

# Woman's hour:

## The best (and worst) places in Britain for Women

Evidence from 3 UK countries and 380 local authorities

### Introduction/Aims

In this project, NatCen was asked to find which local authority is best for women to live in the UK for the Woman's hour show on BBC radio. By calculating an index, we aimed at determining which one out of the 380 local authorities in England, Scotland and Wales was the best (and the worst) for a woman to live.

#### Aims:

- Determine which is the best and worst city for a woman to live.
- Determine which city performs best at each domain.

### Background

For this project, I was assigned to write the literature review of the report:

- Safety, income and air quality appear to be widely used in research studies exploring the best places to live (Findlay et al., 1988; Kahneman and Deaton, 2010; McCann, 2004).
- Consistent with existing literature, we also used domains such as education, culture and house affordability (Albouy, 2009; Ballas, 2013).
- Based on the researchers' rationale and the client's request, we also included health and well-being and life expectancy.

### Domains

**Income**  
**House affordability**  
**Safety**  
**Health / Wellbeing**  
**Life expectancy**  
**Education**  
**Air quality**  
**Culture**

## Data, Methods and Methodology

- Data scoping and management were my main duties for this specific project.

Examples of data sources used:

- ONS
- Scotland's census 2011
- DEFRA
- Understanding Society
- ASHE
- Converted PFD data files to Excel files.
- Data cleaning: Extracting specific columns from big data files – computed simple calculations in Excel.
- Ensured Excel files were ready to be uploaded to Stata.

For this project, we calculated an index. For the index calculation, we sorted each domain and created a ranking for each variable. We reversed the ranking when the item ranked had a negative sign (eg. Anxiety) and transformed all the variables using this formula:

$$23 * \ln ( 1 - R * ( 1 - \exp (-100/23)) )$$

23 = Fixed value that helps to deal with extreme cases

Ln = Natural logarithm // exp = exponential function // 100 = Fixed %

R=Ratio (if LA is ranked 29 out of the 380, then R=29/380).

Following the authors' judgement, all domains were given an equal weight, except culture. By calculating the weighted average for each LA using the variables' transformed ranks and sorting the index scores, we obtained a list indicating the best and worst local authorities in the UK.

## Results

- Transferred results into accessible format for the final report and produced detailed tables with values and rankings.

### Best:

1. East Dunbartonshire, Scotland
2. East Renfrewshire, Scotland
3. West Oxfordshire, South East

### Worst:

378. Corby, East Midlands
379. Blackpool, North West
380. Islington, London

Figure 1:

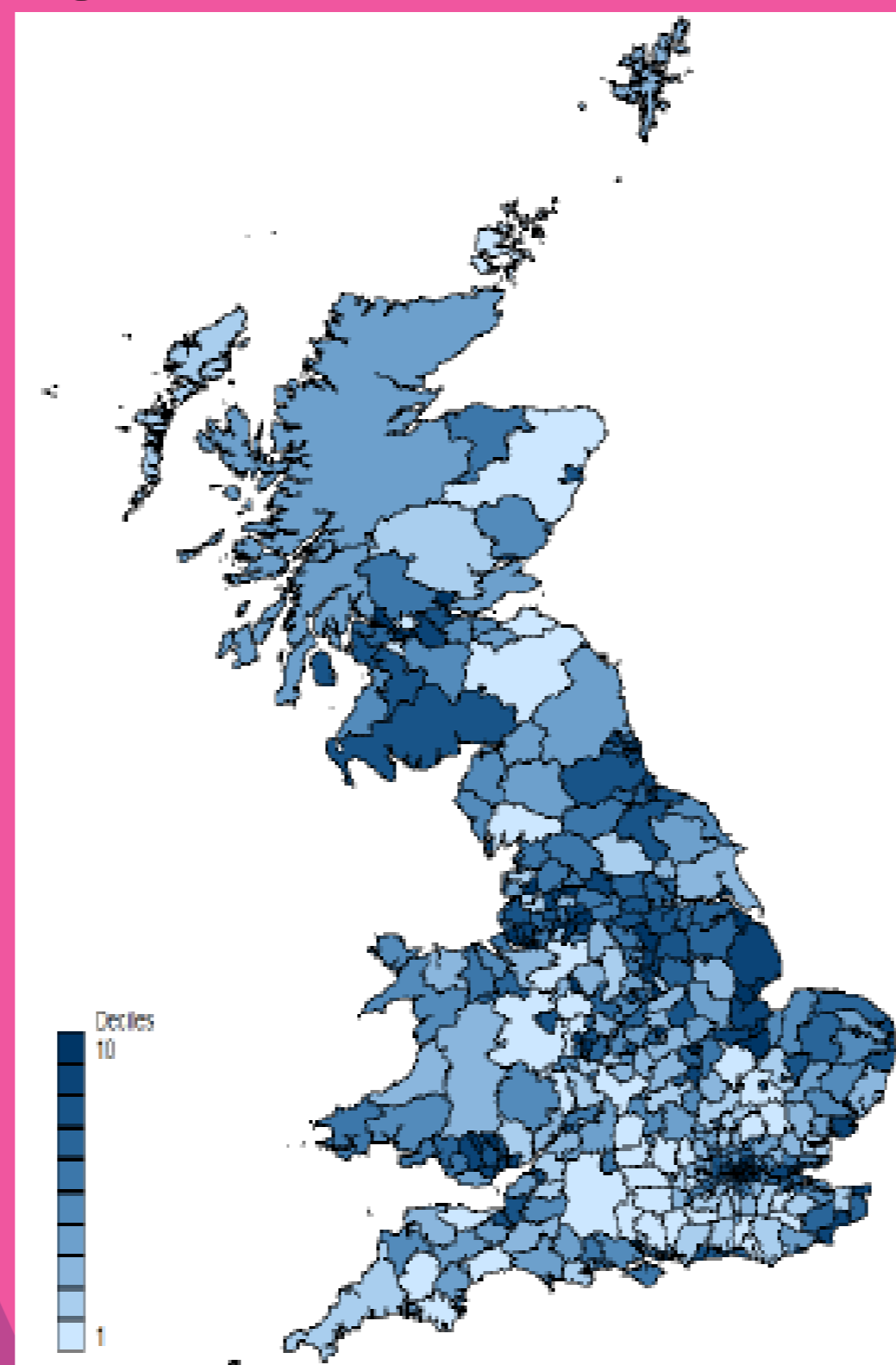


Figure 1: LAs falling in the first decile ranked best overall while those in the 10th ranked worst.

## Limitations

- Data ranging from 2011 to 2017.
- Imputation: When data existed at a regional level and not at a local authority level, the regional average was used. This affected the weight attributed to domains such as culture.

## References

- Albouy, D. (2009). "Are big cities really bad places to live? Improving quality-of-life estimates across cities." Working Paper no. 14472, NBER, Cambridge.
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- McCann, E. (2004). 'Best Places': Interurban Competition, Quality of Life and Popular Media Discourse. *Urban Studies*, 41(10), pp.1909-1929.