

# Language data in UK census longitudinal studies

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- Describe the UK census longitudinal studies
- Outline why, when and how the topic of language features
- Give examples of what you can look at with language,
  - eg. changes over time in speakers of different languages
- Discuss previous language research using the longitudinal studies

## Language questions in UK...SUMMARY

COUNTRY	1971	1981	1991	2001	2011
<b>Wales</b>	Welsh ( <a href="#">WELSH7</a> )	Welsh ( <a href="#">WELSH8</a> )	Welsh ( <a href="#">WELSH9</a> )	Welsh ( <a href="#">LANP0</a> ; <a href="#">LANRP0</a> ; <a href="#">LANSP0</a> ; <a href="#">LANUP0</a> ; <a href="#">LANWP0</a> )	Welsh ( <a href="#">LANRP11</a> ; <a href="#">LANSP11</a> ; <a href="#">LANUP11</a> ; <a href="#">LANWP11</a> ); Main language ( <a href="#">MAINLANG11</a> ); English proficiency ( <a href="#">LANGPRF11</a> )
<b>Scotland</b>		Scottish gaelic	Scottish gaelic ( <a href="#">GAELIC9</a> )	Scottish gaelic ( <a href="#">LANP0</a> ; <a href="#">LANRPS0</a> ; <a href="#">LANUPS0</a> ; <a href="#">LANSPS0</a> ; <a href="#">LANWPS0</a> ; <a href="#">LANNPS0</a> )	Scottish gaelic ( <a href="#">GAEL2P1</a> ); Language spoken at home( <a href="#">LANGP1</a> ); English proficiency ( <a href="#">ENGSCOTP1</a> )
<b>N.Ireland</b>			Irish	Irish	Irish (ILANUP1, ILANSP1, ILANRP1, ILANWP1, USLANUP1, USLANSP1, USLANRP1, USLANWP1, IRISH1P1, IRISH2P1, ULSTER1P1, ULSTER2P1); Main language (MAINLANGP1); English proficiency (MAINLANGPRFP1)
<b>England</b>					Main language ( <a href="#">MAINLANG11</a> ); English speaking proficiency ( <a href="#">LANGPRF11</a> )

## Language questions in the E, W & NI censuses

**17** Can you understand, speak, read or write Welsh?  
 ↻ Tick all that apply.

Understand spoken Welsh

Speak Welsh

Read Welsh

Write Welsh

None of the above

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**18** What is your main language?

English or Welsh → Go to **20**

Other, write in (including British Sign Language)

\_\_\_\_\_

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**19** How well can you speak English?

Very well      Well      Not well      Not at all

← Native language ability (W & NI)

← Main language (E, W & NI)

← English language speaking proficiency (E, W & NI if English not main language)

Welsh census form, 2011

## Language questions in the SCOTLAND census

**16** Which of these can you do?  
 ♦ Tick all that apply.

	English	Scottish Gaelic	Scots
Understand	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Speak	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Read	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Write	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

or  
 None of these

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**17** How well can you speak English?  
 Very well   Well   Not well   Not at all

---

**18** Do you use a language other than English at home?  
 ♦ Tick all that apply.

No, English only  
 Yes, British Sign Language  
 Yes, other - please write in

← Native language ability

← English language speaking proficiency

← Language used at home

Scottish census form, 2011 (ONS)

# Investigating language with the LS: example

## A million Welsh speakers by 2050?

## How feasible is this Welsh government goal?

Oli Duke-Williams & Nicola Shelton

**Yr Iaith Gymraeg: un miliwn o siaradwyr Cymraeg erbyn 2050?**  
**Welsh Language: A million Welsh speakers by 2050?**

Oli Duke-Williams<sup>1</sup> and Nicola Shelton<sup>2</sup>  
<sup>1</sup> Department of Information Studies, UCL, <sup>2</sup> Department of Epidemiology and Public Health, UCL

**A MILLION WELSH SPEAKERS BY 2050?**

A stated goal of the Welsh Government is to have a million Welsh speakers by 2050.

**MAIN POINTS**

- The great rate of Welsh speaking in 2011 was age 12: all ages retained their ability to speak Welsh, the one million target would be easily surpassed
- After a big post-school decline, the odds of retaining Welsh speaking increased with age
- There are many current Welsh speakers in England: this is strongest in people who were in Wales for longer periods at least two censuses. The million Welsh speaker target may be easier to achieve if it includes people living in England
- There is a relatively large group of people in England who have previously spoken Welsh: encouraging language retention in England would help build the overall numbers of Welsh speakers, including those who might later return to Wales

**PRIF BWNNTIAU**

- Y gyfrif uchaf o siaradwyr Cymraeg yn 2011 oedd 13 oed: gall oedranau holl oed i siaradu Cymraeg, tydysdan hawsaf i ragori targed y miliwn
- Ar ôl trwmio mawr ar ôl ysgol, cyfnewid y ddod o siaradwyr Cymraeg yn cynyddu gyda oed
- Mae yna lawer o siaradwyr Cymraeg cyffwrdd yn Lloegr: mae hysbysu ar ôl ysgol yn rhoi'r cwybodaeth i Nghymru am gynhyddiadau Cymraeg yn ymhloto yn Lloegr
- Mae yna grŵp sylweddol o bobol yn Lloegr sydd wedi siaradu Cymraeg yn blaen, tydysdan hawsaf i ragori targed y miliwn

**LANGUAGE QUESTIONS IN THE CENSUS**

A question on Welsh language capabilities has been asked of people in Wales for many censuses: the questions asked in 2001 (left) and 2011 (right) are shown below. In 2011, a new question was asked in all parts of the UK, with slightly different wording about main language used. In England (right, top), a tick box was available for English. In Wales, a tick box was used for English or Welsh (right, middle and bottom): it is therefore not possible to distinguish Welsh as opposed to English, unless it was specifically asked in the tick box.

**WELSH SPEAKING DIASPORA**

The LS also can choose to look at Welsh speakers in England. Table 2 shows LS members who had some Welsh ability in 2001, and moved from Wales to England in the period 2001-11 (see Fig 8 for age group). These people stated that Welsh was their main language in 2011. Table 3 gives information about LS members resident in England in 2011 and with Welsh as their main language. We had previously seen that residents in Wales. All previous censuses are conducted in Wales (Table 1). LS members were more likely to have Welsh as a main language if they had been resident in Wales for at least two censuses.

**ABOUT THE ONS LS**

The ONS Longitudinal Study (LS) is a sample of people who were aged 16 or over in 2001 and who were living in the UK in 2011. The LS is a representative sample of the UK population aged 16 or over in 2001. The LS is a representative sample of the UK population aged 16 or over in 2001. The LS is a representative sample of the UK population aged 16 or over in 2001.

**Table 1: Odds for gaining Welsh language compared with losing it (n=17,702)**

Age (in years)	Female	Male	Confidence Interval
12-14	1.54	0.94	1.19 - 1.91
15-17	1.29	0.92	1.00 - 1.16
18-24	1.00	0.90	0.79 - 1.03
25-34	1.00	0.92	0.82 - 1.03
35-44	1.00	0.92	0.82 - 1.03
45-54	1.00	0.92	0.82 - 1.03
55-64	1.00	0.92	0.82 - 1.03
65-74	1.00	0.92	0.82 - 1.03
75-84	1.00	0.92	0.82 - 1.03
85+	1.00	0.92	0.82 - 1.03

**Table 2: Odds for retaining Welsh language compared with losing it (n=10,923)**

Age (in years)	Female	Male	Confidence Interval
12-14	1.00	0.92	0.82 - 1.03
15-17	1.00	0.92	0.82 - 1.03
18-24	1.00	0.92	0.82 - 1.03
25-34	1.00	0.92	0.82 - 1.03
35-44	1.00	0.92	0.82 - 1.03
45-54	1.00	0.92	0.82 - 1.03
55-64	1.00	0.92	0.82 - 1.03
65-74	1.00	0.92	0.82 - 1.03
75-84	1.00	0.92	0.82 - 1.03
85+	1.00	0.92	0.82 - 1.03

# Characteristics of people by change in Welsh language capability...

...between 2001

&

2011

**9** Can you understand, speak, read, or write Welsh?

*✓ all the boxes that apply.*

- Understand spoken Welsh
- Speak Welsh
- Read Welsh
- Write Welsh
- None of the above

**17** Can you understand, speak, read or write Welsh?

➤ Tick all that apply.

- Understand spoken Welsh
- Speak Welsh
- Read Welsh
- Write Welsh
- None of the above

Census forms, 2001 & 2011 (ONS)

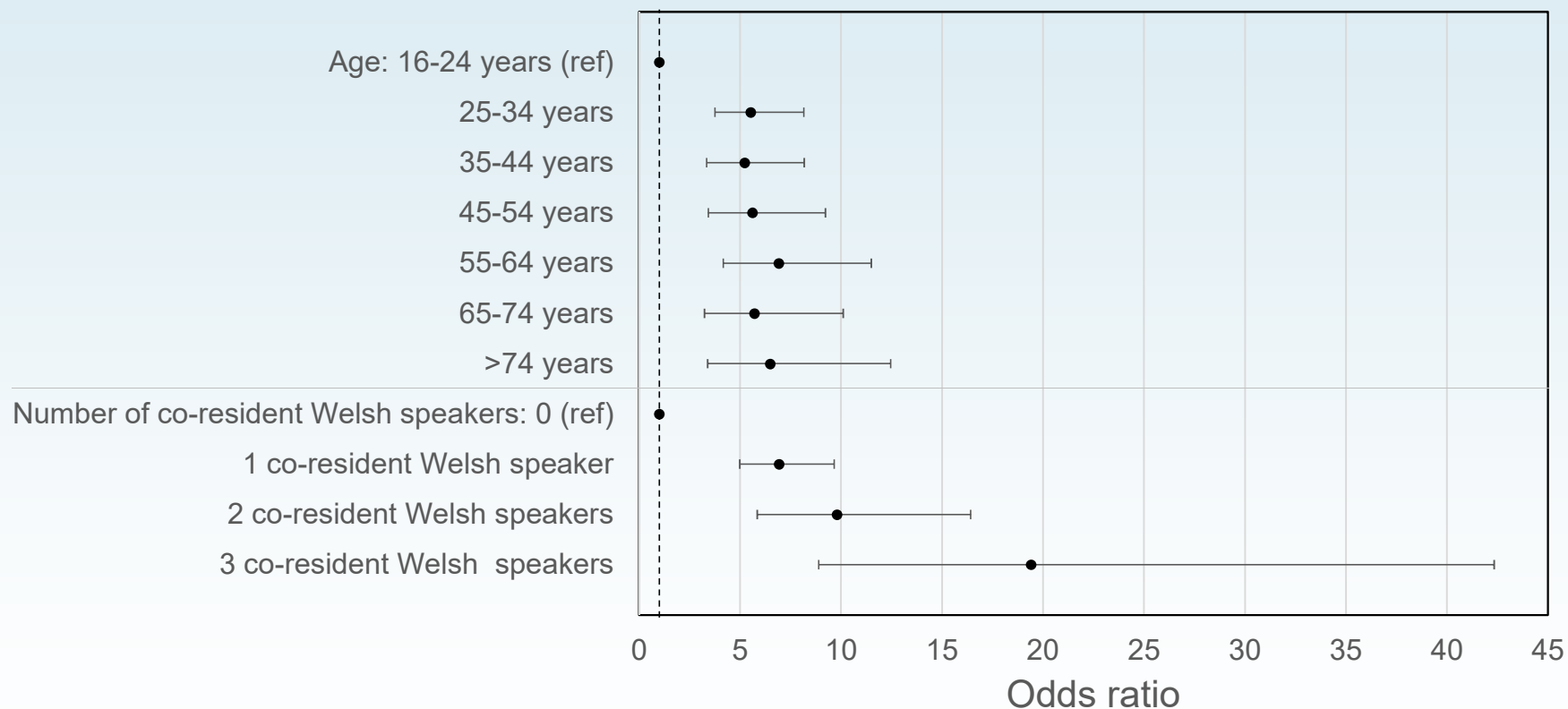


## Definitions of change in Welsh language capability

	<b>Welsh language capability</b>	
	2001	2011
Retaining	$\geq 1$	$\geq 1$
Gaining	0	$\geq 1$
Losing	$\geq 1$	0



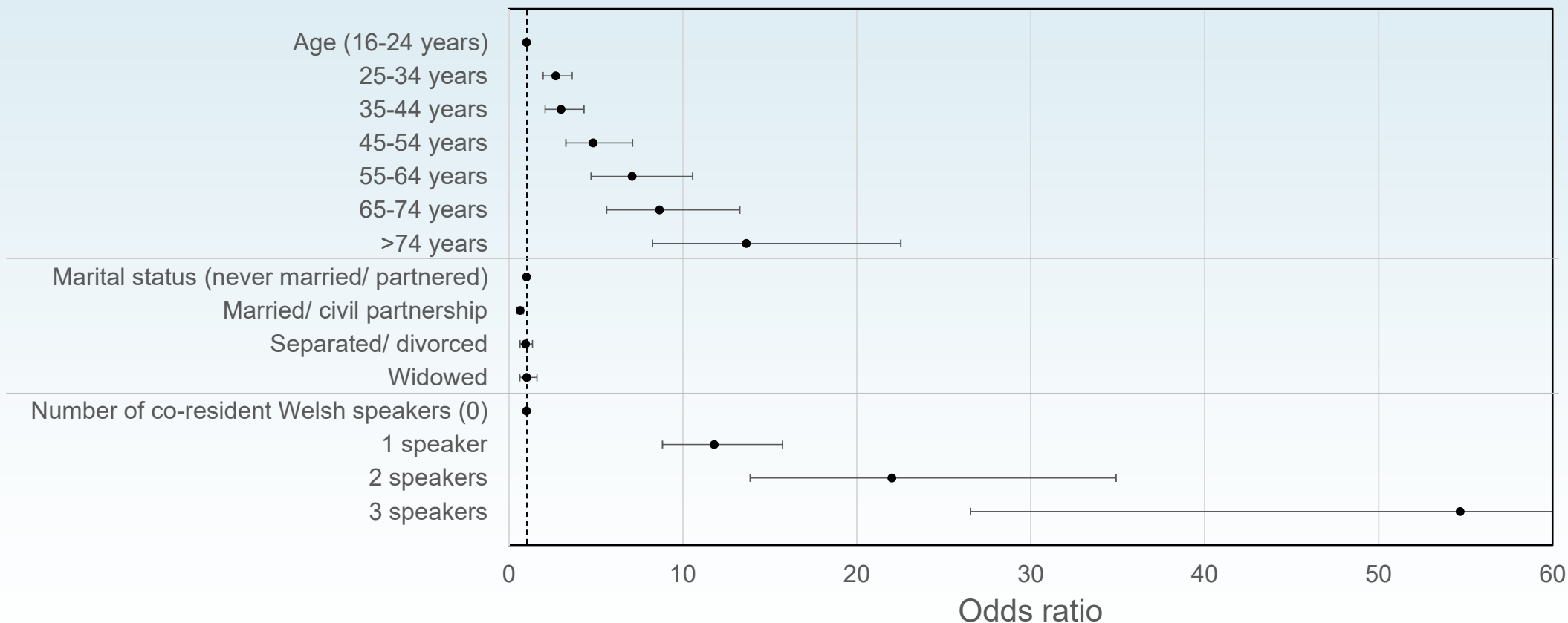
# Odds for gaining Welsh language compared with losing it (N=1713)



Adjusted for sex, highest education qualifications, socio-economic status and marital status.

Source: ONS Longitudinal Study

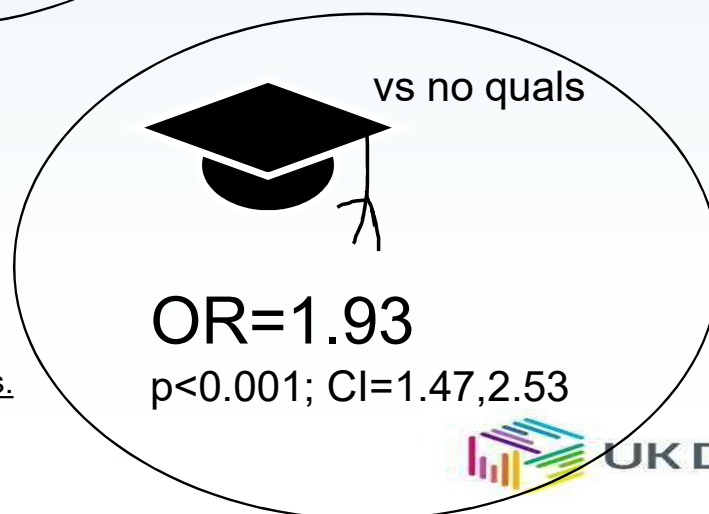
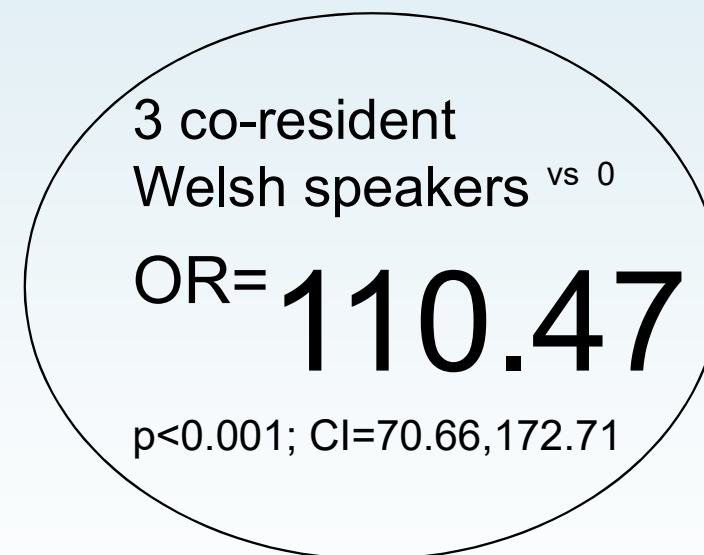
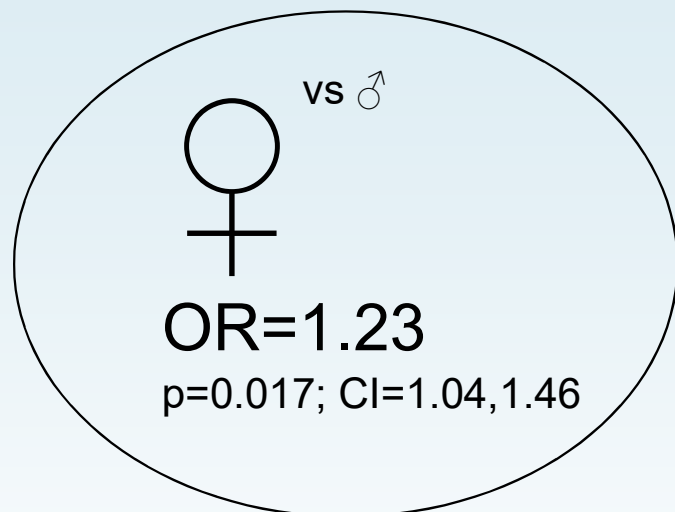
# Odds for retaining Welsh language compared with losing it (N=3533)



Adjusted for sex, highest education qualifications and socio-economic status.

Source: ONS Longitudinal Study

# Odds for gaining Welsh language compared with not gaining it (N=18327)



Adjusted for socio-economic status.  
Source: ONS Longitudinal Study

# Odds for gaining Welsh language compared with not gaining it (N=18327)

Separated/divorced

vs never married/partnered

**OR=0.66**

p=0.008; CI=0.49,0.90

35-44yrs vs 16-24yrs

**OR=0.60**

p=0.004; CI=0.42,0.85

Married/partnered

vs never married/partnered

**OR=0.47**

p<0.001; CI=0.38,0.59

45-54 yrs vs 16-24 yrs

**OR=0.64**

p<0.020; CI=0.43,0.82



Adjusted for socio-economic status.  
Source: ONS Longitudinal Study

# “Welsh” as main language only explicit in England in 2011

England, 2011

**18** What is your main language?

English ➔ Go to **20**

Other, write in (including British Sign Language)

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Wales, 2011

**18** What is your main language?

English or Welsh ➔ Go to **20**

Other, write in (including British Sign Language)

2001-Census forms (ONS)

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Census forms, 2001 (ONS)

## Further investigations:

- LS members resident in Wales in 2001 and in England in 2011 with  $\geq 1$  Welsh language capability in 2001, by main language in 2011
- LS members resident in England in 2011 with main language Welsh in 2011, and previously resident in Wales

Source: ONS Longitudinal Study



## Conclusions

- Many people in England report Welsh main language
  - More likely if previously resident in Wales for  $\geq 2$  censuses
    - Easier to achieve 1 million Welsh speaker target if include people in England
  
- Many people in England have previously spoken Welsh
  - Encourage retention to contribute to overall Welsh speaker numbers

Source: ONS Longitudinal Study





## Previous studies using language

*Differential factors driving geographic variation in mortality in Scotland vs. England and Wales: the contribution of residential mobility and relative deprivation*

Laura A. Kelly et al, University of Pennsylvania

*Ethnic identification among immigrants and their descendants across three generations*

Christel Kesler, Columbia University and Stephen Jivraj, UCL

*Ethnic migration and mobility in England and Wales to 2011*

Lucinda Platt, London School of Economics and Political Science et al

*Exploring the relationships between time since immigration and language spoken*

Oliver Duke-Williams and Rachel Stuchbury, UCL

*Neighbourhood and social integration of mixed ethnic unions*

Zhiqiang Feng, University of St Andrews et al



## Access to data

- Available via support units, see <https://calls.ac.uk/>
- Secure access: accredited researchers & approved projects



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# Questions

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