Profiling special educational needs in Northern Ireland using educational and social data

- **Overview**

  - ADRC in Northern Ireland
  - Research context
  - Research aim

- **Data**

  - Utility of secondary data
  - Challenges and solutions
 - Conclusions and implications

ADRC-NI

- Partnership: **UU, QUB** and **Northern Ireland Statistics and Research Agency (NISRA).**

- Supports and promotes acquisition, linking and analysis of administrative data for research.

- ADR-NI is part of **Administrative Data Research UK (ADR UK).**

- The **Network** gives accredited researchers access to linked, de-identified cross-departmental administrative data in a secure environment.

- Supports research that will improve knowledge, policymaking and public service delivery.

- Funded by ESRC with support from HSC R&D.

Research Context

- Growth in numbers of pupils with SEN in NI is proportionately higher than the general school population.
- Observable changes in the educational and social profile of these pupils.
- To date, analysis of linked data has not been used to gain better insights into this group.
- Access to, and analysis of, such data offers potential value to families, educators, policy makers and researchers.

Successful secondary data analysis is dependent on data that is both available and accessible …
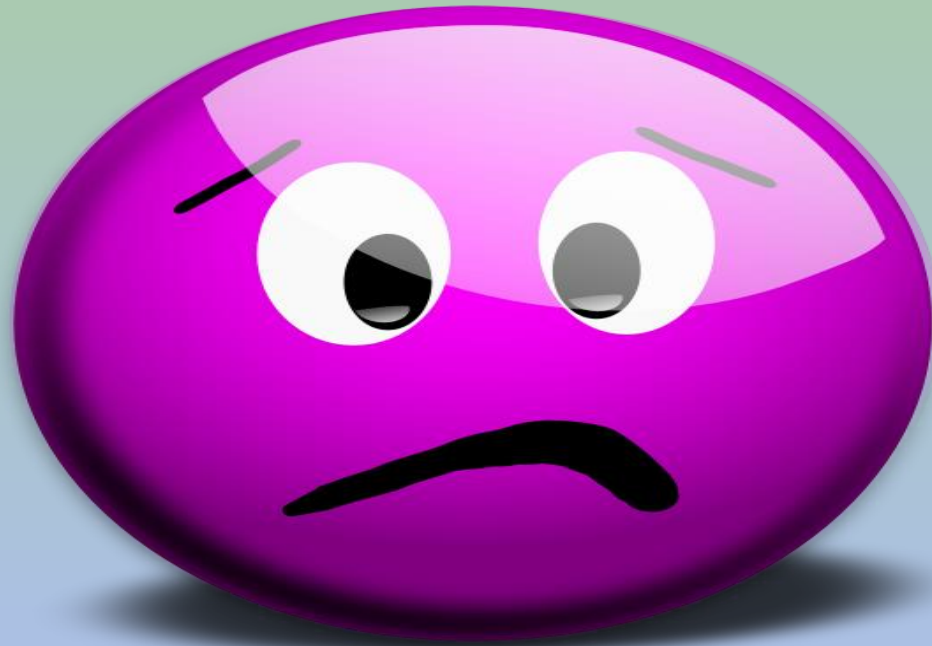
… sometimes, things don't go according to plan.

Original Research Aim

- To explore the educational and social profile of pupils with SEN in NI using:

  - Individual-level data provided via the Unique Pupil Number (UPN);
  - Census data (2001 and 2011).

Revised Research Aim

- To interrogate the utility of existing education data sources as a means of gaining insights into pupils with SEN in NI

- To interrogate the utility of existing social data sources to gain insights into the relationship between SEN and disability relative to wider socio-economic influences

Education Data

- Utility of education data

  - Unique, individual pupil information
  - Disaggregated information: type of SEN, gender, school type, year group, region
  - Record, monitor and profile change over time
    - At individual level
    - At group level

Education Data

- Challenges

  - Lack of access to original individual pupil data (UPN)

  - Changing goal posts

  - Identifying alternative data

  - Data suppression

Education Data

- Solutions: Maximising Sources

  - Negotiation and access to alternative data
  - Profiling SEN at group rather than individual level using
    - Prevalence rates
    - Change ratios
  - Creating baseline of SEN
  - Creating benchmarks from which to compare further data

What did we find?

- A proportionately higher increase (21%) in the overall numbers of pupils with SEN compared to the wider pupil population.

- Clear distinctions across school types between rates of growth for pupils generally and for those with SEN.

- Increasing prevalence rates for Free School Meal Entitlement (FSME) among pupils with SEN across school types.

- Evidence of change in the geographic distribution of SEN.

What did we find?

- Prevalence rates concentrated in three over-arching categories.

- Prevalence rates were consistently higher among male pupils over time, with a few exceptions:
  - Females with SEBD in secondary schools

- Change ratios showed some striking variations between genders:
  - Females SEBD across school types
  - Females ASD across school types

Greater association between SEN prevalence and deprivation.

Social Data (NILS)

- Utility of social data

  - Proportionately largest longitudinal study in UK (28% of population)

  - Data drawn from a range of sources enabling exploration of socio-demographic and health profile of sub-population:

    - All male and female NILS members aged between 4-19 years enumerated at the 2011 Census and also returned in the 2011 School Census
    - Members of the household enumerated in the 2011 Census and the 2001 Census is enumerated in the 2001 Census.

NILS Data

- Challenges

- Impact of COVID-19

  - Social restrictions, closure of secure room and limited access only to data

  - Protracted delays in preparation, checking and analytic proceducre
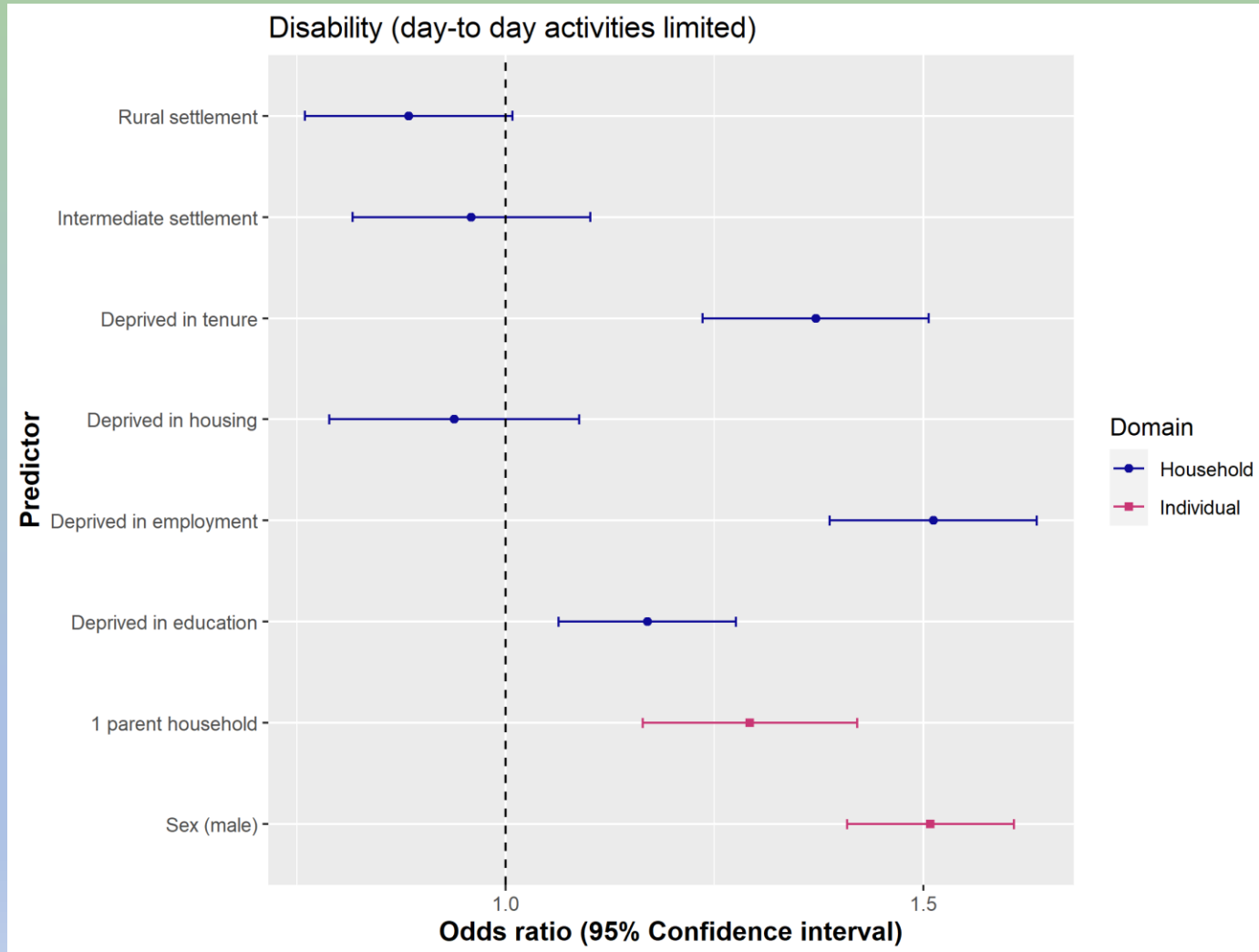
  - Reliance on remote 'trial and error' process

NILS Data

- Solutions: Maximising Resources

  - Negotiating access to statistical team

  - Utilising alternative software

What did we find?

Learning, intellectual or social or behavioural difficulty
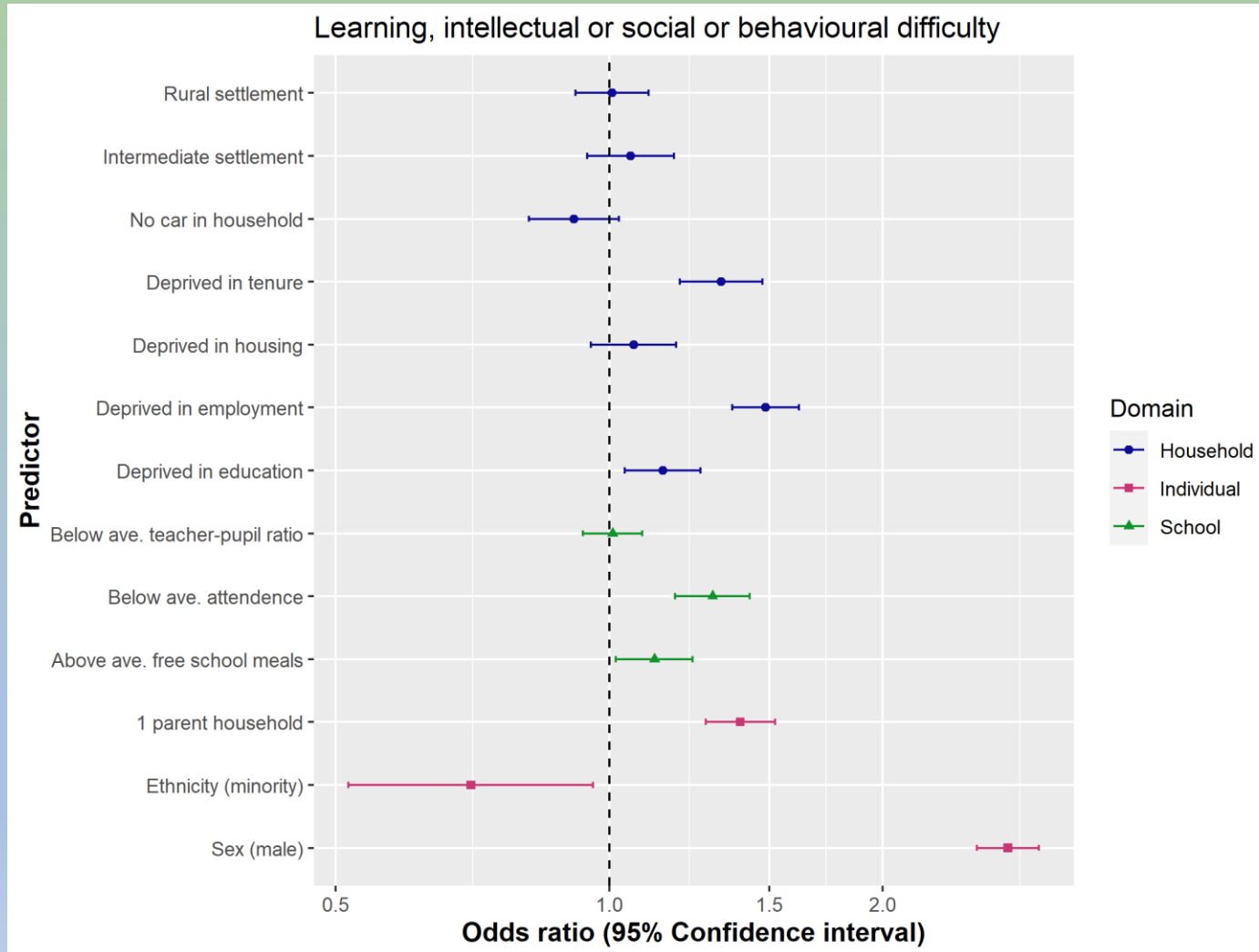
What did we find?

Conclusions and Implications

- Availability of administrative data

- Accessibility of administrative data

- Successful use of administrative data

Project Team

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Thank you!

Questions?