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Management Service



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Report - RS01WM

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 the West Midlands

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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 the West Midlands, attaining at least one qualification (including education/training hard outcomes) and went on to gain employment with a known occupation.

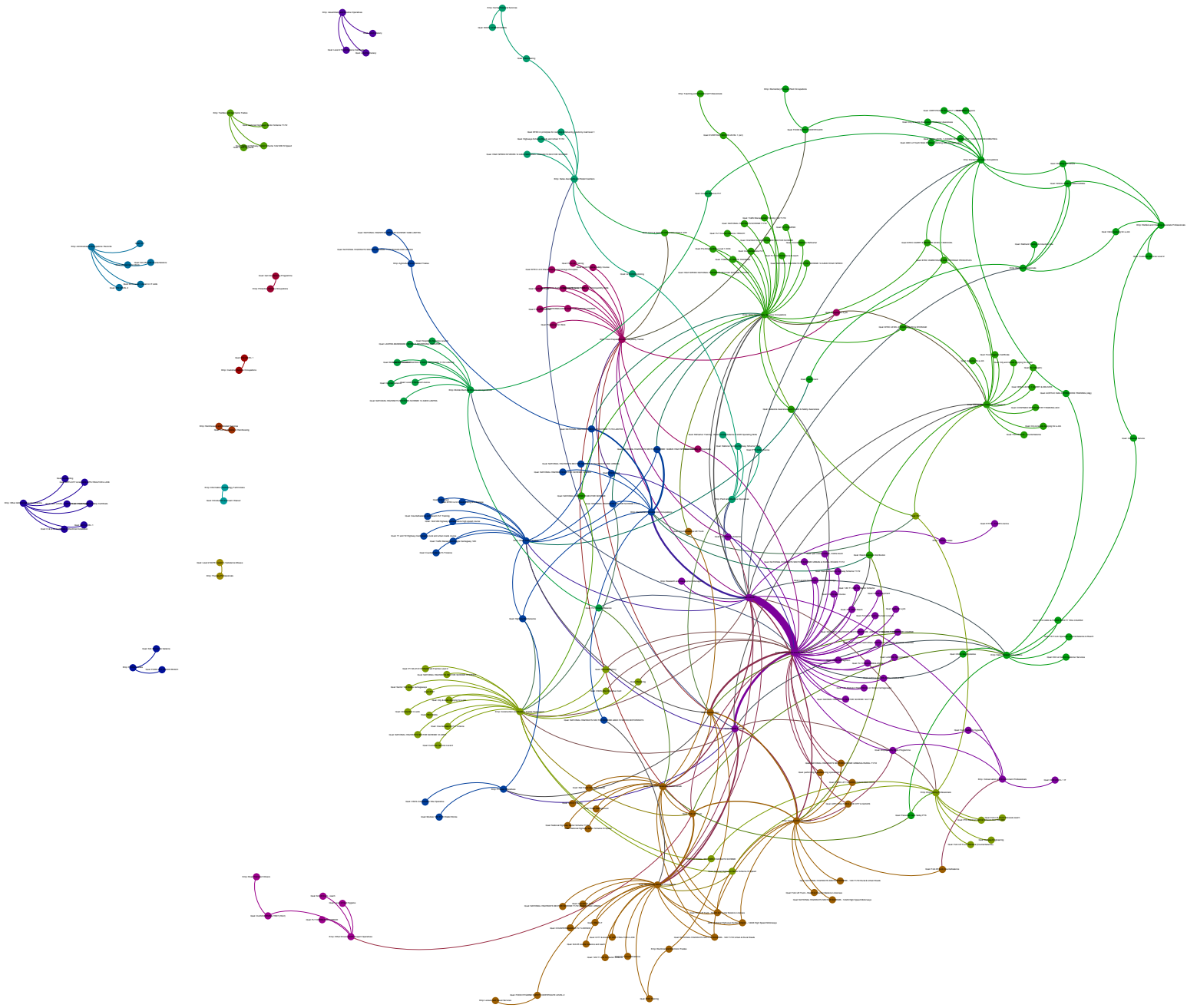
The aim of this report is to identify links between the subject nature of qualifications achieved and the occupations that have been entered. For example, we may expect that those who gained qualifications relating to health & safety to go into higher risk occupations such as construction. In contrast, 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.

*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 (Construction & Building) only one participant gained training in IT. Although we can be confident that this individual belongs to this cluster in this instance, it should not be inferred that IT 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: Construction & Building		
Occupations (Top 10)	No.	%	Qualifications (Top 10)	No.	%
Construction and Building Trades	71	90%	CSCS	55	50%
Conservation and Environment	5	6%	Health & Safety	22	20%
Vehicle Trades	2	3%	Traffic Management	17	15%
Research and Development Managers	1	1%	FLT/Telescopic	6	5%
			Employability Skills	4	4%
			Food Safety & Hygiene	2	2%
			Apply For A Job	2	2%
			Forward Tipping Dumper	1	1%
			Retail	1	1%
			IT	1	1%

Cluster Description:			B: Storage		
Occupations (Top 10)	No.	%	Qualifications (Top 10)	No.	%
Elementary Storage Occupations	29	39%	FLT	29	38%
Construction Operatives	25	33%	Construction	19	25%
Transport Associate Professionals	18	24%	Traffic Management	16	21%
Electrical and Electronic Trades	2	3%	Applying For A Job	3	4%
Leisure and Travel Services	1	1%	Food Safety/Hygiene	2	3%
			IPAF	2	3%
			Manufacturing Operations	2	3%
			CPCS	1	1%
			Operatives Card	1	1%
			Rail Track	1	1%

Cluster Description:			C: Services & Cleaning				
Occupations (Top 10)		No.	%	Qualifications (Top 10)		No.	%
Elementary Services Occupations	32	64%	Applying For A Job	10	22%		
Elementary Cleaning Occupations	17	34%	Warehousing & Distribution	9	20%		
Teaching and Educational Prof.	1	2%	FLT	8	17%		
			Traffic Management	7	15%		
			Carry & Deliver	4	9%		
			Asbestos Awareness	3	7%		
			Adult Numeracy	2	4%		
			Confined Spaces	1	2%		
			Food Hygiene	1	2%		
			Employability	1	2%		

Cluster Description:			D: Traffic				
Occupations (Top 10)		No.	%	Qualifications (Top 10)		No.	%
Elementary Construction Occupations	23	48%	Traffic Management	37	76%		
Other Skilled Trades	17	35%	CSCS	7	14%		
Process Operatives	5	10%	FLT	4	8%		
Agricultural and Related Trades	3	6%	Warehousing & Storage	1	2%		

Cluster Description:			E: Sales				
Occupations (Top 10)		No.	%	Qualifications (Top 10)		No.	%
Elementary Sales Occupations	16	41%	CSCS	7	18%		
Sales Related Occupations	11	28%	Food Safety/Hygiene	5	13%		
Welfare Professionals	6	15%	Mentoring	4	10%		
Welfare and Housing Assoc. Prof.	5	13%	Working with others	4	10%		
Elementary Process Plant Occupations	1	3%	PTS	4	10%		
			Customer Service	4	10%		
			Acrylic Nail Extensions	2	5%		
			Applying For A Job	2	5%		
			Sugarcraft & Cake Decorating	2	5%		
			Working with Young People	1	3%		

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	Construction & Building	Storage	Services & Cleaning	Traffic	Sales
Demo: % Aged 50 or over	0.5%	2.7%	1.1%	3.4%	15.8%
Demo: % Aged Under 21	10.0%	5.5%	4.3%	0.0%	2.6%
Demo: % BAME	29.5%	54.8%	42.4%	41.6%	26.3%
Demo: % Custody Starts	2.6%	1.4%	0.0%	0.0%	0.0%
Demo: % Female	0.5%	0.0%	6.5%	0.0%	43.4%
Assess: % Alcohol Need	20.5%	19.9%	20.7%	30.3%	35.5%
Assess: % Attitude & Life Skills Need	73.7%	76.7%	69.6%	61.8%	69.7%
Assess: % Drugs Need	43.2%	50.7%	38.0%	34.8%	27.6%
Assess: % Education Need	98.9%	97.3%	90.2%	97.8%	75.0%
Assess: % Financial Status Need	16.3%	23.3%	32.6%	18.0%	36.8%
Assess: % Health Need	13.7%	21.2%	31.5%	10.1%	30.3%
Assess: % Housing Need	10.0%	11.6%	18.5%	33.7%	44.7%
Assess: % Relationships Need	11.6%	8.9%	14.1%	13.5%	27.6%
Assess: % Low Motivation on Starting	51.1%	48.6%	45.7%	16.9%	34.2%
Total Participants in Cluster	190	146	92	89	76

Here we can see that the profile of the participants within each cluster varies somewhat. For example, a large proportion (43%) of those participants in the 'Sales' cluster were women, while the 'Construction & Building' cluster contains a relatively high proportion (10%) of participants aged under 21.