



National Offender  
Management Service



European Union  
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Investing in jobs and skills

## Report - RS01YH

# Assessing the Link between Qualifications & Occupations

Identifying if certain types of qualification have  
led to certain types of employment,  
during the NOMS CFO programme in  
Yorkshire & Humberside (inc. South Yorkshire)

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## Overview

This is the first in a series of short statistical reports aimed at better understanding the nature of the participants worked with on the NOMS Co-financing programme, and the mechanisms that help move them towards employment and reduce reoffending. For more information on this report, please contact the Research & Statistics team via the CFO Helpdesk.

Data presented in this report is taken from CATS (Case Assessment & Tracking System), for the second round of the CFO programme through to October 2013. Analysis is restricted to those participants that started on the programme in Yorkshire & Humberside (including South Yorkshire<sup>^</sup>), attaining at least one qualification (including education/training hard outcomes) and went on to gain employment with a known occupation.

The aim of this report is to identify links between the subject nature of qualifications achieved and the occupations that have been entered. For example, we may expect that those who gained qualifications relating to health & safety to go into higher risk occupations such as construction. In contrast, we may not expect a participant who has achieved qualifications in hair & beauty to go on to gain employment in engineering. Here we use statistical analysis to identify '*clusters*' of qualifications and occupations. The qualifications in a given *cluster* are likely to lead to the occupations also assigned to that *cluster*, and less likely to lead to the occupations found in other *clusters*. This report highlights such *clusters* and describes in more detail the most prevalent *clusters*.

By studying the identified clusters of qualifications and occupations, we gain insight into how certain qualifications lead to particular occupations. We are also able to identify qualifications that may be seen as irrelevant to the type of employment gained. This judgement however is subjective and left to the reader to determine.

## Results

On the next page can be found an interactive high-resolution map of the links between qualifications and occupations. This map has been made 'zoomable', so that the detail can be seen as you zoom in while capturing the entire map on a single page. Each labelled marker represents either a qualification or occupation as entered on CATS. The thicker the link between them, the more participants have achieved both that qualification and occupation. Finally, the map is colour-coded to show the different clusters found. All of the qualifications and occupations with the same colour marker have been statistically determined to have a relationship between them.

<sup>^</sup>Unfortunately there is not enough data to perform this analysis separately for South Yorkshire, and so analysis has been performed over Yorkshire & Humberside as a whole.  
\*Qualifications are presented as they are entered on CATS. As such, several spelling variations of the same qualification may be seen in the map overleaf. The decision not to 'merge' the same or similar qualifications into a standardised 'label' was both a practical and analytical one, ensuring we capture as much information about the mechanisms as possible.



## Identified qualification/occupation clusters

Below are the five most prevalent qualification/occupation clusters identified in this analysis. Each table relates to a specific cluster, detailing the occupations and qualifications it contains. For brevity, these tables are limited to the top 10 most commonly claimed outcomes where applicable. Please note that the figures in these tables are the number of participants that have achieved that qualification/occupation, and is limited to those participants who have been included in this analysis - participants who have gained both at least one qualification and employment with a known occupation. Percentages in each table will not necessarily sum to 100%.

Finally, consideration should be given to the limitations of the data below. Many occupations and qualifications are only achieved by a very small number of participants (often only a single individual). For example, looking at the first cluster (Process Operatives) only one participant gained training in Electrical Installation. Although we can be confident that this individual belongs to this cluster in this instance, it should not be inferred that Electrical Installation training always leads to the types of occupations in this cluster. As the number of participants gaining an occupation/qualification increases, the more confident we can be that the occupation/qualification belongs to the cluster.

Cluster Description:			A: Process Operatives		
Occupations (Top 10)	No.	%	Qualifications (Top 10)	No.	%
Process Operatives	16	34%	CSCS	36	58%
Elementary Construction Occupations	8	17%	Warehousing	6	10%
Engineering Professionals	7	15%	Engineering	6	10%
Sales Assistants and Retail Cashiers	6	13%	Asbestos Awareness	2	3%
Conservation and Environment	5	11%	Site Safety	2	3%
Construction Operatives	3	6%	Food Safety/Hygiene	2	3%
Sales Related Occupations	2	4%	FLT	2	3%
			Electrotechnical	1	2%
			BOSIET/MIST	1	2%
			Electrical Installation	1	2%

Cluster Description:			B: Elementary Services		
Occupations (Top 10)	No.	%	Qualifications (Top 10)	No.	%
Other Elementary Services Occupations	16	47%	FLT	11	46%
Mobile Machine Drivers and Operatives	11	32%	CSCS	4	17%
Elementary Cleaning Occupations	5	15%	Asbestos Awareness	4	17%
Housekeeping and Related Services	2	6%	Adult Literacy/Numeracy	2	8%
			EASE Employability	1	4%
			IT	1	4%
			Slinger and Signaller Certificate	1	4%

Cluster Description:			C: Construction & Building				
Occupations (Top 10)		No.	%	Qualifications (Top 10)		No.	%
Construction and Building Trades	7	41%	Asbestos Awareness	8	31%		
Metal Forming, Welding and Related	7	41%	Adult Literacy/Numeracy	5	19%		
Textiles and Garments Trades	3	18%	FLT	5	19%		
			Health & Safety	4	15%		
			Warehousing & Storage	2	8%		
			Scaffolding	1	4%		
			IT	1	4%		

Cluster Description:			D: Transport				
Occupations (Top 10)		No.	%	Qualifications (Top 10)		No.	%
Road Transport Drivers	17	100%	Driver Training	6	43%		
			Construction	2	14%		
			Food Safety/Hygiene	2	14%		
			FLT	1	7%		
			First Aid	1	7%		
			Plant Machinery	1	7%		
			Streetworks	1	7%		

Cluster Description:			E: Admin & Sales				
Occupations (Top 10)		No.	%	Qualifications (Top 10)		No.	%
Other Administrative Occupations	4	44%	Food Safety	7	41%		
Elementary Sales Occupations	3	33%	ECDL	6	35%		
Elementary Administration Occupations	2	22%	Energy Sales	1	6%		
			Health & Social Care	1	6%		
			Computerised Accounts	1	6%		
			FLT	1	6%		

## Describing the nature of participants found within each qualification/occupation cluster

The table below details the demographic and assessment characteristics of the participants found in each of the five qualification/occupation clusters presented previously.

Factor	Process Operatives	Elementary Services	Construction & Building	Transport	Admin & Sales
Demo: % Aged 50 or over	5.6%	5.2%	17.1%	0.0%	23.1%
Demo: % Aged Under 21	14.0%	10.3%	2.4%	0.0%	15.4%
Demo: % BAME	0.9%	1.7%	29.3%	54.8%	11.5%
Demo: % Custody Starts	5.6%	20.7%	7.3%	12.9%	0.0%
Demo: % Female	2.8%	0.0%	0.0%	0.0%	30.8%
Assess: % Alcohol Need	38.3%	34.5%	29.3%	6.5%	30.8%
Assess: % Attitude & Life Skills Need	67.3%	94.8%	82.9%	87.1%	84.6%
Assess: % Drugs Need	33.6%	32.8%	17.1%	6.5%	0.0%
Assess: % Education Need	95.3%	75.9%	100.0%	100.0%	96.2%
Assess: % Financial Status Need	45.8%	37.9%	65.9%	29.0%	65.4%
Assess: % Health Need	29.0%	19.0%	36.6%	58.1%	23.1%
Assess: % Housing Need	43.9%	5.2%	29.3%	77.4%	65.4%
Assess: % Relationships Need	26.2%	43.1%	29.3%	54.8%	23.1%
Assess: % Low Motivation on Starting	18.7%	31.0%	14.6%	61.3%	38.5%
<b>Total Participants in Cluster</b>	<b>107</b>	<b>58</b>	<b>41</b>	<b>31</b>	<b>26</b>

Here we can see that the profile of the participants within each cluster varies somewhat. For example, those participants in the 'Elementary Services' cluster were more likely to start on the project in custody than participants in the other clusters, while the 'Admin & Sales' cluster contains a high proportion (31%) of women.