

Research Questions Workshop

27 March 2024

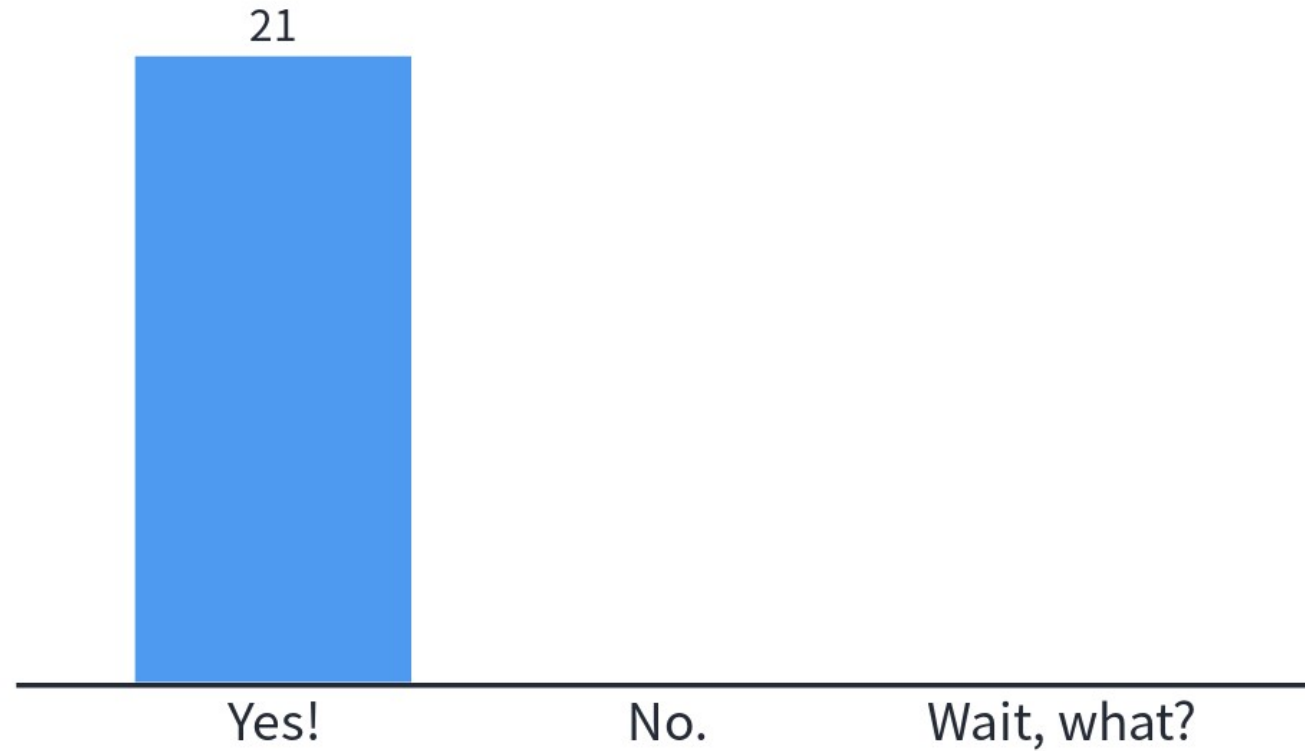


Interaction

- During this workshop you can use the Zoom chat for technical questions or comments (to chat with the facilitator).
- If you want to ask questions in relation to the content of this talk, there is a Q&A option in mentimeter.
- All other interactions (polls, short answer, etc.) will be in mentimeter. Let's try one now!



Can you hear us?



Troubleshooting audio problems

- Check your speaker/headset is plugged in / volume is on.
- Click on audio to change to listening via phone
- We are recording this webinar and will post it on YouTube (<https://www.youtube.com/user/UKDATASERVICE>)

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Different approaches to research

Nigel's introduction

My approach is informed by substantive interests, particularly in housing, race and migration. When you start to think about your research, I would suggest you identify

- The focus of your research
- Who the research subjects are
- The theoretical and policy framework if applicable
- Then broadly follow the research cycle

Jools' Introduction

BA in linguistics in California and Spain

Msc in Philosophy, Psychology and Language in Scotland

PhD in Complex Adaptive Systems in Netherlands

Now Computational Social Science with UK Data Service

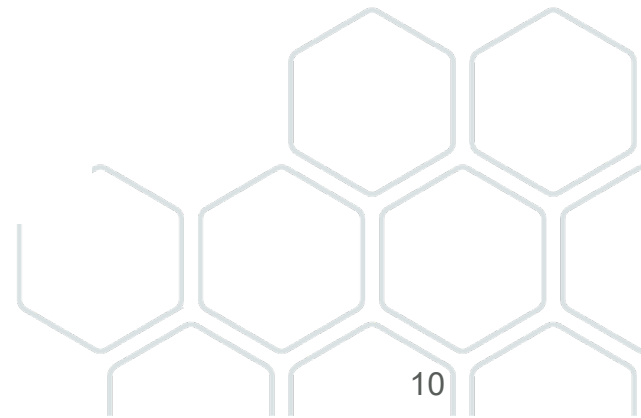
I use computational methods to address:

- new social science research questions or
- old social science research questions in new ways

Jools' iterative research cycle

1. Identify the problem
2. Explore the problem
3. Formalise the concepts
4. Collect data, implement software, verify
5. Experiment and analyse data
6. Discussions and conclusions
7. Communicate, publish, present
8. Share, document and validate

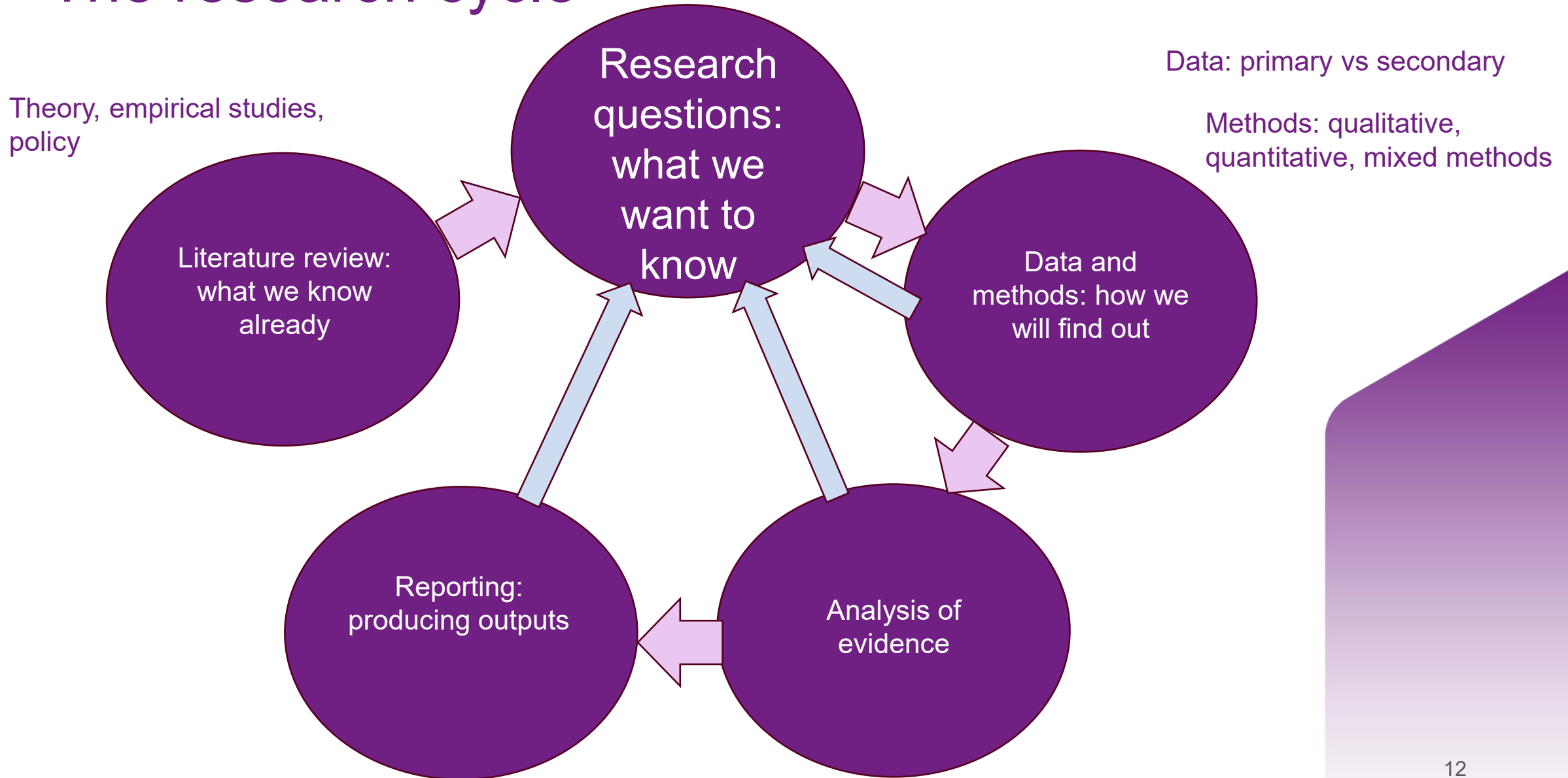
What topics are you developing questions for?



Research questions in place

In the research cycle with some examples

The research cycle



From description to action

EVENS ethnic inequalities (descriptive analysis)

What would a racially just society look like?

How close is Britain to being a racially just society?

Has the COVID-19 pandemic taken Britain further away from racial justice and ethnic equality

Objective 1 – Knowing Manchester Better (descriptive to action)

We will work together with Manchester's citizens and our partners in the public and voluntary sectors to improve the quality of the information we have about Manchester's diverse communities. This will strengthen our understanding of our people and will help us to support 'community cohesion', where people from different backgrounds get on well together in the local area, and treat each other with respect and consideration. We will engage with our citizens to build strong, trusting relationships which will help us to develop policies and commission services that meet everyone's needs.

Mixing methods to answer different questions

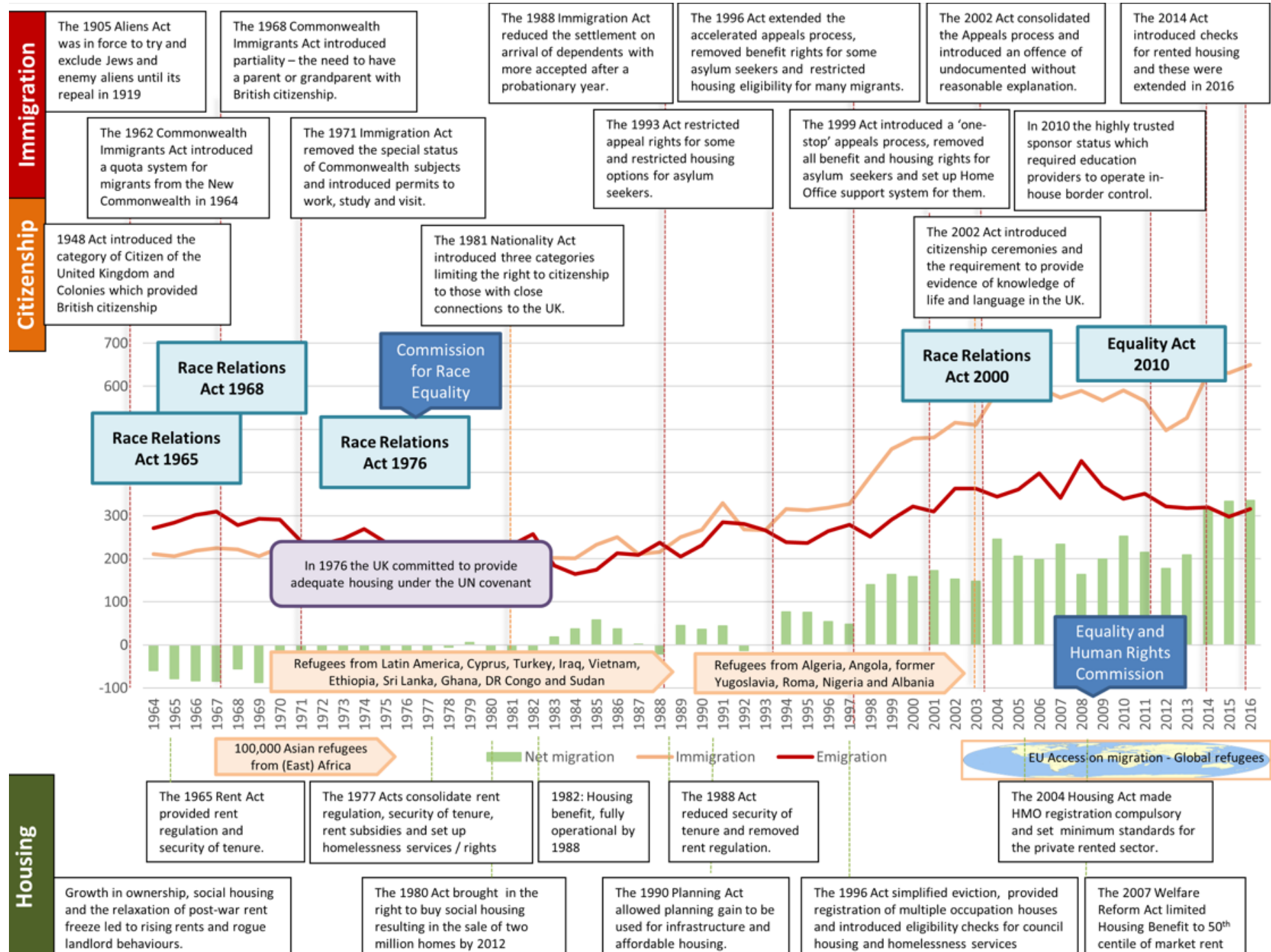
This paper aims to identify housing disadvantages faced by migrants and ethnic minorities; the legal, policy and market forces that shape them; how they have developed over time; how they are manifest nationally and locally; and how they are being responded to locally by those concerned with mitigating them.

... to provide a foundation to inform future research and policy and to engage with local actors to develop ways of overcoming migrant housing disadvantage and challenging discrimination

It used historical policy analysis, statistical analysis of census microdata and a facilitated workshop with key stakeholders to develop.

Lukes, S, de Noronha, N and Finney, N (2018). Slippery discrimination: a review of the drivers of migrant and minority housing disadvantage. *Journal of Ethnic and Minority Studies*, 45:17, 3188 – 3206.

Migration and Legal changes

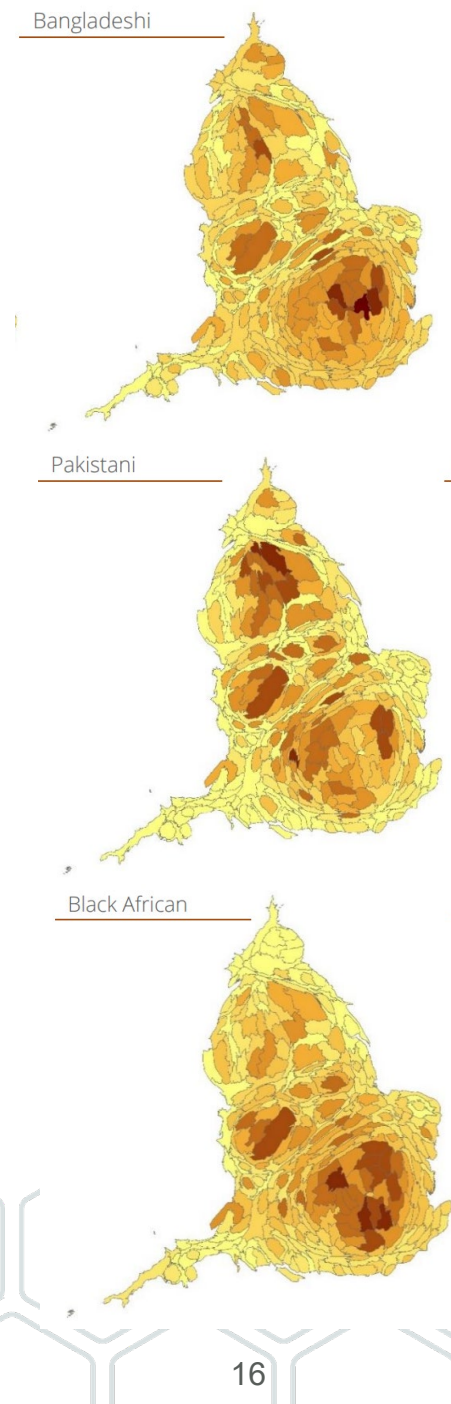


Influencing policy

Thinking about what the future will look like (forecasting) on behalf of the Race Equality Foundation and the Housing Learning and Improvement Network. The briefing:

- explores the demographic profile of the larger ethnic groups who are likely to contribute to the growth of the minority population
- identifies housing deprivation of ethnic groups by age and explores the factors that contribute to the higher levels of housing deprivation experienced by minority groups
- identifies the usage of care and residential homes by ethnic group and discusses future demand
- discusses the geographical concentrations of ethnic groups and the different demands this is likely to place on local services.

[New briefing on housing for black and minority ethnic older people - Race Equality Foundation Nigel de Noronha, 2019](#)



Person-first and Identity-first language

What differences can we find in the way human geneticist use PFL and IFL?

- PFL = 'person with autism' and IFL = 'autistic person'
- All abstracts from the European Conference on Human Genetics between 2001 and 2021
- Context = autism, over time, nouns used, co-occur in a single abstract
- Text-mining and Natural Language Processing methods



Person-first and Identity-first conclusions

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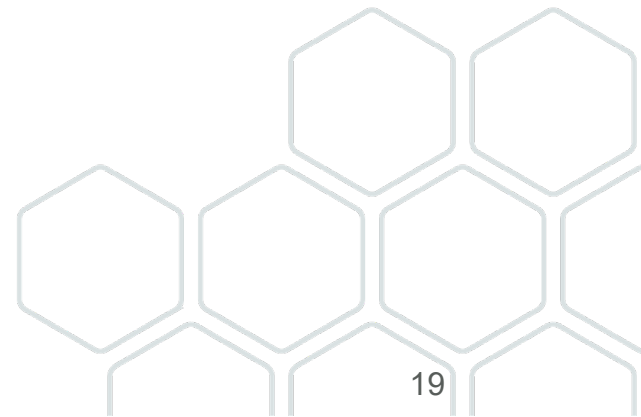
Conclusions:

- used roughly equally in total and over time up until 2019
- Fewer different nouns used in PFL but those were “people-nouns”
- More variety of nouns used in IFL but those were “science-nouns”
- ~20% of abstracts use both patterns



Other types of research

- *Empirical – with hypotheses and null hypotheses*
- *Causative*
- *Longitudinal*
- *...*



What methods are you using/planning to use?



Developing research questions

Some guidance on clarity, focus and conciseness

Research question requirements

Clear – straightforward grammar, language appropriate for audience, sensible

Focussed – matches the time, resources and data to which the researcher has access

Concise – expressed in the fewest words needed

Clear

How should social networking sites address the harm they cause?

This question doesn't:

- Specify which (types of) social networking sites
- Specify what kind of harm is meant or who is harmed
- Support or prove the extent of that harm

It's ambiguous, leaving too much room for interpretation.

Clearer

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What action should Facebook take to prevent vulnerable users from exposure to extremist propaganda?

Focussed

What effect have anti-climate change innovations had?

This can be narrowed by specifying:

- Effect – what is to be measured and how?
- Scope – what are the space & time boundaries to consider?
- Detail – what is the level of observation?

The lack of focus means it is unlikely to be answerable in a single project – maybe not even a single career.

More Focussed

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What effect have UK government green grants had on heat pump installations since 2008?

Concise

What measurable difference can be seen in pre- and post-Covid academic lockdown testing outcomes of human individuals between the ages of 13 and 19 when those individuals are domiciled within the country of Great Britain and Northern Ireland?

This is overly "academic", making it wordy and hard to follow.

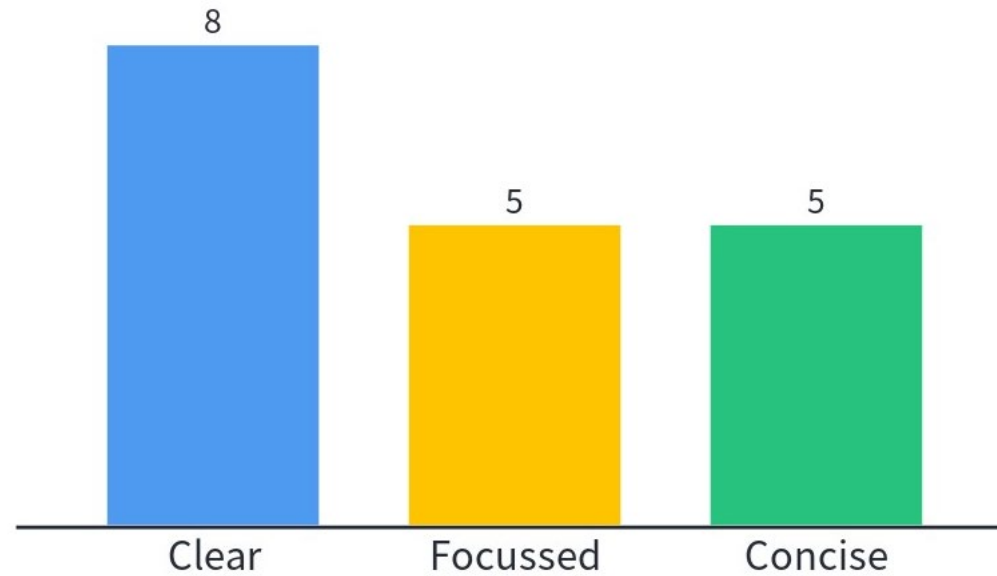
More Concise

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What differences can be measured between pre- and post-Covid student test scores for UK residents aged 13 to 19?

Which of these do you usually find hardest?



Research question - desirable features

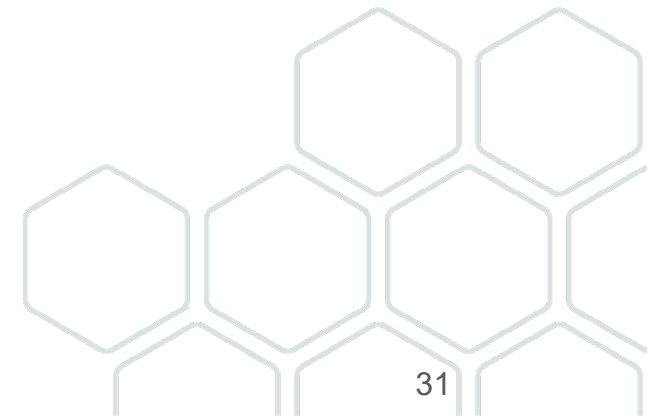
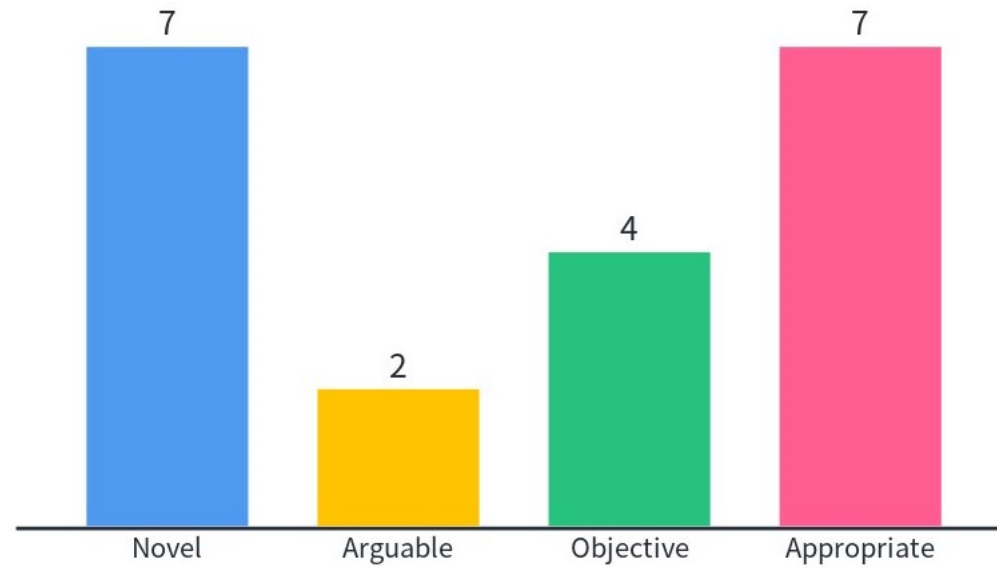
Novel – should address a question/problem that is not yet fully or sufficiently addressed

Arguable – not answerable with a simple repetition of facts

Objective – should not rely on "good", "bad", similar judgement words

Appropriate – question and answer should match time and resources

Do you consider any of these essential?



Worked examples

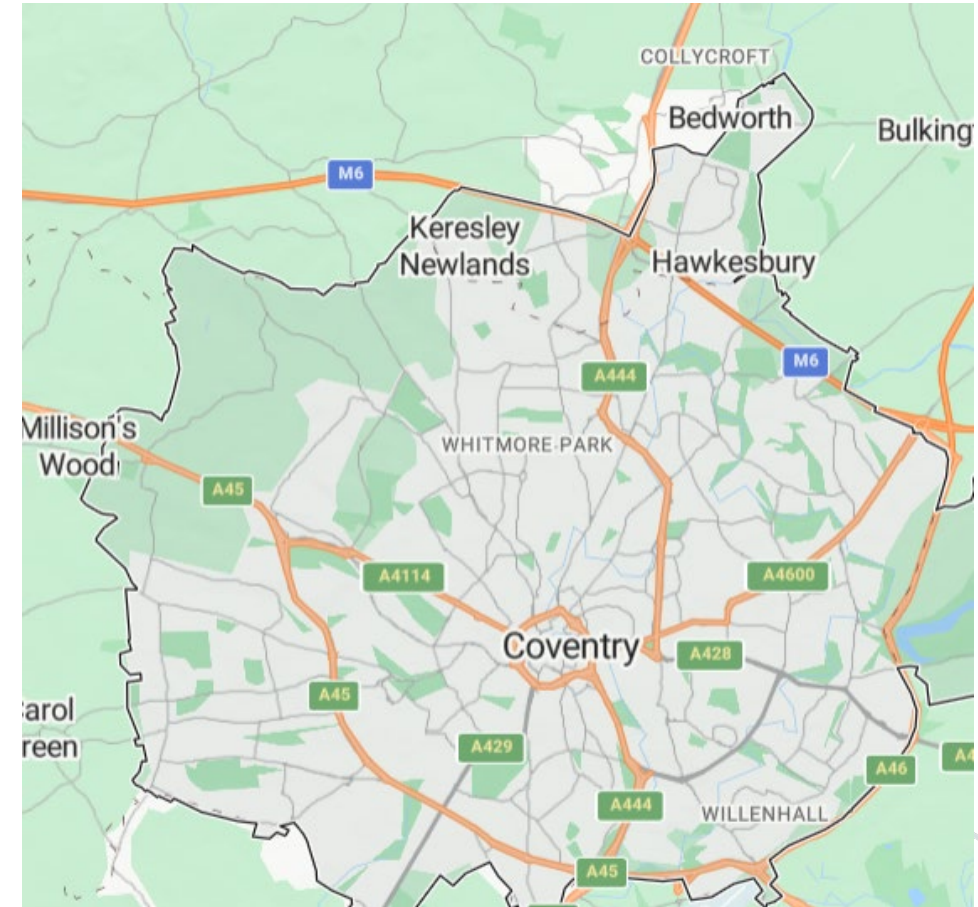
From submissions

Impact of Commonwealth Games on Coventry

Sukriti

- social, economic, and environmental impact of the 2022 Commonwealth Games on the city of Coventry.
- strategies implemented to maximize societal benefits during and after the event.
- effectiveness of leveraging the Commonwealth Games to promote long-term sports development and infrastructure improvements in Coventry.
- challenges faced by Coventry as a satellite host

Stakeholder interviews, Secondary data source: existing research, media coverage, and academic studies on the social, economic, and environmental impacts of past Commonwealth Games or similar large-scale sporting events to provide context and comparative insights, Surveys and interviews with local residents and businesses,



Discussion

How did the hosting of the 2022 Commonwealth Games in Coventry contribute to the sustainable development of the city in terms of social, economic, and environmental aspects?

Can you say a little more about how Coventry was part of the 2022 Commonwealth Games?

What specific challenges did this raise? How did this link to other events in Coventry – e.g. City of Culture? What investments were made for the Games?

How were local people, businesses and other organisations involved? What social, economic and environmental benefits were identified? What was the planned timescale for the realisation of these benefits?

In light of this, how might you focus on specific aspects of these benefits in your study?

Example 2

Martin

What would good proof-in-the-classroom look like within the English 11-18 school system? The development of the learning and teaching of mathematical proof in the secondary school classroom in England.

It would be useful to understand why the focus is on mathematical proof – is this something you are interested or experienced in?

What do you mean by good proof in the classroom? To what extent is this framed by the external environment that the English secondary school system operates in?

Which theoretical concepts do you think will help you to analyse the data you collect?

What methods do you think will be applicable for the study?

How has existing literature used these theoretical concepts and what methods and data to of Bourdieu would you like to use? What do you want to add to this literature?

Q&A session

Please put your questions in the Q&A box