

# Speak well, do well – English language proficiency and health and social outcomes of UK immigrants

## Key Findings

- Among the immigrant population, better English language skills improve educational attainment and decrease fertility and the likelihood of becoming a teenage mother but have little effect on adult health and no effect on child health.
- The reductions in fertility and the likelihood of becoming a teenage mother are likely to be due to an improvement in educational attainment.
- A poor command of English leads immigrants to live in an area where residents are deprived in terms of income and employment.
- Specific school-based English-learning programmes for young immigrants who arrive in the United Kingdom (UK) at age eight or later would be particularly beneficial for them, as arriving in the UK after the critical period of language acquisition makes it more difficult to learn the language.

## What problem was this research addressing?

The share of foreign-born population in the UK has increased from 9% to 13% from 2004 to 2014 (Office for National Statistics, 2015). The social integration of immigrants is becoming increasingly important in the Scottish policy agenda (Scottish Government, 2016). To implement successful policies to target social and health inequalities of the immigrant population it is important to understand what barriers immigrants face to integrate. Among possible barriers, this project focuses on language. Language facilitates communication with natives as well as access and use of public services, which may subsequently affect health and social outcomes of immigrants. This project analyses the role that English language skills play in explaining a number of health and social outcomes of UK immigrants and ultimately explores the policies that might be effective in facilitating the social integration of immigrants.

## What this research adds?

This project contributes to the knowledge base on the social integration of immigrants by using a unique dataset from the Office for National Statistics (ONS) Longitudinal Study of England and Wales which links individual-level data from the 2011 Census to life event records as well as deprivation indices on income, employment and health.<sup>1</sup> The combination of these datasets allows us to study the causal impact of language skills on health

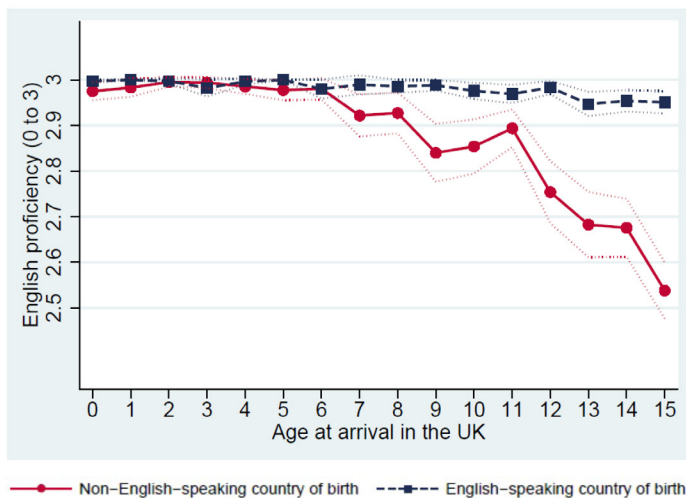
<sup>1</sup>The deprivation indices are obtained from the Multiple Indices of Deprivation 2015 published by the UK Department for Communities and Local Government.

and social outcomes of immigrants that have not been studied before in a UK context. Given the lack of causal evidence based on Scottish data, this research output is the closest statistical evidence available to Scotland.

## Methods

We use an estimation technique called the Instrumental Variable (IV) estimation which allows us to estimate, as opposed to correlate, the causal effect of English skills. The IV estimation requires an instrument for English language proficiency that is correlated with English language skills. We use the age at arrival in the UK to construct the instrument because it is likely to affect the English language skills of individuals. Cognitive science documents that if individuals are exposed to a new language at a critical age range (i.e., childhood), the individuals easily learn the language, whereas acquiring the new language is much harder outside this critical age range, referred to as the 'critical period hypothesis of language acquisition' (Lenneberg, 1967). The critical period hypothesis implies that age at arrival in the UK would affect the English language proficiency of immigrants arriving from countries where English is not spoken as a main language because these immigrants would be exposed to English for the first time when they arrived in the UK. Based on this idea, we use an interaction of age at arrival with an indicator for coming from non-English countries as the instrument. Figure 1 plots the English language proficiency against age at arrival for the immigrants born in English- and non-English-speaking countries.

**Figure 1:** Age at Arrival and English Proficiency



Notes: Figure plots the average ordinal measure of English proficiency, where 3, 2, 1, and 0 correspond to speaks English 'very well', 'well', 'not well', and 'not at all', respectively. English proficiency is regression adjusted for age. Two sets of outer lines correspond to 95% confident intervals. The sample corresponds to childhood immigrants aged 20 to 60 at the time of Census 2011. Source: ONS.

### Research findings

Our results suggest that the education, fertility and extent of deprivation of immigrants are influenced by their ability to speak English. Precisely, better English language skills significantly raise the likelihood of having academic degrees and reduce that of having no qualifications. Regarding fertility and health outcomes, a better proficiency in English significantly delays the age at which an immigrant woman has her first child, lowers the likelihood of becoming a teenage mother, decreases the number of children a woman has, but has little effect on self-reported adult health and no effect on child health measured by birthweight. The results for deprivation outcomes indicate that better English language skills lead immigrants to live in an area where residents are less deprived in terms of income, employment and health, although the effect on health deprivation is not statistically significant.

**Policy relevance of research findings**

Our results contribute to the public debate on the integration of immigrants, providing some evidence against claims that the lack of integration of immigrants into the UK society is due to their social or cultural preferences. We have found that there is a constraint that immigrants face to integrate aside from possible cultural preferences; namely, proficiency in English, and that alleviating this constraint could be a successful way to help immigrants better integrate into the UK society. Specific English-learning programmes at school for young immigrants who arrive in the UK at age eight or later would be particularly beneficial for them, as arriving in the UK after the critical period of language acquisition makes it more difficult for them to learn the language.

### References

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Researchers on this project were Yu Aoki and Lualhati Santiago. For further information see the full papers:

Aoki, Y., and Santiago, L. (2015). *Education, health and fertility of UK immigrants: The role of English language skills*. University of Aberdeen Discussion Paper in Economics, vol. 15, no.12.

Aoki, Y., and Santiago, L. (2016). *English Language Skills and Socioeconomic Segregation of UK Immigrants*. University of Aberdeen Discussion Paper in Economics, vol. 16, no.7.

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