

# Radial plots for the 2011 area classification for health areas: version 2

May 2018

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### **Radial Plots**

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## Radial plots for the 2011 area classification for health areas

#### Introduction

This paper displays radial plots for the 59 Census statistics used to derive the 2011 area classification for health areas. The classification places each of the 235 UK health areas into clusters with other health areas that are most similar in terms of census statistics. This enables similar health areas to be classified according to their particular combination of characteristics. For more information about the methodology used to produce the classification, see the Methodology Note.

Radial plots are presented for each of the 8 supergroups, 16 groups and 22 subgroups that comprise the classification. Each data point on a radial plot displays the value for each one of the 59 standardised and transformed 2011 Census statistics used. Data points with positive values represent variables that have a higher value than the standardised UK mean or the standardised parent cluster mean. A parent cluster refers to a supergroup or group in which a given group or subgroup belongs. For example the parent cluster for the group 1b – Thriving Rural is supergroup 1 – Affluent England, and the parent cluster for the subgroup 1b1 – Affluent Rural is the group 1b – Thriving Rural. Data points with negative values represent variables that have a lower value than the standardised UK mean or the standardised UK mean or the standardised parent cluster for the subgroup 1b1 – Affluent Rural is the group 1b – Thriving Rural. Data points with negative values represent variables that have a lower value than the standardised UK mean or the standardised parent cluster mean.

On the radial plots, for supergroups a red circle represents the standardised UK mean, and for groups and subgroups it represents the standardised parent cluster mean – zero in all cases. This circle around the radial is at a constant distance from the centre. Therefore, data points that appear on the outside of the circle represent variables that have a higher value than the standardised UK mean or the standardised parent cluster mean, while data points that appear on the inside of the circle represent variables that have a lower value than the standardised UK mean or the standardised parent cluster mean.

In addition to the data points, each of the radial plots shows a brief description for the 59 final 2011 Census statistics grouped into 5 different Census domains. A full description of these Census statistics is shown on page 7 with further detail about some of these statistics in the glossary on page 8.

For supergroups, the blue line on radial plots represents the difference between the values of standardised 2011 Census statistics for health areas within a given supergroup and the value for the standardised UK mean (which includes all 235 health areas).

For radial plots showing groups, there are two lines in addition to the red circle: the blue line represents the difference between the standardised values of 2011 Census statistics for health areas within a given group and the value of the standardised parent cluster mean (for groups, the parent cluster is the supergroup to which it belongs). Data points on the blue line that appear on the outside of the circle represent variables where the standardised value for the given group is higher than the standardised mean for the supergroup to which it belongs.

Data points that appear on the inside of the circle represent standardised values that are lower than the parent group standardised mean. The green line on each radial plot for groups represents the difference between the standardised values of Census statistics and the standardised UK

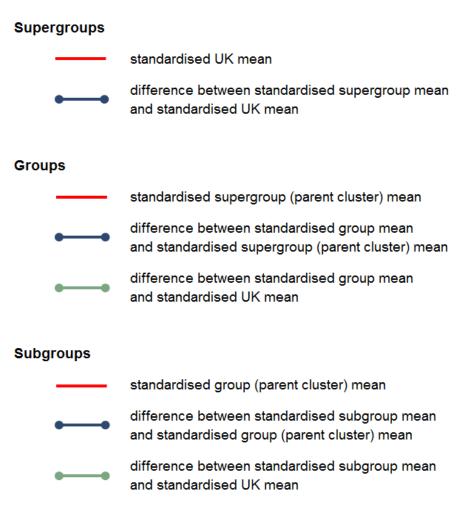


mean for each statistic. Again, data points outside the circle indicate a higher standardised value than the UK mean and data points inside the circle indicate a lower value.

Radial plots for subgroups contain a blue line - which displays the difference from the standardised values of Census variables and the standardised parent cluster mean (in this case the parent cluster is the group in which the given subgroup belongs) – and a green line, which represents the difference between the standardised values of Census statistics for a given subgroup and the standardised UK mean for each variable.

With the previous report published (September 2017) for both groups and subgroups, the green radial lines, indicating for groups the difference between the standardised groups mean and standardised UK mean, and for subgroups the difference between the standardised subgroup mean and standardised UK mean, were incorrectly shown. This has been corrected in this version of the report.

#### Radial plot legend summary





#### List of 59 final 2011 Census Statistics

Number	Description	Domain
1	% Persons living in a communal establishment	
2	Number of persons per hectare	
3	% Persons aged 0 to 4	
4	% Persons aged 5 to 14	
5	% Persons aged 25 to 44	
6	% Persons aged 45 to 64	
7	% Persons aged 65 to 89	
8	% Persons aged 90 and over	e
9	% Persons aged over 16 who are single	nctr
10	% Persons aged over 16 who are married or in a registered same-sex civil partnership	Demographic structure
11	% Persons aged over 16 who are divorced or separated	ohic
12	% Persons who are white	grap
13	% Persons who have mixed ethnicity or are from multiple ethnic Groups	Ĕ
14	% Persons who are Asian/Asian British: Indian/Pakistani/Bangladeshi	De
15	% Persons who are Asian/Asian British: Chinese and Other	
16	% Persons who are Black/African/Caribbean/Black British	
17	% Persons who are Arab or are from another ethnic Group	
18	% Persons whose country of birth is the UK or Ireland	
19	% Persons whose country of birth is in the old EU (pre 2004 accession countries)	
20	% Persons whose country of birth is in the new EU (post 2004 accession countries)	
21	% Persons whose main language is not English and cannot speak English well or at all	
22	% Households with no children	Household composition
23	% Households with non-dependent children	lseh posi
24	% Households with full-time students	Hot
25	% Households who live in a detached house or bungalow	Ŭ
26	% Households who live in a semi- detached house or bungalow	
27	% Households who live in a terrace or end-terrace house	
28	% Households who live in a flat	- Bu
29	% Households who live in a caravan or other mobile or temporary structure	Housing
30	% Households who own or have shared ownership of property	Р
31	% Households who are social renting	
32	% Households who are private renting	
33	% Households who have one fewer room or less rooms than required	

Number	Description	Domain
34	Individuals day-to-day activities limited a lot or a little (Standardised Illness Ratio)	
35	% Persons providing unpaid care	
36	% Persons aged over 16 whose highest level of qualification is Level 1, Level 2 or Apprenticeship	
37	% Persons aged over 16 whose highest level of qualification is Level 3 qualifications	, ui ui
38	% Persons aged over 16 whose highest level of qualification is Level 4 qualifications and above	Socio-Economic
39	% Persons aged over 16 who are schoolchildren or full-time students	
40	% Households with 2 or more cars or vans	
41	% Persons aged between 16 and 74 who use public transport to get to work	
42	% Persons aged between 16 and 74 who use private transport to get to work	
43	% Persons aged between 16 and 74 who walk, cycle or use an alternative method to get to work	
44	% Persons aged between 16 and 74 who are unemployed	
45	% Employed persons aged between 16 and 74 who work part time	
46	% Employed persons aged between 16 and 74 who work full-time	
47	% Employed persons aged between 16 and 74 who work in the agriculture, forestry or fishing industries	
48	% Employed persons aged between 16 and 74 who work in the mining, quarrying or construction industries	
49	% Employed persons aged between 16 and 74 who work in the manufacturing industry	
50	% Employed persons aged between 16 and 74 who work in the energy, water or air conditioning supply industries	
51	% Employed persons aged between 16 and 74 who work in the wholesale and retail trade; repair of motor vehicles and motor cycles	nent
52	% Employed persons aged between 16 and 74 who work in the transport or storage industries	Employment
53	% Employed persons aged between 16 and 74 who work in the accommodation or food service activities industries	Ш
54	% Employed persons aged between 16 and 74 who work in the information and communication or professional, scientific and technical activities	-
55	% Employed persons aged between 16 and 74 who work in the financial, insurance or real estate activities	
56	% Employed persons aged between 16 and 74 who work in the administrative or support service activities industries	
57	% Employed persons aged between 16 and 74 who work in the public administration or defence; compulsory social security industries	
58	% Employed persons aged between 16 and 74 who work in the education sector	
59	% Employed persons aged between 16 and 74 who work in the human health and social work activities industries	



#### Census glossary

Old EU countries – refers to the 15 pre 2004 accession countries: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Irish Republic, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden and the UK.

New EU countries - refers to the 10 accession countries who joined the EU in 2004 – Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia, and the 2 countries who joined in 2007 – Bulgaria and Romania.

Industries – based on aggregations of industries from the Standard Industrial Classification 2007 (SIC 2007):

- agriculture, forestry and fishing
- mining, quarrying or construction industries
- manufacturing industry
- energy, water or air conditioning supply industries
- wholesale and retail trade; repair of motor vehicles and motor cycles industries
- transport or storage industries
- accommodation or food service activities industries
- information and communication or professional, scientific and technical activities industries
- financial, insurance or real estate industries
- administrative or support service activities industries
- public administration or defence; compulsory social security industries

Qualifications - refers to different past and present qualifications:

- level 1, examples include GCSEs (grades D-G) and diplomas (City & Guilds, BTEC)
- level 2, examples include GCSEs (grades A\*-C) and O Levels (grades A-C)
- level 3, examples include A Levels (grades A-E) and AS Levels
- level 4 and above, examples include Higher National Certificates (HNCs) and degrees

#### Radial plot naming convention

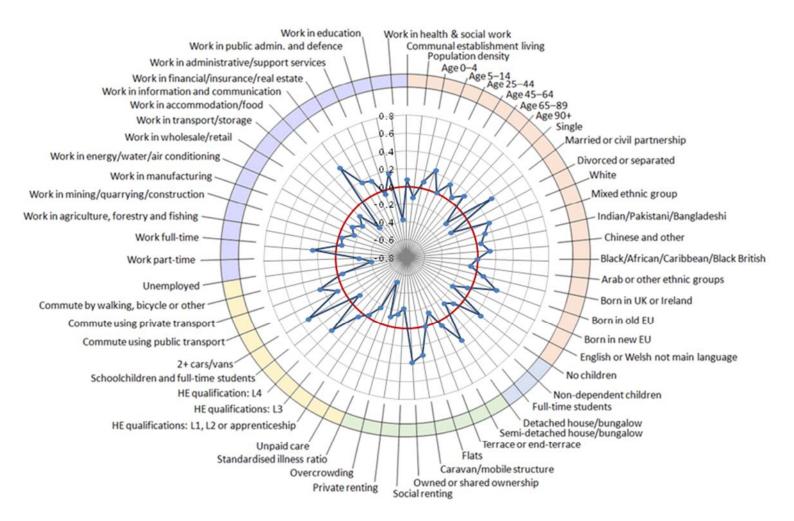
For each radial plot, there may be:

- one cluster name (with code) indicating the radial plot is for a supergroup
- two cluster names (with codes) indicating the group name in bold, and the parent supergroup
- three cluster names (with codes) indicating the subgroup name in bold, and the parent supergroup and group

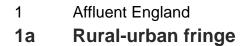


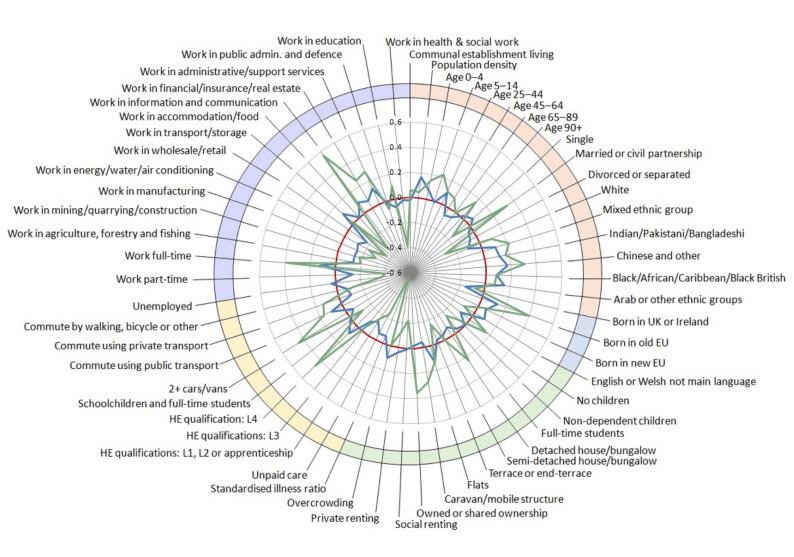
#### Radial Plots for supergroups, groups and subgroups

#### 1 Affluent England



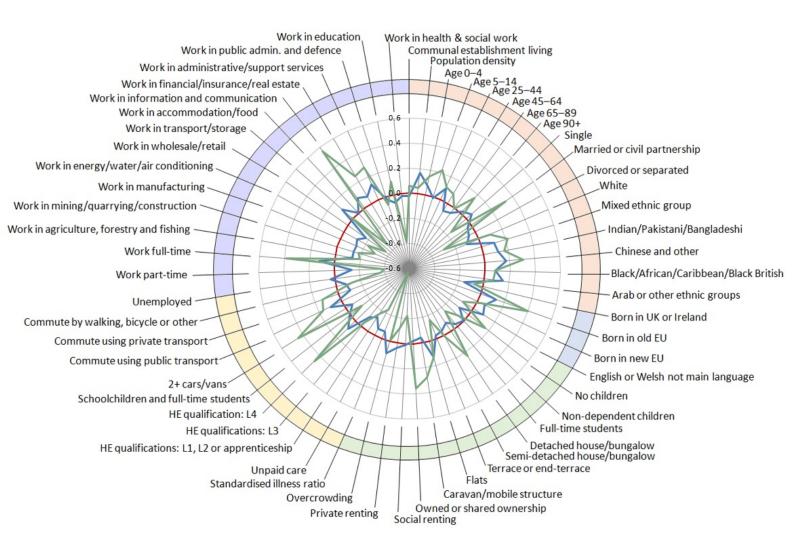








- 1 Affluent England
- 1a Rural-urban fringe
- 1a1 Rural-urban fringe

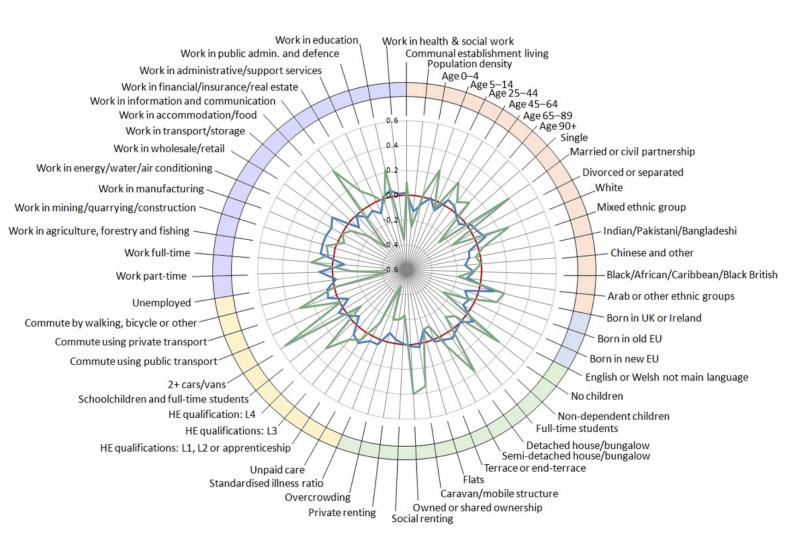


#### This subgroup is the same as the parent group



1 Affluent England

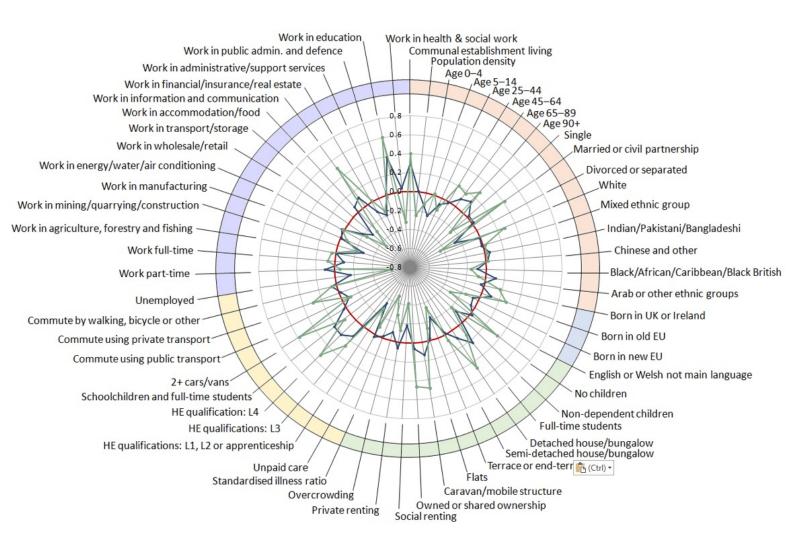
1b Thriving rural





- 1 Affluent England
- 1b Thriving rural

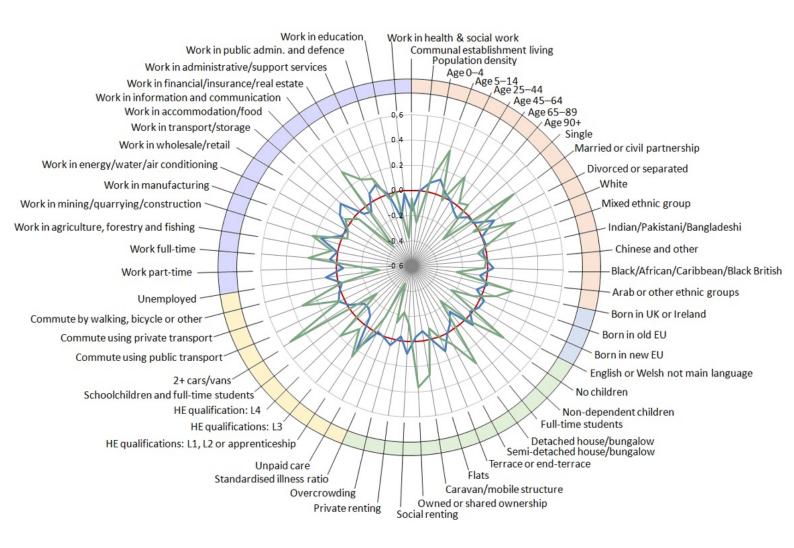
#### 1b1 Affluent rural





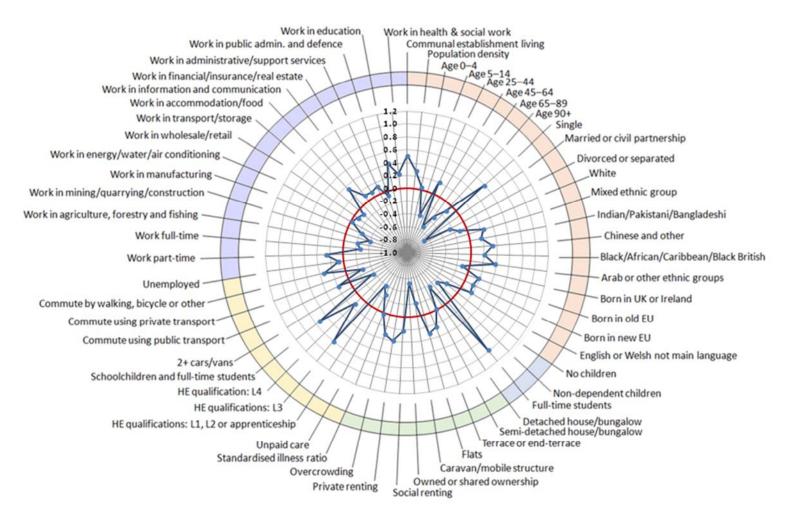
- 1 Affluent England
- 1b Thriving rural

#### 1b2 Rural growth areas



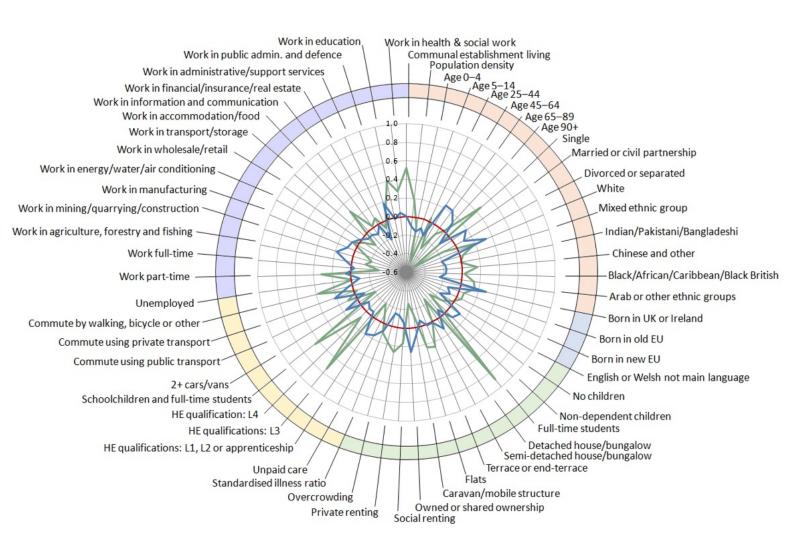


#### 2 Business, education and heritage centres





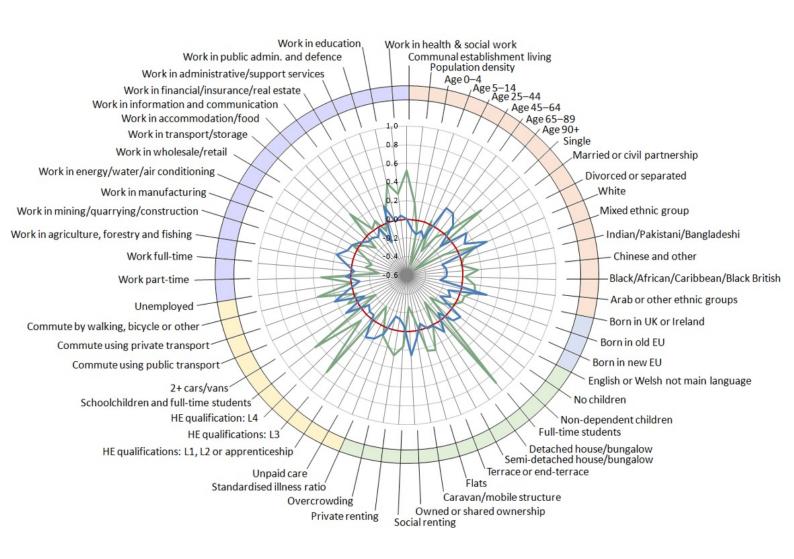
- 2 Business, education and heritage centres
- 2a Larger towns and cities



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- 2 Business, education and heritage centres
- 2a Larger towns and cities

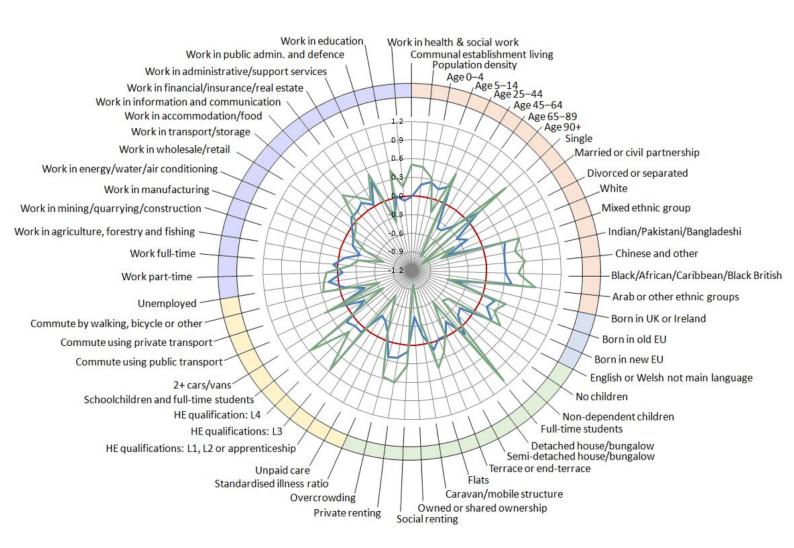
#### 2a1 Larger towns and cities



#### This subgroup is the same as the parent group



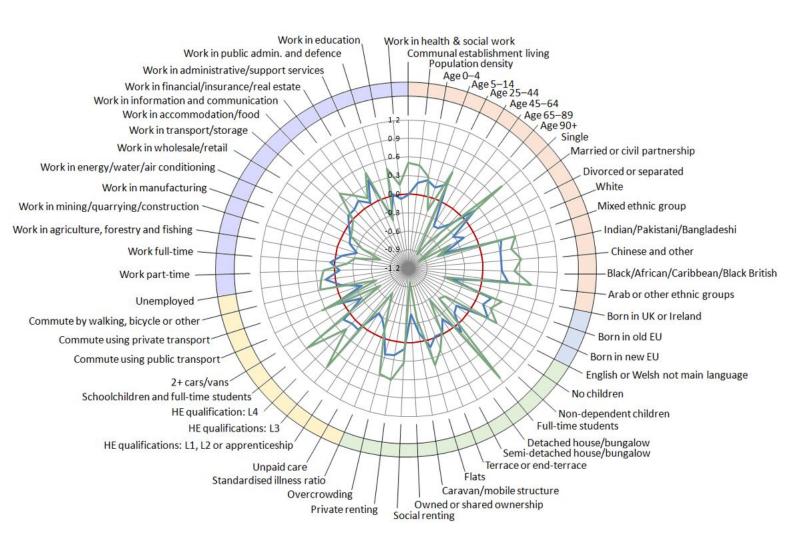
- 2 Business, education and heritage centres
- 2b University towns and cities





- 2 Business, education and heritage centres
- 2b University towns and cities

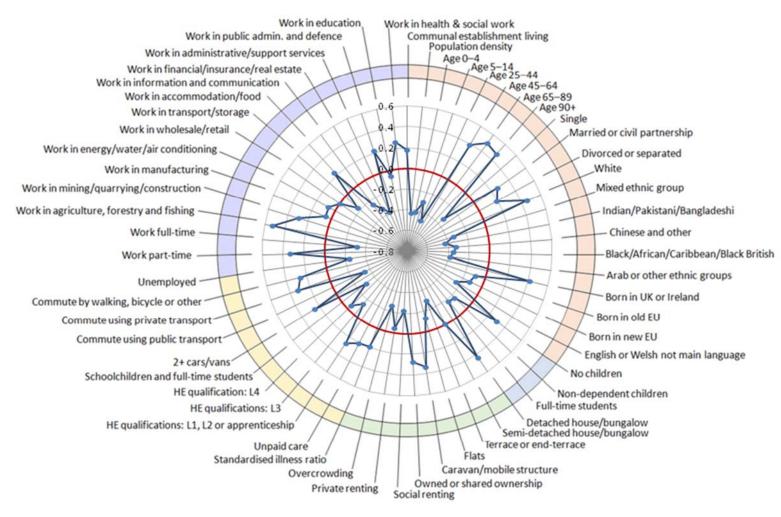
#### 2b1 University towns and cities



#### This subgroup is the same as the parent group

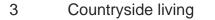


#### 3 Countryside living

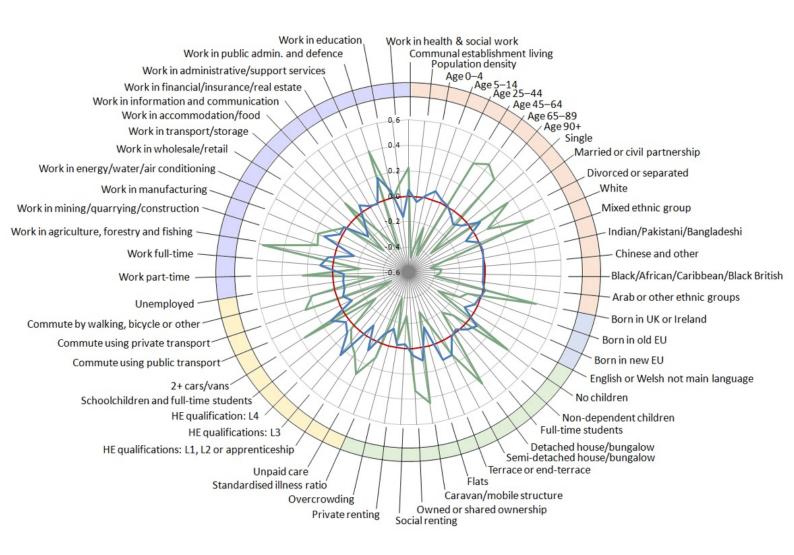


This subgroup is the same as the parent group





#### 3a English and Welsh countryside

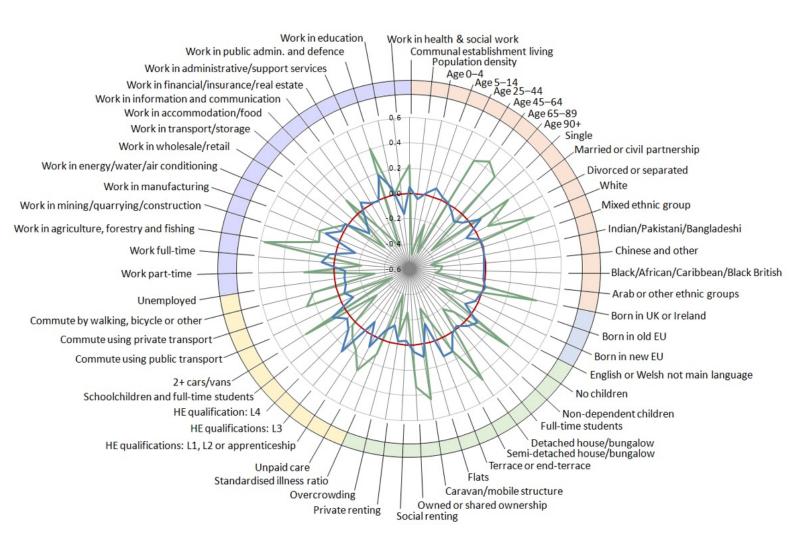




3 Countryside living

3a English and Welsh countryside

#### 3a1 English and Welsh countryside

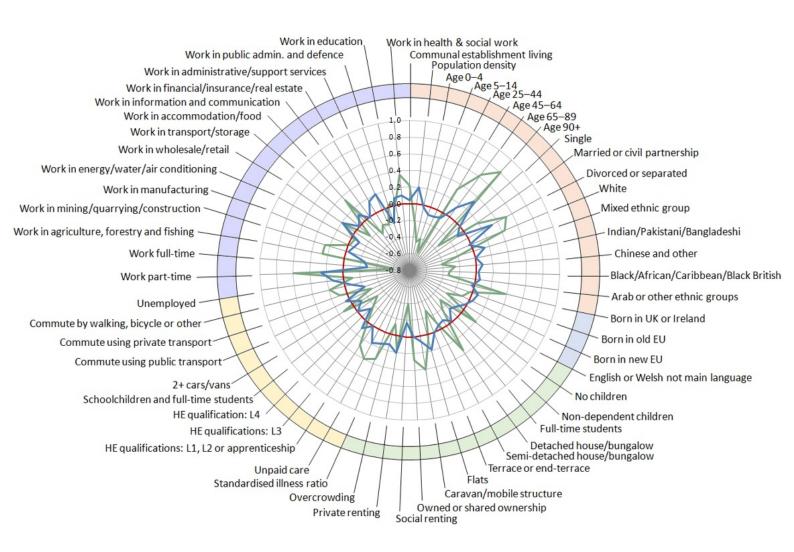


#### This subgroup is the same as the parent group



#### 3 Countryside living

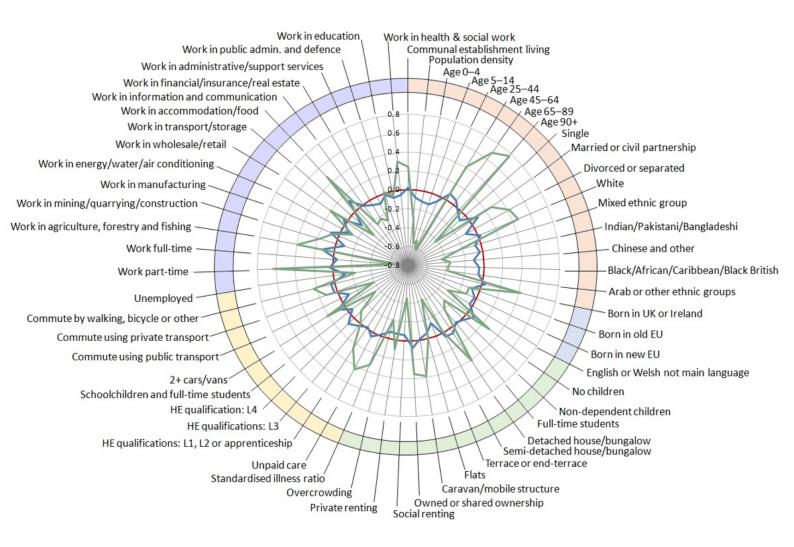
#### 3b Remoter coastal living





- 3 Countryside living
- 3b Remoter coastal living

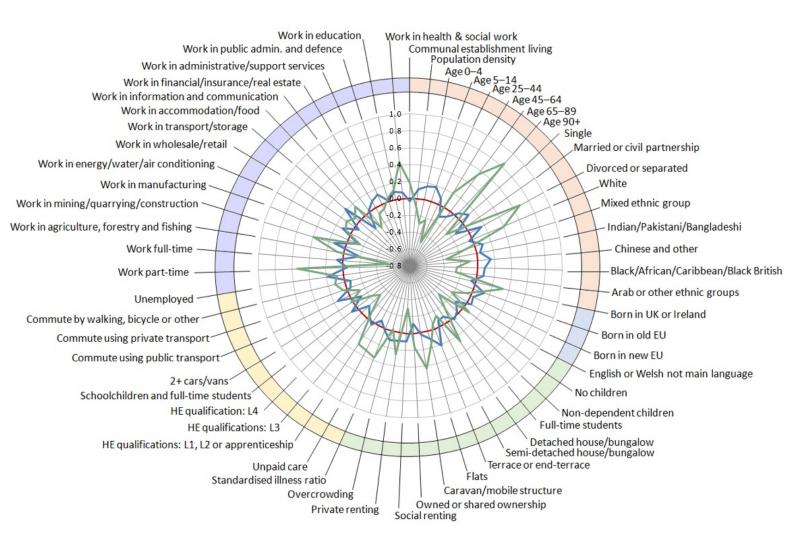
#### 3b1 Ageing coastal living





- 3 Countryside living
- 3b Remoter coastal living

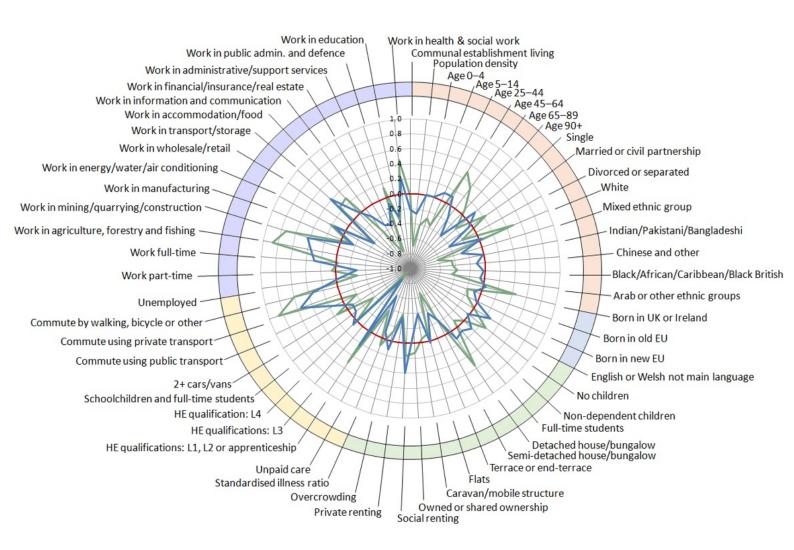
#### 3b2 Seaside living





#### 3 Countryside living

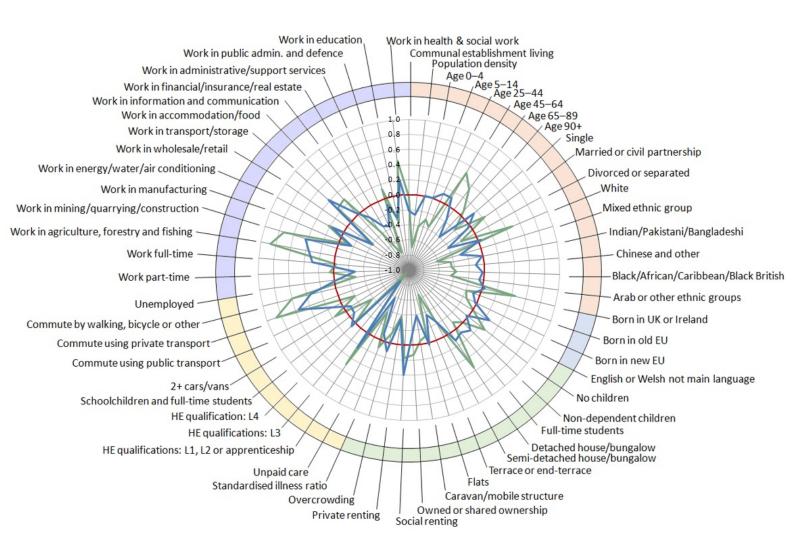






- 3 Countryside living
- 3c Scottish countryside

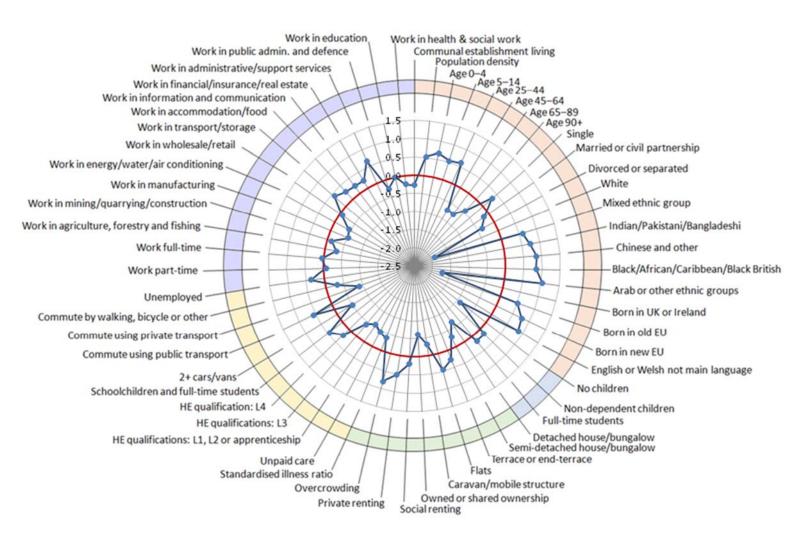
#### 3c1 Scottish countryside



#### This subgroup is the same as the parent group



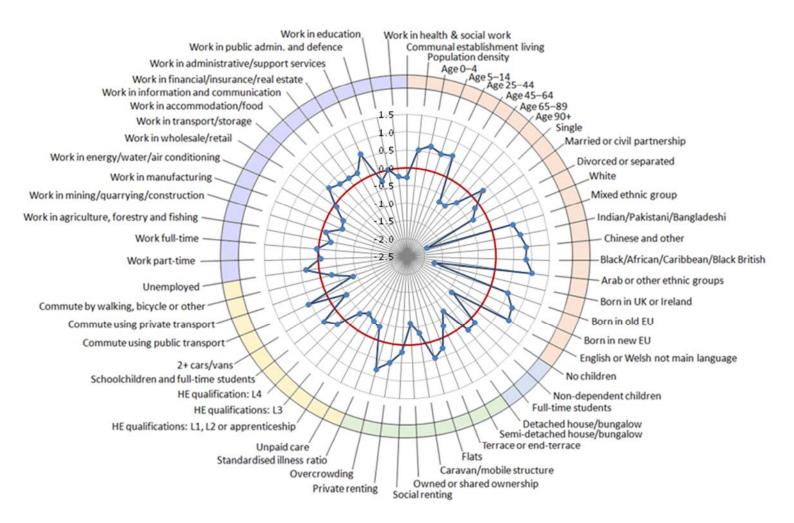
#### 4 Ethnically diverse metropolitan living





4 Ethnically diverse metropolitan living

#### 4a Ethnically diverse metropolitan living

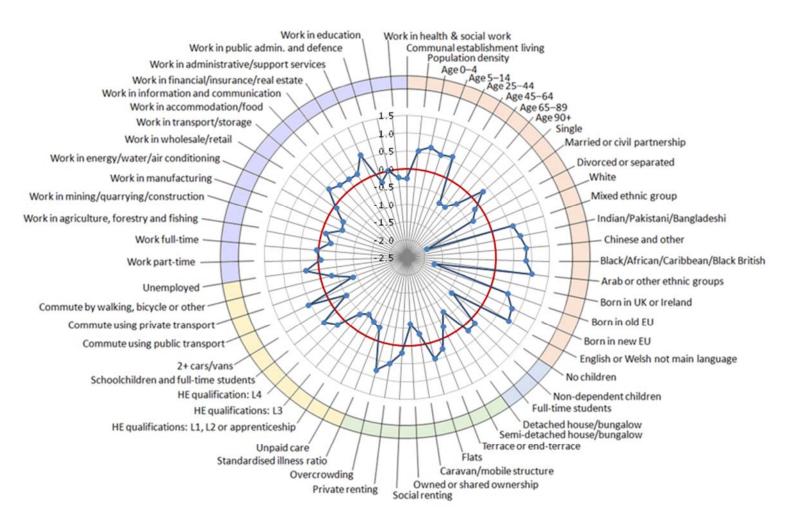


#### This group is the same as the parent supergroup



- 4 Ethnically diverse metropolitan living
- 4a Ethnically diverse metropolitan living

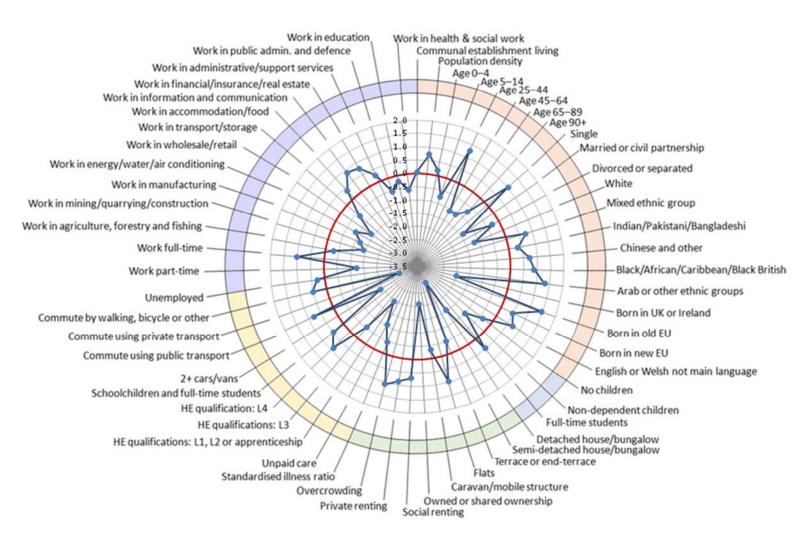
#### 4a1 Ethnically diverse metropolitan living



#### This group is the same as the parent group and supergroup



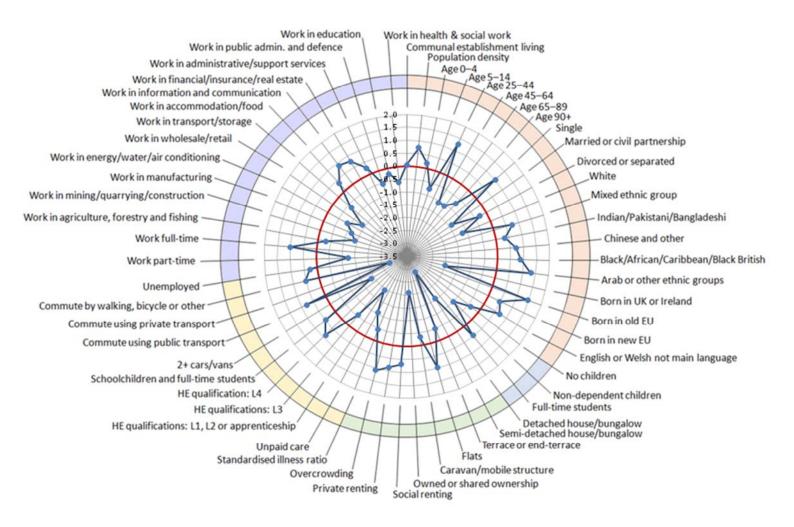
#### 5 London cosmopolitan





5 London cosmopolitan



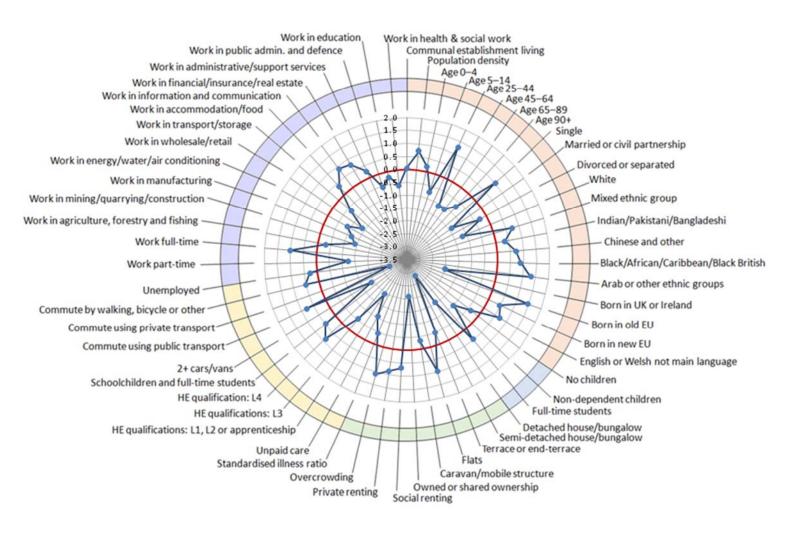


This group is the same as the parent supergroup

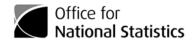


- 5 London cosmopolitan
- 5a London cosmopolitan

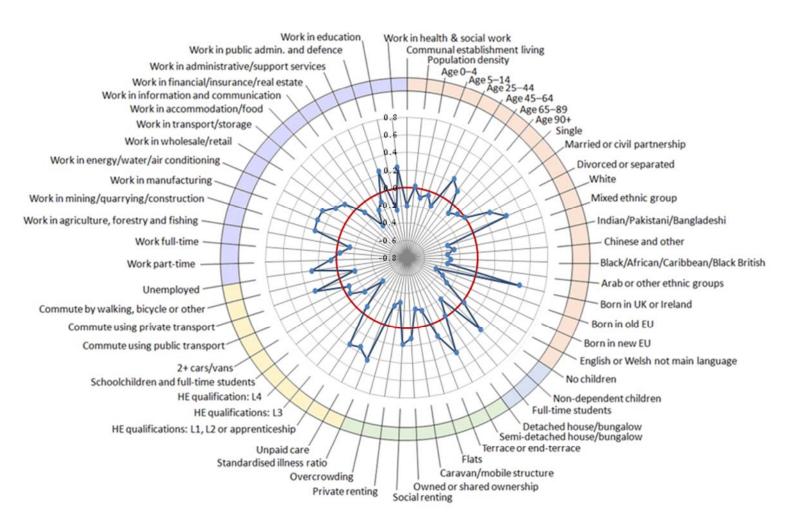
#### 5a1 London cosmopolitan



This subgroup is the same as the parent group and supergroup



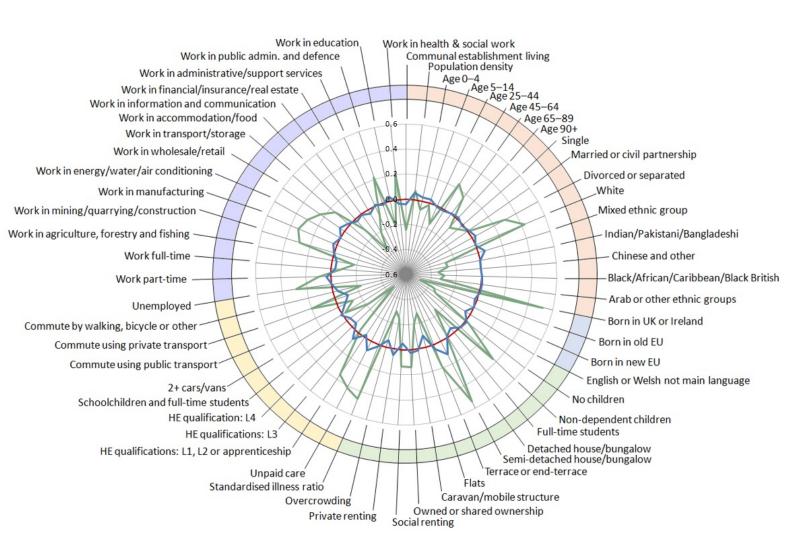
#### 6 Services and industrial legacy





6 Services and industrial legacy

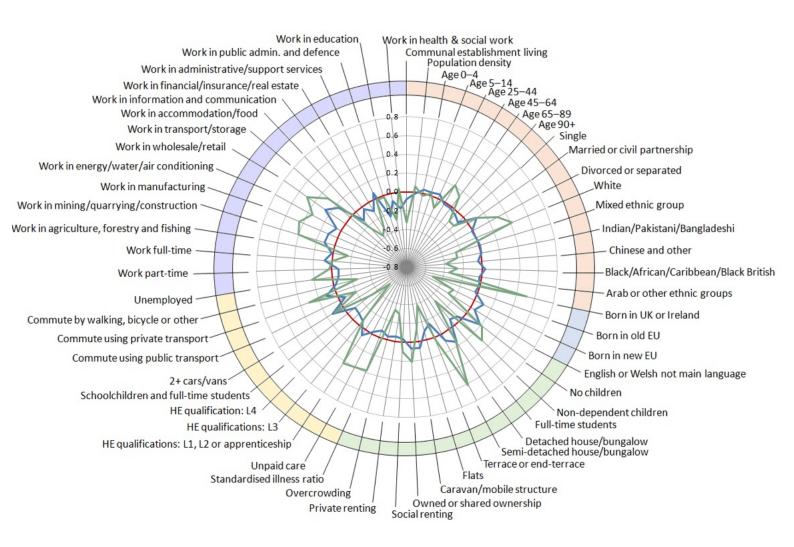
#### 6a Services, manufacturing and mining legacy





- 6 Services and industrial legacy
- 6a Services, manufacturing and mining legacy

#### 6a1 Manufacturing legacy

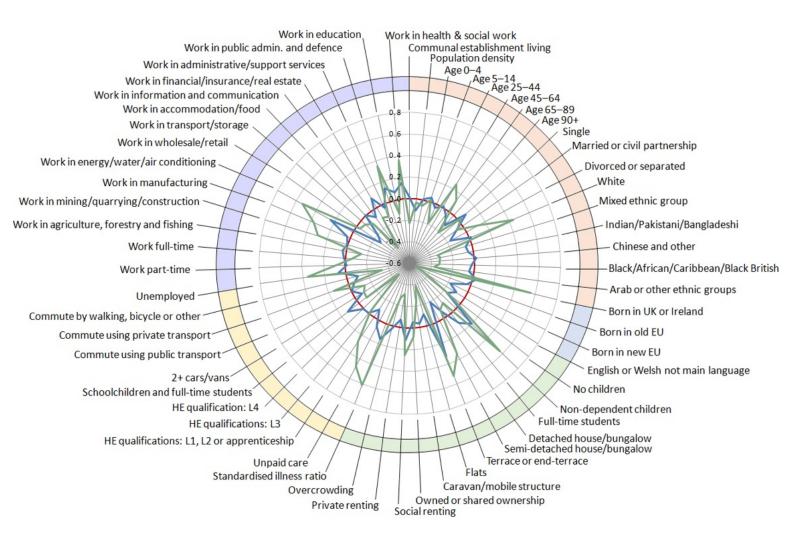




6 Services and industrial legacy

6a Services, manufacturing and mining legacy

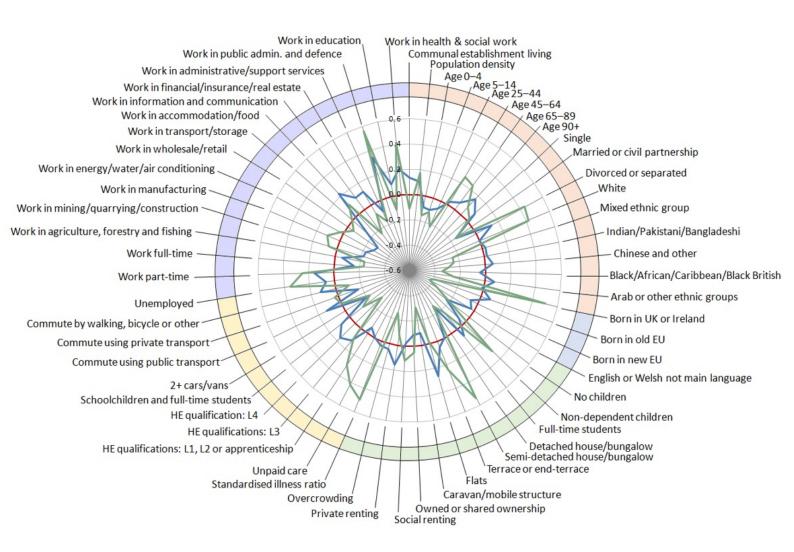
#### 6a2 Mining legacy



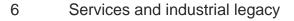


- 6 Services and industrial legacy
- 6a Services, manufacturing and mining legacy

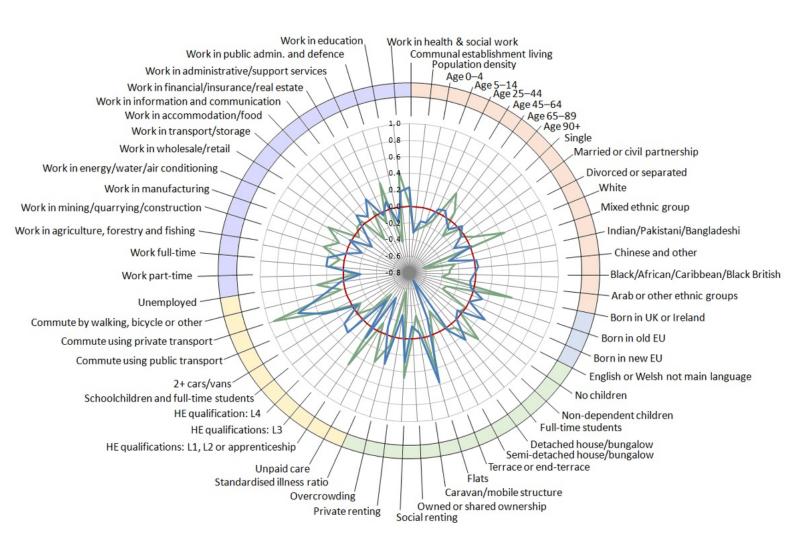
### 6a3 Service economy







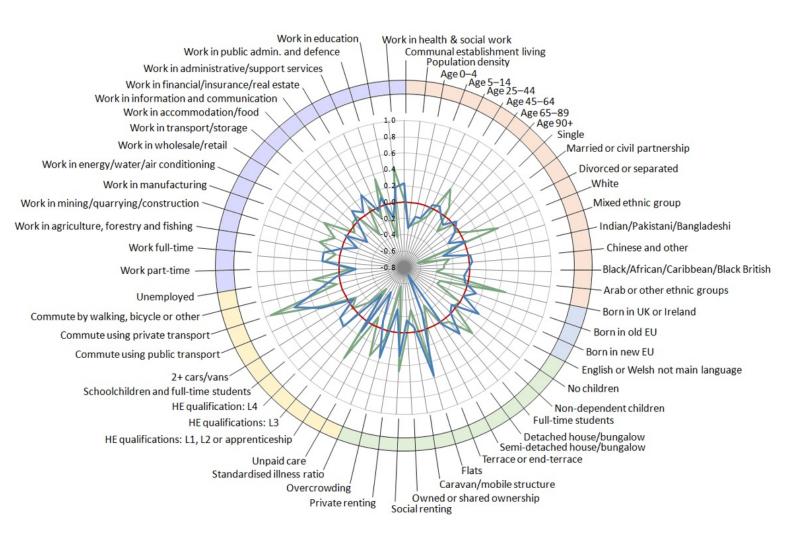
### 6b Scottish industrial legacy



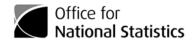


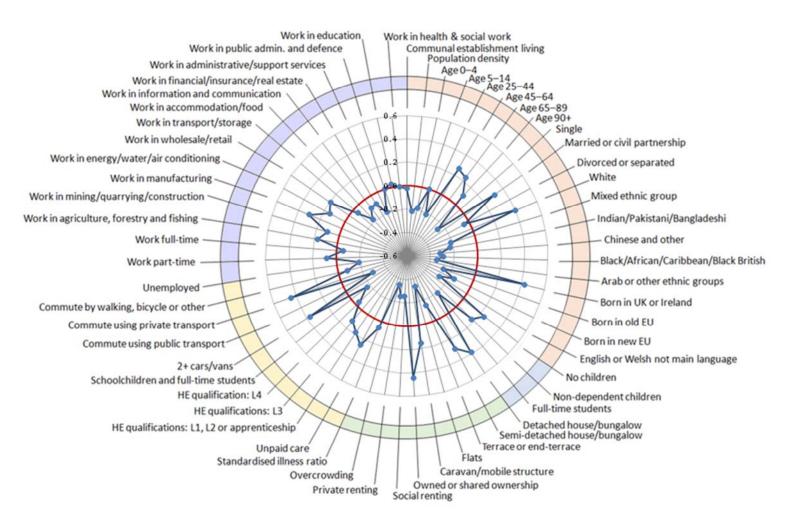
- 6 Services and industrial legacy
- 6b Scottish industrial legacy

# 6b1 Scottish industrial legacy



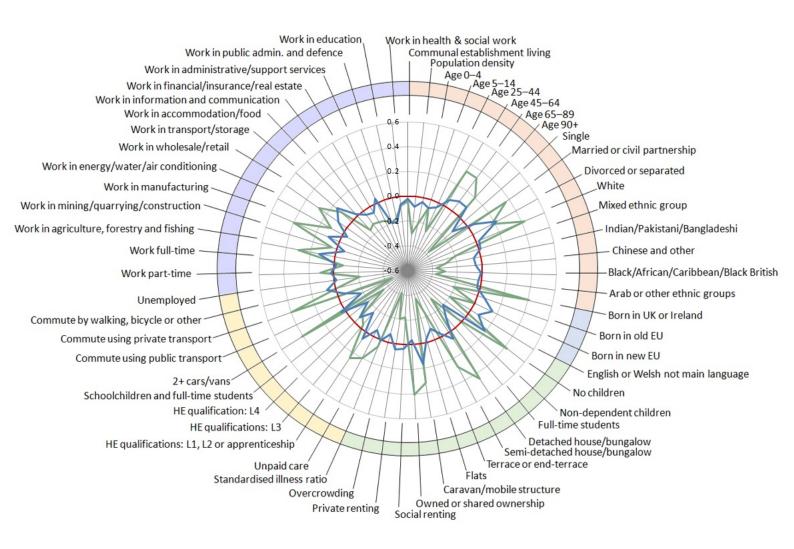
This subgroup is the same as the parent group



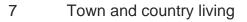




# 7a Country living

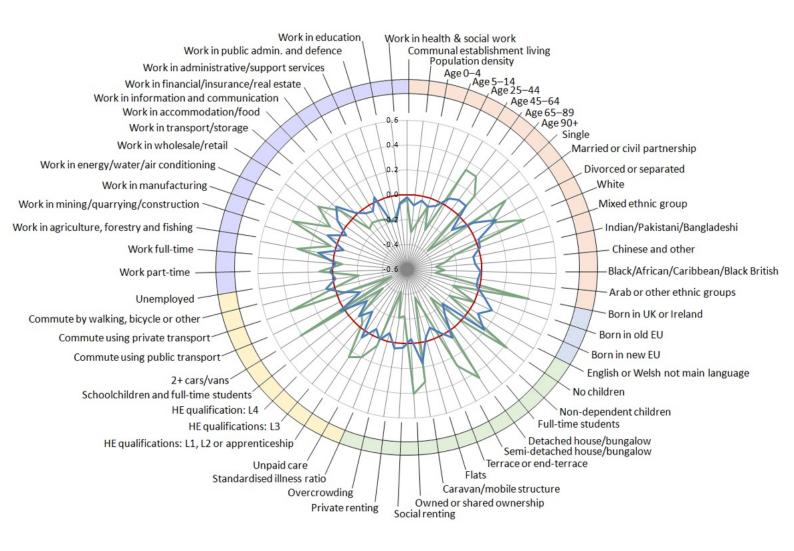






7a Country living

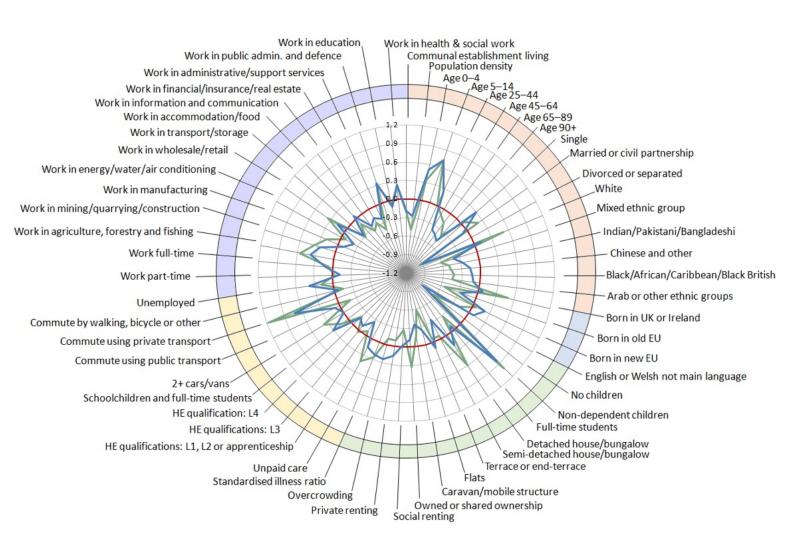
# 7a1 Country living



#### This subgroup is the same as the parent group



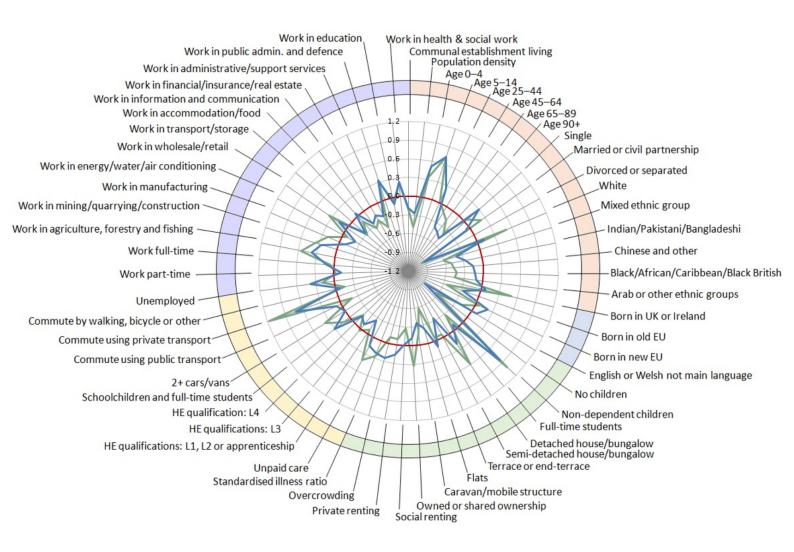
# 7b Northern Ireland countryside





- 7 Town and country living
- 7b Northern Ireland countryside

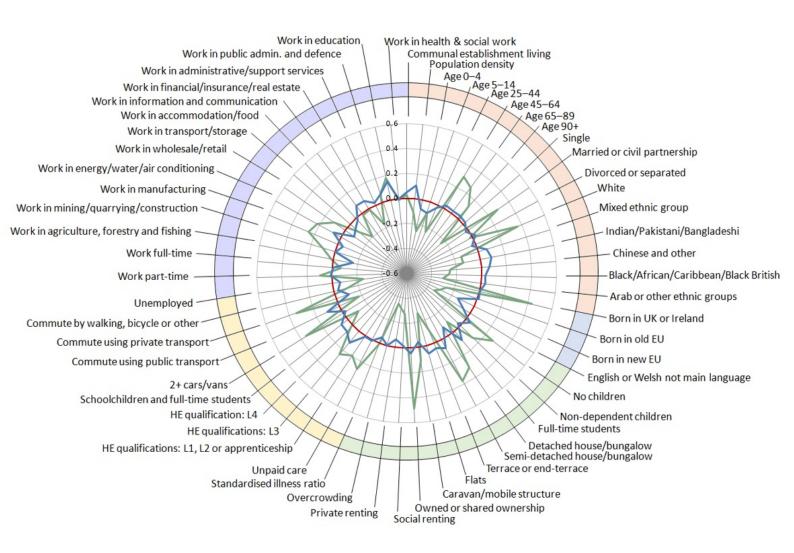
# 7b1 Northern Ireland countryside



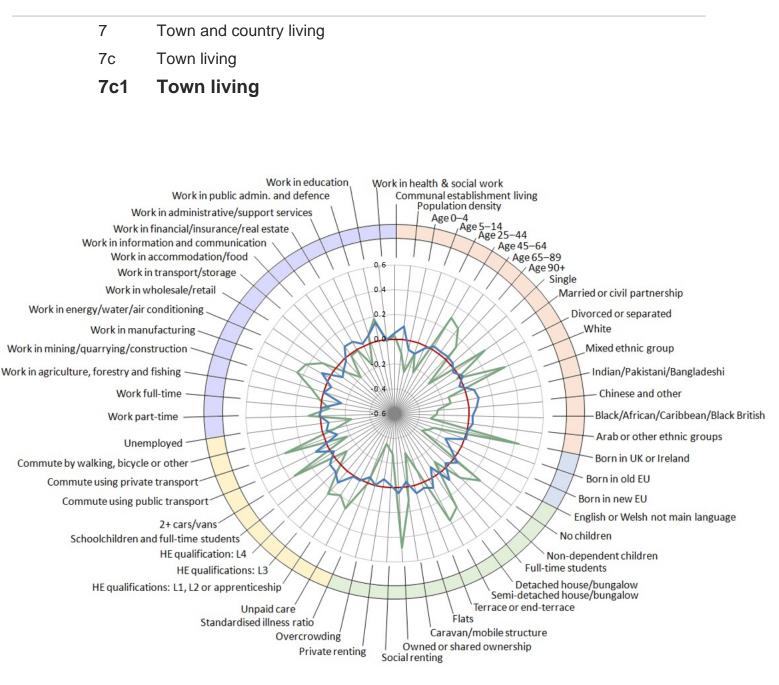
#### This supergroup is the same as the parent group



# 7c Town living



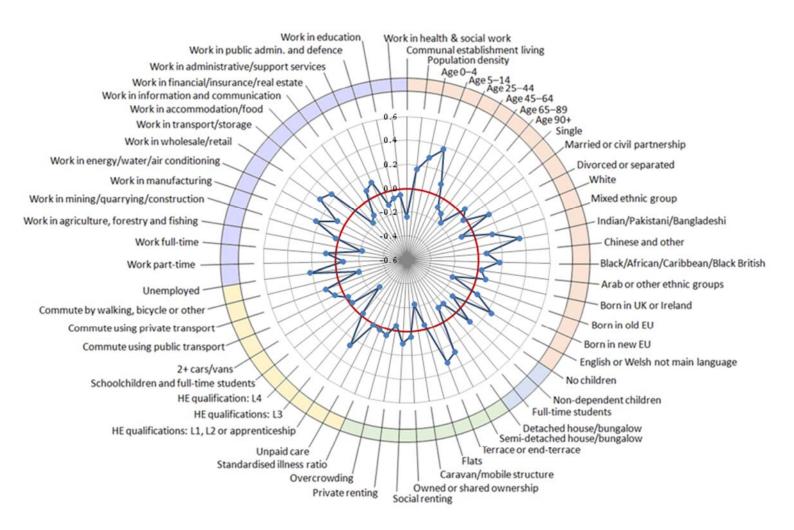




This subgroup is the same as the parent group



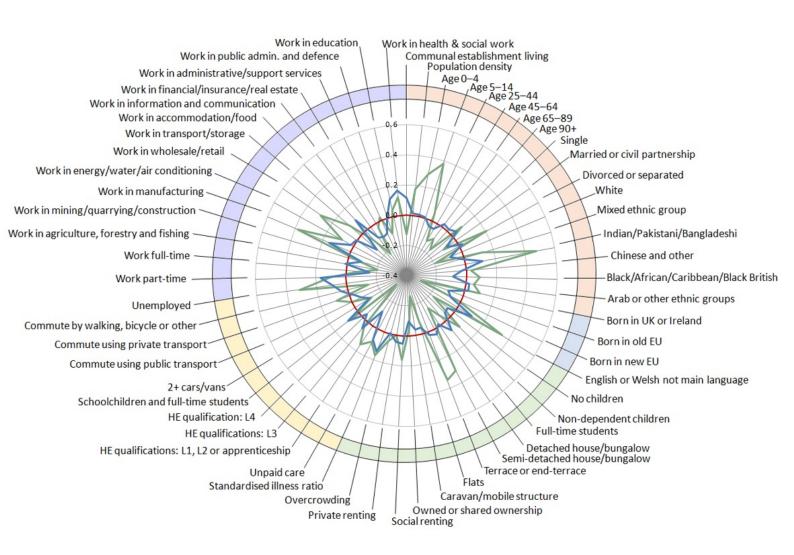
#### 8 Urban settlements





#### 8 Urban settlements

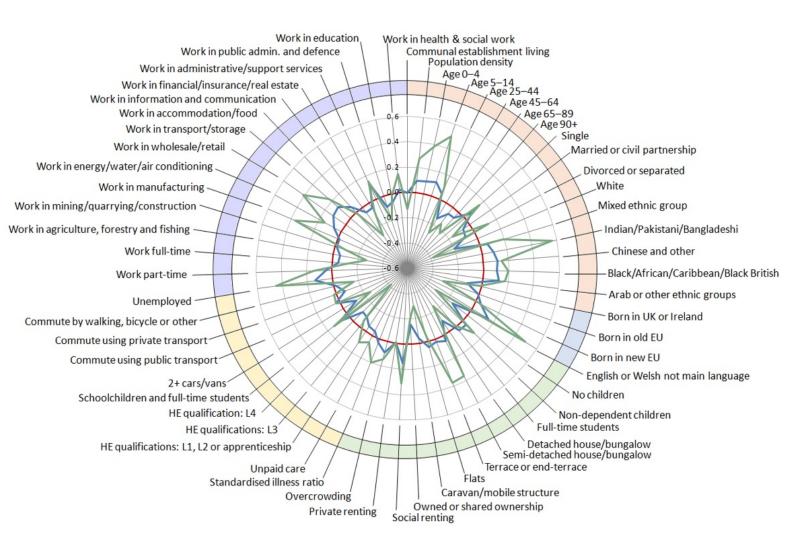
#### 8a Manufacturing traits





- 8 Urban settlements
- 8a Manufacturing traits

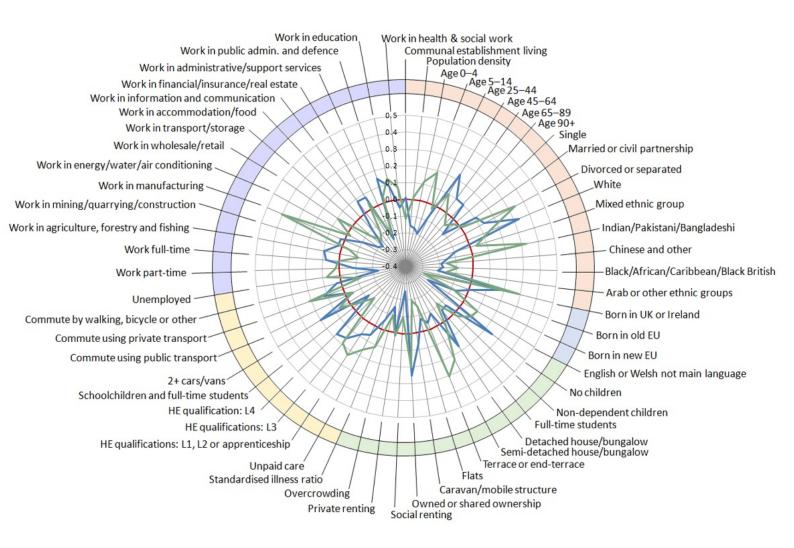
### 8a1 Industrial and multi-ethnic



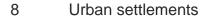


- 8 Urban settlements
- 8a Manufacturing traits

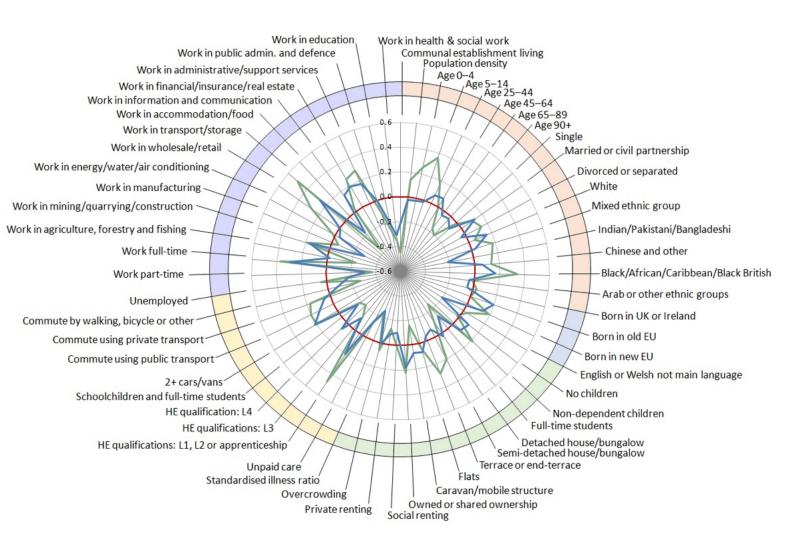
# 8a2 Urban living







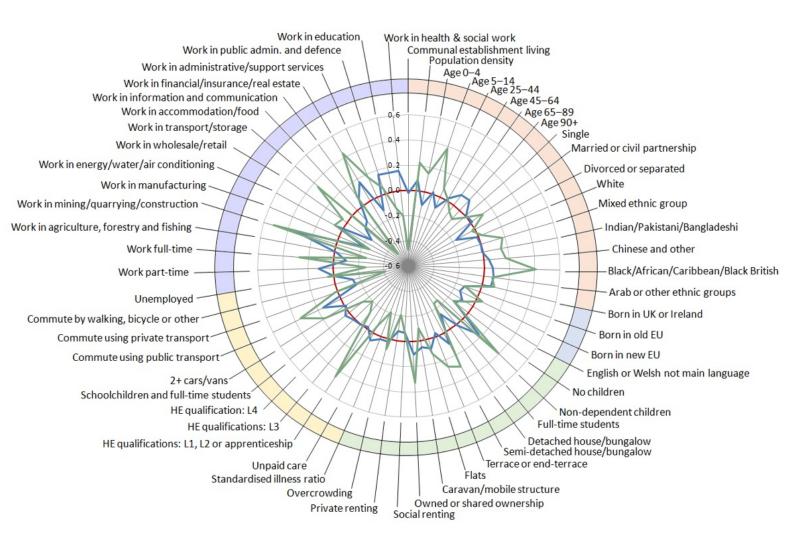
## 8b Suburban traits



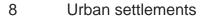


- 8 Urban settlements
- 8b Suburban traits

## 8b1 City periphery







8b Suburban traits

# 8b2 Expanded areas

