

## Research Briefing N° 106

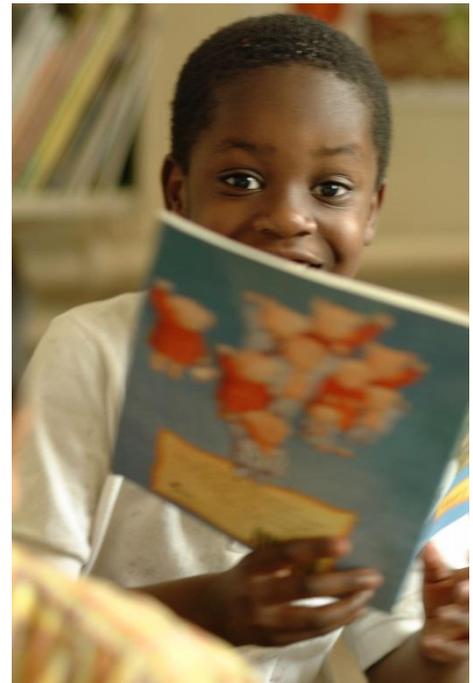
# Reading for pleasure, and attainment in maths, vocabulary and spelling

This research examines whether children who read in their spare time develop intellectually at a faster rate than other children.

**Key words:** reading; BCS70; longitudinal; cognitive tests; mathematics

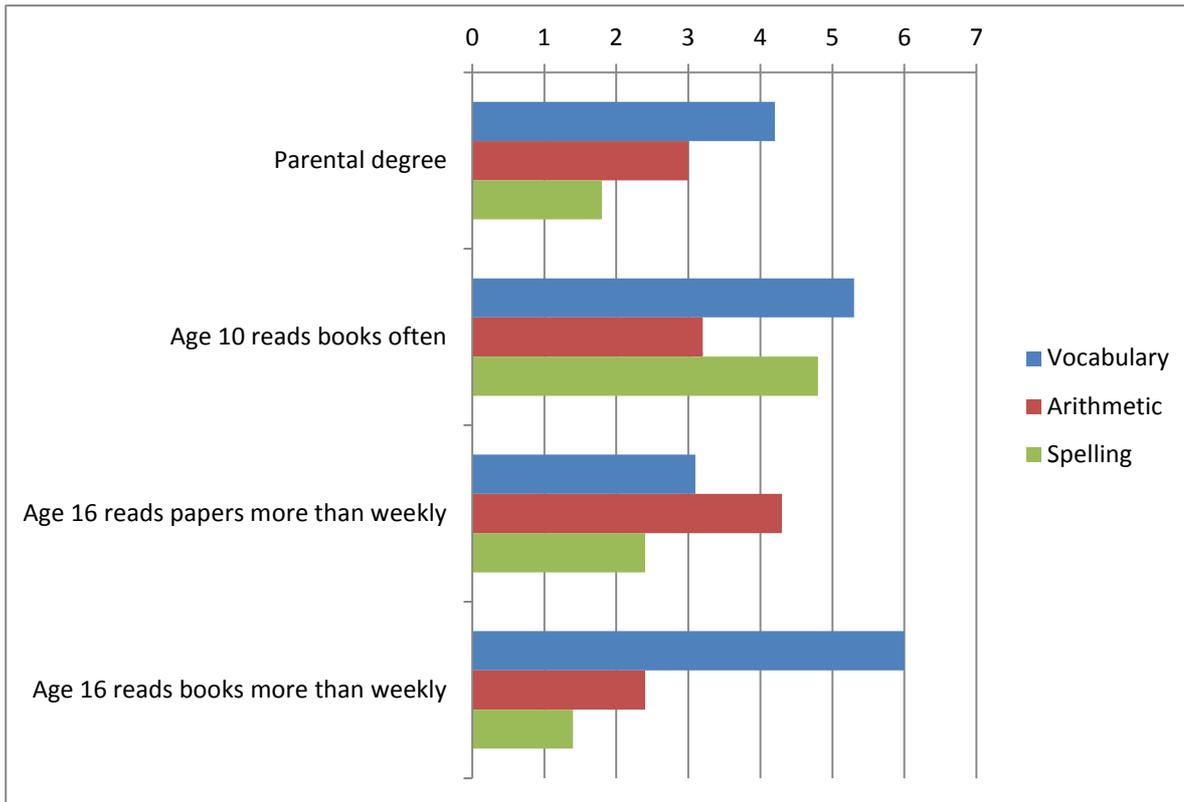
## Key findings

Findings are of interest to policymakers, schools, libraries and parents.



- Reading for pleasure had a powerful influence on children's learning, especially for the development of their vocabularies, but also for their spelling and mathematics skills. We discovered that those who read books often at age 10 and more than once a week at age 16 gained higher test results at age 16 than those who read less regularly. In other words, reading for pleasure was linked to greater intellectual progress, both for vocabulary, spelling and mathematics.
- Reading for pleasure made a substantial difference – the difference made was around four times greater than the difference made by having a parent with a degree. This difference is illustrated by figure 1.
- Having older siblings had a negative influence on children's development, especially for vocabulary.
- Children were much less likely to read for pleasure by age 16 than at age 10.
- Reading introduces young people to new vocabulary and to new ideas, and both of these things are likely to enable them to better understand and absorb new information and concepts across the curriculum.

**Figure 1:** Percentage point differences in progress between age 10 and 16 in vocabulary, arithmetic and spelling



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## What we did

The research set out to find out whether reading for pleasure made a difference for children’s intellectual development.

The research was conducted by Dr Alice Sullivan and Matt Brown, who analysed (in 2013) the reading behaviour of approximately 6,000 young people being followed by the 1970 British Cohort Study (BCS70), which is funded by the Economic and Social Research Council (ESRC). They looked at how often the teenagers read during childhood and their test results in maths, vocabulary and spelling at ages 5, 10 and 16.

Six thousand of the study members took tests in vocabulary, spelling and maths in 1986 when they were aged 16. They had already taken a range of tests when they were younger (at 5 and 10), and the researchers were also able to draw on rich information about their home backgrounds.

## How we did it

The 1970 British Cohort Study (BCS70) follows the lives of people born in England, Scotland and Wales in a single week of 1970. The sample is nationally representative. Every few years the study participants are interviewed to track different aspects of their lives, from education and employment to physical and mental health. This allows researchers to look at what influences an individual's development over a long period of time.

Previous studies have shown that children who read a lot tend to achieve higher test scores than children who do not. However, an important advantage of this study is that it examines change in children's development over time. Using statistical regression analysis, the researchers were able to control for children's attainment

scores at the ages of 5 and 10, as well as a range of social background factors, in order to assess whether reading makes a difference to children's progress up to age 16.

## Implications

Concerns have been raised that young people today are reading less in their spare time than previous generations. This is particularly worrying given that our research suggests this is likely to have repercussions for their intellectual development. We also know that reading for pleasure tends to decline between the primary and secondary school years. Our findings emphasise the importance of schools and libraries working to ensure that all young people have access to a wide range of books and are helped to discover authors that they will enjoy.

## Further information

Working paper:

[Sullivan, A. and Brown, M. \(2013\) Social inequalities in cognitive scores at age 16: The role of reading. CLS Working Paper 2013/10. London: Centre for Longitudinal Studies](#)

Guardian blog: <http://www.theguardian.com/books/booksblog/2013/sep/16/reading-improves-childrens-brains>

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