

## What influences vocabulary?

### Initial findings from the Millennium Cohort Study Age 14 Survey



#### MCS Age 14 Survey

The most recent survey of the Millennium Cohort Study was the Age 14 Sweep, which took place between January 2014 and March 2015. The 11,726 participants who took part were interviewed face to face and completed a questionnaire and two cognitive assessments, including a vocabulary assessment. The next sweep will take place in 2018 when the participants are aged 17.

You can find out more about the data collected from this sweep on our website. The data from this and all previous sweeps are available from the UK Data Service.

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#### Introduction

Language skills are an important prerequisite for wider learning. In this briefing we examine the factors which influence young people's knowledge of vocabulary.

Using data from the Millennium Cohort Study, we investigate the varying levels of vocabulary among 14-year-olds to assess:

- The influence of other factors, including parents' level of education, occupation and ethnicity, on children's language development.
  - The association between cultural activities, like having lots of books in the family home and reading for pleasure, and young people's level of vocabulary.
- This briefing is part of a series on different topics, based on the most recent data from the Millennium Cohort Study.**

#### Key findings

- 14-year-olds whose parents were educated to at least undergraduate degree level had, on average, a higher level of vocabulary; they understood just over 8 words out of 20, compared to the average of 7 out of 20.
- Young people whose mothers had the widest vocabulary were more likely to score highly too.
- 14-year-olds who read often for pleasure and those from homes where there were lots of books available to them got better vocabulary scores.
- Overall, the variation in the vocabulary scores of 14-year-olds was much smaller than for their parents. There were substantial differences in how many words parents understood, according to level of education and ethnic group, but among their children, who were all born in the UK, there was much less variation.

## Our approach

The findings in this briefing are based on data collected through the Millennium Cohort Study, a UK-wide birth cohort study, managed by the Centre for Longitudinal Studies.

When they were 14, participants were asked a wide range of questions about their lives, and

also completed a multiple choice word assessment. Nearly 11,000 participants did this assessment. We gave them 20 different words in English and five possible synonyms for each, and asked them to match each word to its correct synonym. An example question is shown below.

We also asked the participant's mother, and their mother's spouse

or partner, to complete a similar assessment, so that we could see how much of a bearing parents' knowledge of vocabulary had on their children's.

We used the results of these assessments, alongside other data about the teenagers, collected since they were born, to identify the strongest influences on children's language development.

EXAMPLE QUESTION:

# conceal

advise

hide

gather

freeze

conciliate

## Findings

### Overview

14-year-olds understood an average of 7 out of 20 of the words we put to them. Parents scored an average of 10 to 11 words out of 20. This infographic gives an overview of the different factors which are positively associated with young people's vocabulary scores.

Level of education and ethnicity played a big part in how well parents did in the word exercise we set them. But the gaps in children's vocabulary, according to parental education and ethnic group were much smaller, suggesting that children's vocabulary development does not depend solely on their background.

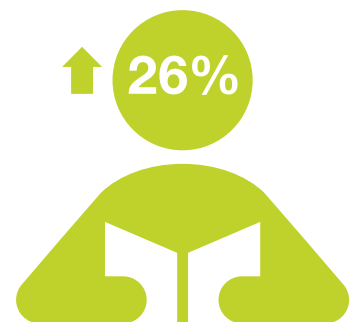
### Links between cultural factors and higher vocabulary scores for teenagers

Growing up in a home rich in books:



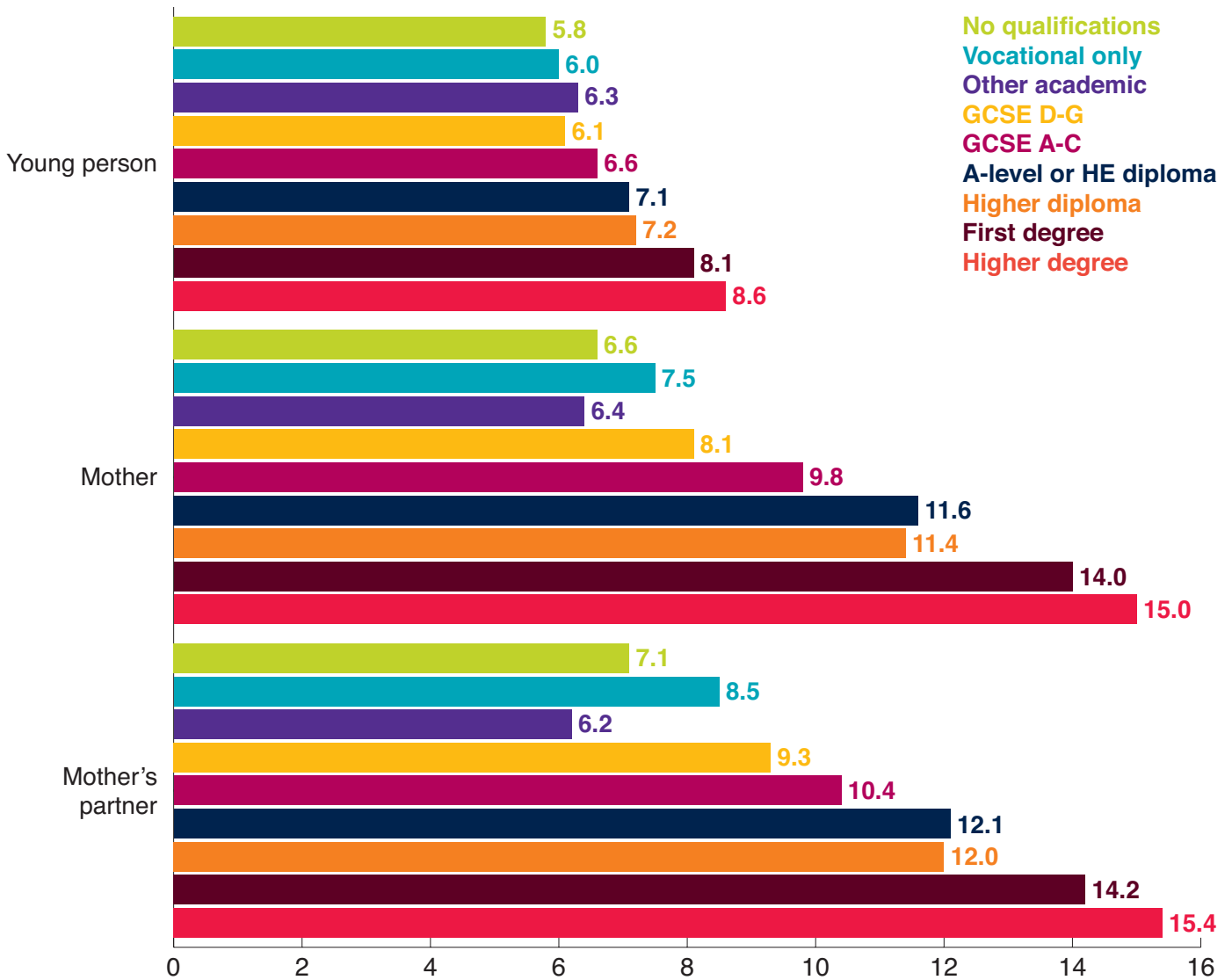
**42% more** words than those from a home with very few books

Reading for pleasure most days:



**26% more** words than those who never read at all

FIGURE 1:  
Average vocabulary scores out of 20 words, by household education



### Parents' education

We found that parents' level of education was very closely associated with their vocabulary scores. There was also a link between parents' education and their children's level of vocabulary, but this was not so strong.

Parents who had studied to degree level or higher, for example, got over double the score of parents who had no qualifications. Children whose parents had studied to degree level or higher, got one and a half times more words right than children whose parents had no qualifications.

### Parents' vocabulary scores

There was a strong link between the vocabulary assessment scores of the parents and their children. Children whose parents had relatively high levels of vocabulary were more likely to do well in the word assessment. If the mother was in the bottom 25% on the vocabulary score, their child got

an average of just under 6 words correct. If the mother was in the top 25%, their child got just over 8 words correct.

This link between parents' and children's scores persisted, even after taking into account the influence of parents' education and occupation.

**“Overall, the variation in the vocabulary scores of 14-year-olds was much smaller than for their parents.”**

## Ethnic differences

While we found some big differences in parents' levels of vocabulary depending on their ethnic background, these were much less pronounced among their children.

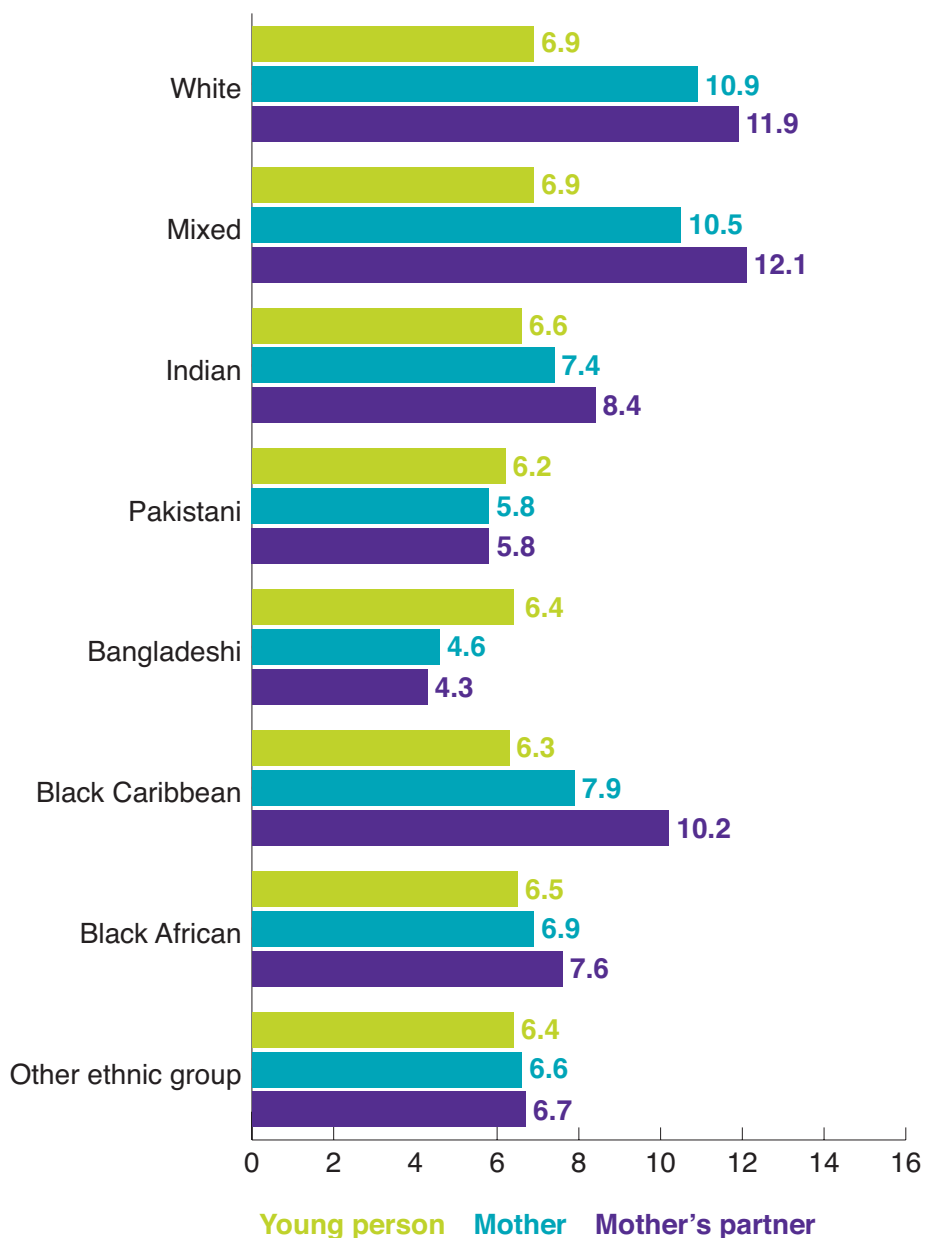
For example, Bangladeshi parents understood an average of around 4 to 5 words out of the 20, compared to the overall average for parents of 10 to 11 words. By comparison, their children scored an average of 6.4, compared to the overall average score of 6.8 for 14-year-olds.

## Cultural activities

We looked at the relationship between having books in the home and reading, and improved vocabulary scores for teenagers.

We found that 14-year-olds who read regularly in their spare time and those who had lots of books available to them in the family home, were more likely to get above average scores in the vocabulary assessment. After accounting for other factors, including parents' education and cognitive tests taken by the teenagers when they were aged 5, 14-year-olds who read for pleasure most days, understood 0.7 more words than their peers who said they never read for pleasure at all.

FIGURE 2:  
Average vocabulary scores out of 20, by ethnic group



**“14-year-olds who read regularly in their spare time and those who had lots of books available to them in the family home, were more likely to get above average scores.”**

## Conclusions

Our findings provide evidence of the important role that parents play in their children's language development. Our research uncovers a strong link between parents' and children's language skills. It highlights ways that parents can support their children to develop a richer vocabulary by making books available at

home and encouraging them to read independently.

Although these results show stark socio-economic differentials in parents' vocabulary, the fact that these differences are much smaller for children than for parents gives grounds for optimism that family background is not destiny.

### About the Millennium Cohort Study

The Millennium Cohort Study has been following the lives of over 19,500 children since they were born in the UK at the turn of the new century. It's one of four longitudinal studies managed by the Centre for Longitudinal Studies.

The study carries out regular surveys (known as 'sweeps') to collect information about participants' physical, socio-emotional, cognitive

and behavioural development over time, alongside detailed information on their daily life, behaviour and experiences. The data collected is a rich and unique resource for researchers across a range of disciplines.

The Millennium Cohort Study has had a significant impact on UK policy, in areas such as breastfeeding, immunisation and child poverty. It will continue to provide a vital source of evidence for policymakers addressing social challenges for many years to come.

## Future research

This is the first time that the Millennium Cohort Study has included any kind of parental cognitive exercise in the survey. We envisage that this will be of wide use to further our understanding of the intergenerational transmission of advantage and disadvantage.

## Acknowledgements

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## For more information

This briefing is a summary of the working paper, The intergenerational transmission of vocabulary, by Alice Sullivan, Vanessa Moulton and Emla Fitzsimons, available from the CLS website.

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