESF early	6.30%	30.80%
LSC-Match	15.90%	22.10%
DWP-ESF	10.50%	15.50%
DWP-Match	58.20%	19.00%
Other	4.20%	4.10%
LSC-ESF late	4.90%	8.60%
Female	37.30%	45.00%
	Population	Sample
	%	%
Over 50 (P1 and P2)	13.20%	15.30%
Disabled (P1 and P2)	30.90%	20.80%
Ethnic minority (P1 and P2)	14.00%	13.10%
<b>Priority 1</b>		
East of England	5.20%	5.90%
London	16.60%	9.30%
East Midlands	8.10%	7.10%
North East	7.70%	7.20%
North West	15.00%	15.90%
South East	7.10%	6.80%
South West	9.60%	8.00%
West Midlands	10.10%	10.40%

Yorkshire & the Humber	8.30%	7.70%
Merseyside	8.30%	13.20%
South Yorkshire	4.00%	8.50%
<b>Priority 2</b>		
East of England	5.40%	9.00%
London	0.70%	1.70%
East Midlands	1.90%	4.10%
North East	1.80%	4.60%
North West	46.90%	19.40%
South East	4.20%	8.60%
South West	2.90%	7.50%
West Midlands	10.50%	13.80%
Yorkshire & the Humber	0.70%	1.70%
Merseyside	20.30%	21.10%
South Yorkshire	4.80%	8.60%

The method used to sample from each sampling frame varied as summarised below.

### **LSC-ESF (First batch)**

All cases from Priorities 2, 4, and 5 were selected. The Priority 1 sample was chosen by taking a stratified random sample. The sampling frame was stratified by region, and within region implicitly stratified by sex, disability, and age (over 50 years old). The selection fractions varied by region, but within each region each individual had an equal probability of selection.

### **LSC-Match**

#### Priorities 1 and 2

A stratified list sample, stratifying by region, sex, disability, age (over 50), and ethnicity, was chosen. The selection fractions varied by region, but within each region each individual was given an equal probability of selection.

#### Priorities 4 and 5

An equal probability sample, with implicit stratifiers sex, disability, age (over 50) and ethnicity was taken.

### **DWP-ESF**

All 1,171 cases in Priorities 4 and 5 were sampled. The sample in Priority 1 was chosen after stratifying by region, sex, ethnicity and age. The selection fractions varied by region and sex; and, contrast to the LSC sample, ethnic minorities and people aged over 50 were given a higher probability of selection.

### **DWP-Match**

The sampling for DWP-Match was similar to DWP-ESF. All cases in Priorities 4 and 5 were sampled and Priority 1 was chosen after stratifying by region, sex, ethnicity and age. Once more the selection fractions varied by region and sex; and ethnic minorities and people aged over 50 were given a higher probability of selection.

### **OTHERS**

Sampling from the 'Others' sampling frame was relatively simple. The sample was stratified by priority, region and sex and a stratified random sample was taken. The sampling fraction varied by priority and region, but an equal probability sample was taken within each priority and region.

### **LSC-ESF (second batch)**

Sampling for LSC-ESF (batch) was as follows:

#### Priority 1

A stratified list sample, stratifying by region, sex, disability, age (over 50), and ethnicity, was chosen. The selection fractions varied by region; and females, ethnic minorities and people aged over 50 were given a higher probability of selection.

#### Priority 2

A stratified list sample, stratifying by region, sex, disability, age (over 50), and ethnicity, was chosen. The selection fractions varied by region, but, in contrast to Priority 1, each individual was given an equal probability of selection.

#### Priorities 4 and 5

An equal probability sample, with implicit stratifiers sex, disability, age (over 50) and ethnicity was taken.

## 3 Questionnaire development and piloting (Wave 1)

### 3.1 Questionnaire content

The questionnaire content needed to address the various objectives of the research and was developed by NatGen, in consultation with the study steering group.

In addition to collecting standard demographic information, the questionnaire needed to provide information about the following;

- Economic activity status prior to attending the course
- Qualification levels prior to attending the course
- Expectations of the training which would be provided on the course
- Details about current activity, if the respondent had already finished (or left) the course.

### 3.2 Interviewing mode

The study was designed to consist mostly of telephone interviews (CATI), with provision for a small proportion of interviews to be conducted face to face (CAPI) to ensure that respondents with communication difficulties were included in the study.

### 3.3 Pilot study

The purpose of the pilot was to test the procedures and questionnaire to inform the methodology for the main stage of the ESF Cohort Study, including whether the data collection approach was feasible. There were three aims of the pilot:

- **The questionnaire** – how successful was the pilot questionnaire? Were there any wording issues? How did the length compare with the target of 25 minutes?
- **The response rates** – what response rates were achieved in the pilot? How did these compare to our estimates? What are the implications for the main stage of the research?
- **Sampling and data issues** – what sampling and data issues emerged in the pilot? How will these affect the main stage of the research?

### The questionnaire

One of the key objectives of the dress rehearsal pilot was to test the ESF Cohort Study questionnaire and other fieldwork documents. After completing their interviews the four interviewers who worked on the pilot study gave feedback on the questionnaire and other fieldwork documents, both verbally in a debrief session and in written feedback forms. This feedback was used to make recommendations about the questionnaire content.

### **Interview length**

The average interview length was 24.4 minutes, with interviews lasting between 10 and 38 minutes. The interview length varied according to how chatty the respondents were, the routing taken through the qualifications section (which was particularly long) and whether there were any language difficulties.

Overall, the questionnaire length was in line with our target length of 25 minutes maximum, however, interviewers did mention that the qualifications section was a bit long so it was recommended that this was trimmed in advance of the main stage.

### **Briefings and instructions about the questionnaire**

The four telephone interviewers working on the pilot attended a briefing with researchers and received project instructions which aimed to replicate the briefing which would be provided in the main stage. The briefing included a section on the background to the study, a dummy interview and time for interviewers to practice different routes through the questionnaire.

### **Making contact and selling the survey**

Interviewers reported that most respondents did recall receiving the advance letter. Where respondents had additional questions about the study, interviewers felt that the script provided them with all the necessary information to answer their queries.

As expected, a relatively high proportion of cases had a telephone number which was unobtainable, which is believed to be due to mobile phone numbers in the sample, as opposed to landline number. Therefore, as people do change their mobile phone numbers more frequently it was suggested that the advance letter was reviewed to include the telephone number we have for respondents. This would allow people who wish to take part to contact us to update their details and would reduce the number of unobtainable numbers in the main stage.

Interviewers reported that some people required them to explain the study to them and suggested that this may be due to the advance letter being quite long. Therefore, it was suggested that the advance letter text was reviewed with a view to simplify the text.

### **Questionnaire content**

During the debrief and in their feedback forms, interviewers identified various issues they or the respondents found with specific questions from the computer administered questionnaire. The main recommendations are summarised briefly below.

- *Qualifications section:* It was recommended that this section was reviewed in advance of the main stage. The main issues to consider were a general lack of understanding about the distinction between educational and vocational qualifications and how to record foreign qualifications.

- *Interview length:* With an average length of 24.4 minutes, the questionnaire length was in line with our target length of 25 minutes maximum.
- *Sensitive questions:* There were several questions which had been identified before the pilot as potentially sensitive, namely: questions about salary; questions about whether criminal convictions, drugs and alcohol were barriers to getting work; and questions about data linkage. These questions did not cause problems in the pilot, so will remain in the main stage questionnaire.
- *Employment status/main activity:* In terms of the question on employment status (main activity), pilot respondents reported doing several activities before the course which were not listed individually in the response options. These activities included: caring for an elderly person or spouse, seeking education, waiting for a course to start, prison and 'nothing'. It was recommended that the main stage questionnaire look at ways of incorporating these additional answer categories.
- *Terminology used to describe training:* Interviewers felt that any ESF intervention should be referred to as a 'course' rather than as training, as this is how the majority of respondents referred to it.

In addition, a number of suggestions were made to help improve the flow of the interview, or give more information to interviewers to aide coding during the interview.

### **Data linkage**

In order to make further use of the information collected during the ESF Cohort Survey, respondents were going to be asked if they gave permission for their responses to be linked to administrative data held by DWP. Respondents were given information about this in the advance letter, including a letter providing reassurances about data confidentiality from the DWP ESF Evaluation Team.

At the end of the questionnaire, the interviewers asked respondents for their permission to link the data. In most cases (85%) respondents agreed to this straight away, with 11% (nine cases) saying no. The remaining three people said they were not sure or had queries about this that the interviewers were able to answer. When asked after they had been given more information, all three people gave permission for this.

### **Response rates**

The achieved response rate in the pilot was 28 percent, in line with the target response rate for the main stage study. However, the availability of contact details was not as expected. Addresses and telephone numbers were only available for 64 per cent of cases, compared to an estimate of 80 per cent.

### **Sampling and data issues**

An important part of the pilot was to test out the procedures for obtaining the sample from both DWP and the Learning and Skills Council databases, and assessing the quality of this data.

A number of critical sampling and data issues emerged in the pilot. With the DWP data transfer, for instance, it took time to ensure that all data security procedures were in place, an issue that was resolved during the pilot and therefore ensured smoother data transfer procedures in the main stage. The pilot also allowed us to uncover a serious issue around the LSC data, whereby the ESF datasets were found to contain data that was both incomplete (most ESF cases are found on Short Course datasets, not the ESF datasets as assumed) and misleading (most of the cases in the ESF datasets are actually potential match cases rather than ESF beneficiaries). The pilot enabled us to identify the correct procedure for identifying and selecting ESF beneficiaries in advance of the main stage.

## 4 Wave 1 Fieldwork

Fieldwork on the study was carried out by telephone interviewers between April and September 2009.

In addition, a small number (200) of face-to-face interviews were carried out by trained interviewers who were members of NatCen's field interviewer panel. Fieldwork procedures for face-to-face interviews are outlined in section 4.3.

### 4.1 Advance letter

Potential participants were sent a letter in advance of the interviewer calling them explaining the purpose of the study, how they were chosen to take part in the study and saying that an interviewer would be calling them soon. The letter explained that all information would be kept confidential, and referred to information about asking their permission to link their responses to administrative data held by DWP. The letter also explained that if they found it difficult to speak over the phone, it could be arranged for an interviewer to come to their home instead. The letter, and further communications with respondents, all referred to the research as 'the Skills for Jobs Study'.

There was also a supplement enclosed with the letter which briefly explained why they were being contacted in the main minority languages (Gujarati, Urdu, Bengali, Hindi and Punjabi (Gurmukhi dialect)).

Copies of the letter are at Appendix A.

### 4.2 Briefings

Telephone interviewers received a half-day briefing by NatCen research field staff before starting work on the study.

The briefings covered:

- The background to the study: the aims of the ESF programme, information about the study design and who the respondents are.
- Making contact with respondents and introducing the study: the advance letter, introducing the study to the respondents, the longitudinal element of the study (i.e. two waves), data linkage and answering questions about the study.
- The questionnaire: practice session using the CATI program to interview an example respondent (a researcher), including following different questionnaire routes.

In addition to the briefings all interviewers were provided with a set of written project instructions which provided detailed information on the procedures to be followed.



### **4.3 Face-to-face interviews**

Face-to-face interviews were available for respondents who requested these due to language, or other communication difficulties, rather than telephone interviews and those who were identified by telephone interviewers as more appropriate for a face-to-face interview.

Trained interviewers from NatCen's panel of interviewers conducted the face-to-face interviews. Due to the range of geographical locations where interviews were required, interviewer self-briefings were used. These required interviewers to read project instructions, complete several practice interviews and correctly answer a series of questions about the study before beginning work on the study.

### **4.4 Interview length**

The median interview length was 19.5 minutes for telephone interviews, for face-to-face interviews the median interview length was 29 minutes.

## 5 Wave 1 Response Rates

Table 5.1 shows the overall response rate for Wave 1 of the ESF Cohort Study. Of the 36,023 cases which were issued, a total of 10,947 interviews were achieved, comprising of 10,747 telephone and 200 face-to-face interviews.

The proportion of achieved interviews, when calculated from all of the issued sample was 30%. The response rate based on in-scope cases (i.e. total eligible cases assuming that all non contacts were eligible) was 34%.

<b>Table 0.1 Wave 1 response rates for all issued cases</b>			
			<i>ESF Cohort Study</i>
<b>Response Outcomes</b>	<b>Number</b>	<b>Percentage of issued cases</b>	<b>Percentage of in-scope cases</b>
		%	%
Total issued	36,023	100	
Total ineligible respondents	3,862	11	
<b>Total eligible (in-scope addresses)</b>	32,161	89	100
Total direct contact	1,347	4	4
Total non contact	15,145	42	47
Total refusals	3,779	10	12
Total other unproductive	815	2	3
Total face-to-face unproductive	128	0	0
<b>Total interviews</b>	<b>10,947</b>	<b>30</b>	<b>34</b>

## 6 Questionnaire development and piloting (Wave 2)

### 6.1 Pilot study

The pilot aimed to test response rate assumptions and to review the questionnaire in advance of the main stage of the Wave 2 ESF Cohort Study. The pilot study took place in November 2009, all participants had taken part in the Wave 1 pilot earlier in the year.

#### The questionnaire

One of the key objectives of the pilot was to test the ESF Cohort Study questionnaire. As many of the fieldwork procedures and documents were developed for the first interview recommendations focused on the questionnaire content. After completing their interviews the interviewers who worked on the pilot study gave feedback on the questionnaire and other fieldwork documents, both verbally in a debrief session and in written feedback forms. This feedback was used to make recommendations about the questionnaire content.

The pilot demonstrated that the Wave 2 questionnaire was fit for purpose. The average interview length was 15.5 minutes and the question wording was found to be appropriate.

Generally, the questionnaire worked very well. Many of the questions were repeated from the Wave 1 study, and so had been tested previously. The main issues were with the qualifications block, which was found to be relative long and complicated. Therefore, this section of the questionnaire was recommended for thorough review, prior to the main stage.

#### Response rates

Results from the pilot indicated that the original response assumptions were appropriate. The pilot study achieved a response rate of 61 per cent which was similar to the target of 60 per cent. Interviewers reported that it was not difficult to make contact with respondents and convince them to take part in the second interview.

## 7 Wave 2 Fieldwork

Wave 2 fieldwork on the study was carried out between January and March 2010.

All respondents who participated in face-to-face interviews in the first wave were issued with the same model as wave 1.

### 7.1 Advance letter

All wave 1 respondents were sent a letter in advance of the interviewer calling them for the wave 2 interview. This letter thanked respondents for taking part in the first interview and explaining that we would like to speak to them again and that an interviewer would be calling them soon. If respondents had given permission for their responses to be linked to DWP data during the first interview the letter included a reminder about this and explained what they should do if they changed their mind. Respondents who had participated in a face-to-face interview in wave 1 were sent a different version of the advance letter.

Copies of the letters are at Appendix B and C.

### 7.2 Briefings

Telephone interviewers received a half-day briefing by NatCen research field staff before starting work on the second wave of the study.

The briefings covered:

- The background to the study: the aims of the ESF programme, information about the study design and who the respondents are.
- Making contact with respondents and introducing the study: the advance letter, introducing the study to the respondents, data linkage and answering questions about the study.
- The questionnaire: practice session using the CATI program to interview an example respondent (a researcher), including following different questionnaire routes.

In addition to the briefings all interviewers were provided with a set of written project instructions which provided detailed information on the procedures to be followed.

### 7.3 Face-to-face interviews

Trained interviewers from NatCen's panel of interviewers conducted the face-to-face interviews with respondents who had been interviewed by this method in wave 1. Before working on the second wave interviewers were required to complete several practice interviews.

## 7.4 Interview length

The median interview length was 14.5 minutes for telephone interviews, for face-to-face interviews the median interview length was 20 minutes.

## 8 Wave 2 Response Rates

Table 8.1 summarises the response rates at Wave 2 of the study. From the 10,947 wave 1 respondents contacted in wave 2, a total of 7,400 interviews were achieved, this comprised 7,250 telephone and 150 face-to-face interviews.

The proportion of achieved interviews, when calculated from all of the issued sample was 68 per cent. The response rate based on in-scope cases (i.e. total eligible cases assuming that all non contacts were eligible) was 69 per cent.

<b>Table 8.1 Wave 2 response rates for all issued cases</b>			
			<i>ESF Cohort Study</i>
<b>Response Outcomes</b>	<b>Number</b>	<b>Percentage of issued cases</b>	<b>Percentage of in-scope cases</b>
		%	%
Total issued	10,947	100	
Total ineligible respondents	289	3	
<b>Total eligible (in-scope addresses)</b>	10,658	97	100
Total non contact	1,549	14	15
Total refusals	1,521	14	14
Total other unproductive	175	2	2
Total other face-to-face unproductive	13	0	0
<b>Total interviews</b>	<b>7,400</b>	<b>68</b>	<b>69</b>

## 9 Weighting

### 9.1 Wave 1 weights -- summary

The ESF Cohort Study requires weights to correct for the varying selection probabilities (described in chapter 2). As there was a certain amount of non-response (10,947 people responded out of 36,020 selected) the data were also weighted to correct for non-response.

A selection weight was calculated as the inverse of the probability of selection. These weights ranged from 1 (in regions and priorities where every individual was chosen) to 42 (for some combinations of selection variables in the DWP-match sample).

Calibration weighting is a procedure that matches the sample to different population distributions, whilst ensuring that the weights are not too widely spread, and not too distant from the selection weight.

The population distributions used for matching were Priority, Sampling Frame, sex, age (over 50), disability, ethnicity and region. In other words, calibration weighting ensured that the weighted sample matched exactly the population on these variables. This can be seen by comparing columns 4 and 5 of Table 9.1 below.

Some interactions were also used for weighting<sup>1</sup>. For example, as well as ensuring that the weighed sample matched the population distribution, it ensured that the regional, sex, age, disability and ethnic distribution was exact *within* each of Priorities 1 and 2.

The distributions of the main variables at different stages of the matching are shown in Table 9.1. It can be seen from this table that the calibration weighting helped ensure the sample adequately represented the population. For example, people aged over 50 in Priorities 1 and 2 had a high response rate. Without calibration weighting they would have formed 16.2 per cent of the weighted sample and would have been over-represented. Calibration weighting reduced this to the population total of 13.2 per cent.

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<sup>1</sup> The interactions were: Sampling Frame\*Priority, sex\*Priority, and for Priorities 1 and 2 ethnicity\*Priority, age\*Priority, Region\*Priority, and disability\*Priority.

<b>Table 9.1 Effects of the weights at different stages of the weighting</b>				
	Selection weights (selected)	Selection weights (responders)	Calibrated weights (responders)	Population
	%	%	%	%
<b>Priority</b>				
P1	81.90%	81.80%	81.90%	81.90%
P2	14.80%	14.90%	14.80%	14.80%
P4	1.90%	1.80%	1.90%	1.90%
P5	1.40%	1.50%	1.40%	1.40%
<b>Sampling Frame</b>				
LSC-ESF early	6.30%	6.30%	6.30%	6.30%
LSC-Match	15.90%	16.20%	15.90%	15.90%
DWP-ESF	10.70%	10.40%	10.50%	10.50%
DWP-Match	58.10%	59.50%	58.20%	58.20%
Other	4.20%	2.90%	4.20%	4.20%
LSC-ESF late	4.80%	4.70%	4.90%	4.90%
Female	37.30%	37.40%	37.30%	37.30%
Over 50 (P1 and P2)	13.80%	16.20%	13.20%	13.20%
Disabled (P1 and P2)	31.80%	31.60%	30.90%	30.90%
Ethnic minority (P1 and P2)	14.10%	14.10%	14.00%	14.00%
<b>Priority 1</b>				
East of England	5.30%	5.90%	5.20%	5.20%
London	15.70%	14.40%	16.60%	16.60%
East Midlands	8.20%	8.80%	8.10%	8.10%
North East	7.90%	8.00%	7.70%	7.70%
North West	15.20%	14.70%	15.00%	15.00%
South East	7.20%	8.00%	7.10%	7.10%
South West	9.70%	10.00%	9.60%	9.60%
West Midlands	9.70%	9.90%	10.10%	10.10%
Yorkshire & the Humber	8.50%	9.60%	8.30%	8.30%
Merseyside	8.30%	6.50%	8.30%	8.30%



South Yorkshire	4.20%	4.30%	4.00%	4.00%
<b>Priority 2</b>				
East of England	5.40%	8.00%	5.40%	5.40%
London	0.70%	0.70%	0.70%	0.70%
East Midlands	1.90%	2.20%	1.90%	1.90%
North East	1.80%	1.90%	1.80%	1.80%
North West	46.90%	48.50%	46.90%	46.90%
South East	4.20%	4.10%	4.20%	4.20%
South West	2.90%	3.40%	2.90%	2.90%
West Midlands	10.50%	9.20%	10.50%	10.50%
Yorkshire & the Humber	0.70%	0.70%	0.70%	0.70%
Merseyside	22.30%	16.80%	20.30%	20.30%
South Yorkshire	4.80%	4.50%	4.80%	4.80%

## 9.2 Wave 2 weights -- summary

A total of 7,400 people responded to Wave 2. It is likely that the characteristics of those who took part in Wave 2 are different from those that did not, so further weighting was needed to take this into account. The method of weighting Wave 2 consisted of three components:

1. Start with the Wave 1 weight,  $wt1$ .
2. Calculate a non-response weight,  $wt2$ .
3. Multiply  $wt1$  and  $wt2$  to get a pre-calibration weight,  $wt3$ . Calibrate that to the same totals used in Wave 1 to get the final weight.

The three steps are described below.

### Starting weight ( $wt1$ )

The starting weight,  $wt1$ , was the Wave 1 final weight (as described in section 9.1).

### Non-response weight ( $wt2$ )

By using logistic regression it is possible to model the difference between people who responded to Wave 2 and those who did not, and from that model obtain weights to reduce the bias from the differential non-response.

A logistic regression model was fitted using variables both from the sampling frame and from the Wave 1 interview to model response. The variables from the sampling frame used in the model were:

- respondent's region;
- the sampling frame they were sampled from;
- age;
- ethnicity;
- disability status; and
- sex.

The variables from the wave 1 interview were:

- the number of disadvantages the respondent experienced;

- their level of qualification prior to going on the training course;
- their lone-parent status;
- variables summarising their NSSEC status pre-training;
- variables on whether they were NEET (if under 20) or long-term unemployed (if over 20);
- variables indicating the benefits they claimed; and
- a variable indicating whether they found their course relevant.

The parameters in the model were used to estimate the probability of response for each individual. The non-response weight, *wt2* was simply the reciprocal of this probability.

### **Calibrated weights**

The starting weight, *wt1*, was multiplied by the non-response weight, *wt2*, to give a pre-calibration weight, *wt3*. This was then adjusted using the same calibration totals as in Wave 1 to give the final weight.

# 10 Indicative estimates for confidence intervals

Confidence estimates are a measure of precision. They are placed around the survey estimate to give an indication of where the true population value is likely to fall. A 95 percent confidence interval is constructed in such a way that 95 times out of 100 it captures the true population value. This gives us an idea of the margin of error associated with the estimate. If the interval is wide, it indicates the estimate is not very precise; if it is narrow then the estimate is precise and useful.

When estimating a proportion, the margin of error depends on the value of the quantity being estimated and the *effective* sample size (i.e. the sample size adjusted to take into account the efficiency of the sampling design). Table 10.1 below shows the margin of error for various different scenarios.

The table shows that if, for example, a population proportion equal to 30% was being estimated using a sample with an effective sample size of 500, then the margin or error associated with the estimate would be 4.0%.

More usefully, if a sample proportion was found to equal 30% a confidence interval for the true proportion would be 26.0% to 34%.

<b>Table 10.1</b>		<b>Confidence interval examples</b>		
<b>Effective sample size</b>	<b>10% or 90%</b>	<b>30% or 70%</b>	<b>50%</b>	
100	5.9%	9.0%	9.8%	
200	4.2%	6.4%	6.9%	
500	2.6%	4.0%	4.4%	
1,000	1.9%	2.8%	3.1%	
2,000	1.3%	2.0%	2.2%	
5,000	0.8%	1.3%	1.4%	
10,000	0.6%	0.9%	1.0%	

Tables 10.2-10.5 show effective sample sizes for common unweighted bases given in the Wave 2 report. So for example, in Priority 1, the unweighted base is 3,666 and the effective sample size is 1,473.

**Table 10.2 Effective Sample Size by Priority**

	Unweighted Base	Effective Sample size
<b>Overall</b>	7400	2101
<b>Priority</b>		
1	3666	1473
2	2641	1110
4	750	609
5	343	298

**Table 10.3 Effective Sample Size by Region**

Region	Unweighted Base	Effective Sample size
East of England	600	154
London	379	183
East Midlands	365	126
North East	377	113
North West	1106	411
South East	500	117
South West	580	160
West Midlands	779	246
Yorkshire and the Humber	333	115
Merseyside	774	371
South Yorkshire	508	288
Cornwall	1097	878
<b>Total</b>	<b>7398</b>	<b>2100</b>

**Table 10.4 Effective Sample Size by Priority and Funding Stream**

Priority	Funding Stream	n	NEFF
1	ESF	2027	1313
	Match	1509	916
	Both	130	123
2	ESF	1506	902
	Match	1011	582
	Both	124	118
4	ESF	307	242
	Match	443	425
5	ESF	218	182

	Match	125	118
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**Table 10.5 Effective Sample Size by Priority and Region**

Region	Priority	Unweighted Base	Effective Sample Size
East of England	1	273	111
	2	327	288
London	1	336	180
	2	43	41
East Midlands	1	265	116
	2	100	58
North East	1	244	104
	2	133	128
North West	1	578	193
	2	528	404
South East	1	271	96
	2	229	222
South West	1	317	143
	2	263	256
West Midlands	1	438	179
	2	341	219
Yorkshire and the Humber	1	293	111
	2	40	39
Merseyside	1	353	230
	2	421	155
South Yorkshire	1	296	204
	2	212	206
Cornwall	4	750	609
	5	343	298

**Appendix A**                      **Wave 1 advance letter****The Skills for Jobs Study**

We are writing to ask for your help with a telephone survey of people who are on work-related training courses or have been on one recently. This study is for the Department for Work and Pensions (DWP) and is being carried out by the National Centre for Social Research (NatCen), an independent research organisation.

The study is an important one, as the results will help the government and the European Commission to plan future work-related schemes and improve the services they currently provide.

Your name has been chosen at random from the information that the DWP holds of people doing this type of training. A NatCen telephone interviewer will call you soon to ask some questions about the training you have done, and about how it relates to the job you are doing now or any job you might want to do in the future. This should only take around 25 minutes of your time and we would also like to speak to you again in about six month's time to ask whether the training has been useful to you in the longer term.

If you are busy when the interviewer phones, he or she will be happy to call again at a more convenient time. If you don't want to take part in the survey, you can either tell the interviewer when they call or let us know before then (by contacting us on the phone number or email address below).

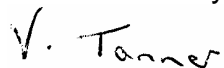
If you find it difficult to speak over the phone, we can arrange for an interviewer to come to your home instead. There is more information on this option enclosed in this letter.

We are very grateful to everyone who does take part in the study. Everything that you tell the interviewer will be kept confidential by NatCen and the DWP and will only be used for research purposes. At the end of the interview, the interviewer will ask you whether you are happy to give permission for your answers to be linked to records held by the DWP. You can read more about what this means on the back of this letter.

If you have any questions about the study please call us on 0800 652 9294 or email us at [skillsforjobs@natcen.ac.uk](mailto:skillsforjobs@natcen.ac.uk), or you can ask the interviewer who calls to speak to you. Alternatively, to find out more about the study visit our webpage at [http://esf.gov.uk/esf\\_in\\_action/cohort\\_survey.asp](http://esf.gov.uk/esf_in_action/cohort_survey.asp).

Thank you for your help.

Yours sincerely,



Vicky Tanner, Project Supervisor



European Union  
European Social Fund  
Investing in jobs and skills

**DWP** Department for  
Work and Pensions

## How will the survey information be used?

Information collected in the survey will be kept confidentially and securely by the Department for Work and Pensions (DWP). This letter sets out how the DWP plans to use the answers you give in the study.

In order to make the information we collect more useful, we would like your permission to link our administrative records to your survey answers. These records hold information about the periods of time when people are in work and about the sort of work that they are doing. We can assure you that:

- Administrative records would be linked to survey data using a unique identifier, and linked data would be anonymised.
- The information will only be used for research and statistical purposes.
- The information will be kept confidential.
- The information will **not** be used to work out whether anyone is claiming benefits or tax credits they should not be.
- Any current or future claims for benefits or tax credits will not be affected.
- You can withdraw your permission at any time.

## Frequently asked questions

### *Why does the DWP want to link survey data?*

The DWP would like to link information from the survey with its administrative records to look at any changes in your employment status following your participation in the work-related training. This will enable us to look at how attending training such as this affects the type of work that people go on to do. The information will only be used for research purposes, the DWP will keep this information confidential and you will not be identified by any further research.

### *What if I change my mind?*

If you give your permission, we will send you a letter detailing what you have agreed to which will include a slip for you to return if you change your mind. You can withdraw your permission to link these records at any time.

### *What will happen if I do not give permission?*

Even if you don't want to give permission for this we would still like you to take part in the study. Saying that you do not give permission will have no effect on any benefits you are entitled to receive or any future participation in work-related training schemes.

If you have any questions about how information from this study will be used, please call 0800 652 9294 or email [skillsforjobs@natcen.ac.uk](mailto:skillsforjobs@natcen.ac.uk).

Thank you for your help.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'E. Brooks', with a horizontal line underneath the name.

Ellenor Brooks  
European Social Fund Evaluation Team



## Appendix B Wave 2 advance letter: telephone interviews

### The Skills for Jobs Study

Last year, you kindly took part in a survey about a work-related training course you were on or had been on recently. It was called **The Skills for Jobs Study**. This was part of a study carried out by the National Centre for Social Research (NatCen) for the Department for Work and Pensions (DWP).

Thank you for helping to make the first part of the study a success and for agreeing to be re-contacted. Your views are very important and will help the government to plan future work-related training schemes and improve the services they currently provide.

We would now like to talk to you again to find out what you have been doing since we last spoke to you. This will help us get an even clearer picture about the training you have done, and about how it relates to the job you are doing now or any job you might want to do in the future.

A telephone interviewer will call you in the next few weeks to ask you some more questions. This should only take about 25 minutes of your time and if you are busy when the interviewer phones, he or she will be happy to call again at a more convenient time. Everything that you tell the interviewer will be kept confidential by NatCen and the DWP and will only be used for research purposes. No information that can identify you will be passed to anyone else without your permission.

Last time we spoke to you, we asked whether you were happy to give permission for your answers to be linked to records held by the DWP. You can read more about what this means on the back of this letter.

If you have any questions about the study please call us on 0800 652 9294 or email us at [skillsforjobs@natcen.ac.uk](mailto:skillsforjobs@natcen.ac.uk), or you can ask the interviewer who calls to speak to you. Alternatively, to find out more about the study visit our webpage at [http://esf.gov.uk/esf\\_in\\_action/cohort\\_survey.asp](http://esf.gov.uk/esf_in_action/cohort_survey.asp).

Thank you for your help.

Yours sincerely,

*V. Tanner*

Vicky Tanner, Project Supervisor





### How will the survey information be used?

The last time we spoke to you, we asked for your permission to link DWP administrative records to your survey answers. These records hold information about the periods of time when people are in work and about the sort of work that they are doing. If you gave us permission to do this, we can assure you that:

- Administrative records would be linked to survey data using a unique identifier, and linked data would be anonymised.
- The information will only be used for research and statistical purposes.
- The information will be kept confidential.
- The information will **not** be used to work out whether anyone is claiming benefits or tax credits they should not be.
- Any current or future claims for benefits or tax credits will not be affected.
- You can withdraw your permission at any time.

### Frequently asked questions

#### *Why does the DWP want to link survey data?*

The DWP would like to link information from the survey with its administrative records to look at any changes in your employment status following your participation in the work-related training. This will enable us to look at how attending training such as this affects the type of work that people go on to do. The information will only be used for research purposes, the DWP will keep this information confidential and you will not be identified by any further research.

#### *What if I did not give permission?*

Even if you did not give permission for this we would still like you to take part in the study. Saying that you do not give permission will have no effect on any benefits you are entitled to receive or any future participation in work-related training schemes.

#### *What if I gave permission and have now changed my mind?*

You can withdraw your permission at any time by returning the slip below to: Skills for Jobs Survey, NatCen, 35 Northampton Square, London, EC1V 0AX.

Alternatively, please call us on 0800 652 9294 or email [skillsforjobs@natcen.ac.uk](mailto:skillsforjobs@natcen.ac.uk) if you have any questions about how information from this study will be used.

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**To be returned if you gave permission, but have now changed your mind.**

I wish to withdraw my permission for my survey answers to be linked to DWP administrative records.

Name: .....

Date of birth: .....

Serial number (see front of letter): .....

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## Appendix C Wave 2 advance letter: face-to-face interviews

### The Skills for Jobs Study

Last year, you kindly took part in a survey about a work-related training course you were on or had been on recently. It was called **The Skills for Jobs Study**. This was part of a study carried out by the National Centre for Social Research (NatCen) for the Department for Work and Pensions (DWP).

Thank you for helping to make the first part of the study a success and for agreeing to be re-contacted. Your views are very important and will help the government to plan future work-related training schemes and improve the services they currently provide.

We would now like to talk to you again to find out what you have been doing since we last spoke to you. This will help us get an even clearer picture about the training you have done, and about how it relates to the job you are doing now or any job you might want to do in the future.

We will be contacting you soon by phone to arrange a convenient time for the interview to take place. An interviewer will then come to your home to speak to you there. This should only take around 25 minutes of your time. Our interviewer will carry an identification card, which includes their photograph and interviewer number.

You are welcome to have a friend or family member present at the interview if you wish.

Everything that you tell the interviewer will be kept confidential by NatCen and the DWP and will only be used for research purposes. No information that can identify you will be passed to anyone else without your permission.

Last time we spoke to you, we asked whether you were happy to give permission for your answers to be linked to records held by the DWP. You can read more about what this means on the back of this letter.

If you have any questions about the study please call us on 0800 652 9294 or email us at [skillsforjobs@natcen.ac.uk](mailto:skillsforjobs@natcen.ac.uk), or you can ask the interviewer who calls to speak to you. Alternatively, to find out more about the study visit our webpage at [http://esf.gov.uk/esf\\_in\\_action/cohort\\_survey.asp](http://esf.gov.uk/esf_in_action/cohort_survey.asp).

Thank you for your help.

Yours sincerely,



Karen Quinlan

Interviewer Name: \_\_\_\_\_

Interviewer ID Number: \_\_\_\_\_





### How will the survey information be used?

The last time we spoke to you, we asked for your permission to link DWP administrative records to your survey answers. These records hold information about the periods of time when people are in work and about the sort of work that they are doing. If you gave us permission to do this, we can assure you that:

- Administrative records would be linked to survey data using a unique identifier, and linked data would be anonymised.
- The information will only be used for research and statistical purposes.
- The information will be kept confidential.
- The information will **not** be used to work out whether anyone is claiming benefits or tax credits they should not be.
- Any current or future claims for benefits or tax credits will not be affected.
- You can withdraw your permission at any time.

### Frequently asked questions

#### *Why does the DWP want to link survey data?*

The DWP would like to link information from the survey with its administrative records to look at any changes in your employment status following your participation in the work-related training. This will enable us to look at how attending training such as this affects the type of work that people go on to do. The information will only be used for research purposes, the DWP will keep this information confidential and you will not be identified by any further research.

#### *What if I did not give permission?*

Even if you did not give permission for this we would still like you to take part in the study. Saying that you do not give permission will have no effect on any benefits you are entitled to receive or any future participation in work-related training schemes.

#### *What if I gave permission and have now changed my mind?*

You can withdraw your permission at any time by returning the slip below to: Skills for Jobs Survey, NatCen, 35 Northampton Square, London, EC1V 0AX.

Alternatively, please call us on 0800 652 9294 or email [skillsforjobs@natcen.ac.uk](mailto:skillsforjobs@natcen.ac.uk) if you have any questions about how information from this study will be used.

✂-----

**To be returned if you gave permission, but have now changed your mind.**

I wish to withdraw my permission for my survey answers to be linked to DWP administrative records.

Name: .....

Date of birth: .....

Serial number (see front of letter): .....  
P2852