

National Literacy Trust research report

Book ownership and reading outcomes

Findings from our Annual Literacy Survey 2016

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In 2011, we published a report outlining data on book ownership from a national survey of over 18,000 children and young people conducted in 2010. Our survey showed that a third of children and young people aged 8 to 16 said that they didn't have a book of their own. Findings also indicated that the degree to which children enjoyed reading, how often they read in their free time and how they felt about reading were related to book ownership.

These findings were in line with other international studies, which had shown that book ownership has a strong influence on educational attainment irrespective of other factors (e.g. Evans et al., 2010; Schubert and Becker, 2010). For example, the home print environment was found to be a strong predictor of reading achievement at age 10 and 15, even when income, parental education, aspects of schooling, language used at home and other aspects of the home environment were controlled (Schubert and Becker, 2010).

Given that book gifting is a central element of some of our programmes, we felt it would be timely to reinvestigate this area. We therefore asked about book ownership in our latest annual literacy survey that we conducted in November/December 2016, in which 42,406 children and young people aged 8 to 18 participated. Of the 39,097 children and young people who answered the question of whether or not they have a book of their own at home, 90.6% (N = 35,403) said that they have a book of their own at home. This is a massive increase since 2010, when only 66.8% said they have a book of their own at home.

While this is clearly something to celebrate, we should not overlook the fact that in 2016, **1 child and young person in 11** (9.4%; N = 3,694) said that they don't have a book of their own. That percentage rises to **1 child and young person in 8** (13.1%) who receive free school meals: our proxy of socioeconomic background.

Indeed, our data also shows that, compared with those who have books of their own, children who don't have books of their own:

- Do significantly less well on a reading test
- Are nearly four times more likely to read below the average expected for their age
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- Enjoy reading less
- Are less likely to read daily
- Are less confident readers

Our data also suggest that there are certain groups of children that are more likely to say that they don't have a book of their own at home. More specifically, we find:

- Fewer boys than girls say that they have a book of their own at home
- Teenagers aged 14 to 16 are significantly less likely to say that they have a book of their own compared with children aged 8 to 11
- Fewer pupils who receive free school meals say that they have a book of their own compared with their peers who don't receive free meals

Who has a book of their own at home in 2016?

Overall, in 2016 **90.6%** (N = 35,403) of children and young people aged 8 to 18 said that they have a book of their own at home. However, this also means that **1 child and young person** in **11** (9.4%; N = 3,694) said in 2016 that they don't have a book of their own.

More girls than boys say that they have a book of their own at home (93.4% vs. 87.7%), which also means that boys are twice as likely as girls to say that they don't have a book of their own at home (12.3% vs. 6.6%).

More pupils aged 8 to 11 than pupils aged 11 to 14 or pupils aged 14 to 16 say that they have a book of their own at home (93.0% vs. 91.1% vs 85.1%). Conversely, this means that twice as many pupils aged 14 to 16 than pupils aged 8 to 11 say that they don't have a book of their own at home (14.9% vs. 7.0%).

Indeed, the gap in book ownership between boys and girls widens as they get older. At Key Stage 2, when children are aged 8 to 11, the gap is 4 percentage points (boys 91.0%, girls 95.0%). At Key Stage 4, when young people are aged 14 to 16, this gap has more than doubled to 8.5 percentage points (boys 81.1%, girls 89.6%).

There is also a link between socioeconomic background and book ownership. Using free school meal (FSM) uptake as a proxy of socioeconomic background, we find that fewer FSM pupils than non-FSM pupils say that they have a book of their own at home (86.9% vs. 91.2%).

In terms of ethnic background, fewer pupils from Black ethnic background say that they have a book of their own at home, while pupils from White backgrounds are most likely to say they have a book of their own (White 91.8%, Mixed 91.0%, Asian 89.2%, Black 86.9%).

There is no significant difference in book ownership by region at KS2 but as Figure 1 shows, there is at KS3 where fewer pupils in the North West say that they have a book of their own than, say, pupils in the South West (88.8% vs. 92.6%). Overall, pupils in the North West report the lowest and pupils in the South West report the highest levels of book ownership at age 11 to 14.



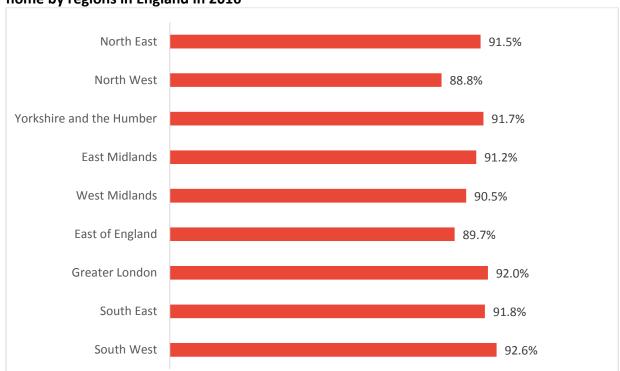


Figure 1: Percentage of pupils aged 11 to 14 who say that they have a book of their own at home by regions in England in 2016

How are book ownership and reading skill linked?

In 2016, we had reading skill data (Digital New Group Reading Test¹) for 572 pupils aged 8 to 16 for whom we also had book ownership data (520 said they have a book of their own; 52 said that they don't have a book of their own at home). The New Group Reading Test provides standardised reading scores that take into account children's ages and are easily interpretable.

Like most other educational skill tests, it is standardised so that the average score is 100, while the spread of the scores (the standard deviation) is set for 15. This means that children who have standardised scores of 85-115 fall within the average reading skills band, while children who score below 85 have below average reading skills and children who score above 115 have above average reading skills.

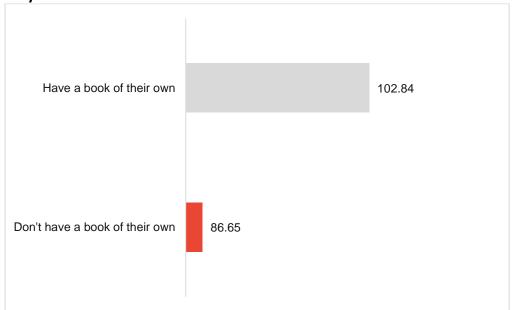
As can be seen in Figure 2, children and young people who say that they have a book of their own at home have, on average, higher reading scores than their peers who say that they don't have their own book². Indeed, children who don't have a book of their own have an average reading score that is at the bottom end of the average test range.

 $^{^2}$ Have a book of their own: SD = 14.86; don't have a book of their own: SD = 12.70; t(570) = 7.583, p < .001



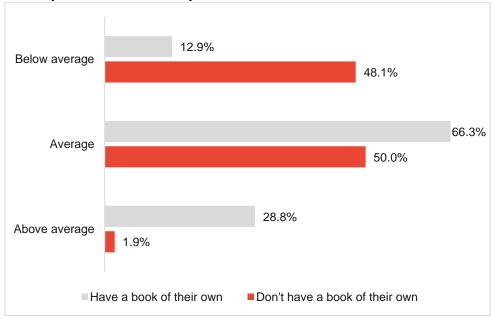
 $^{^1\,}https://www.gl-assessment.co.uk/products/new-group-reading-test-ngrt/.$

Figure 2: Average standardised reading scores in 2016 by whether or not children say that they have a book of their own at home



To compare pupils with different reading scores, they were divided into three groups based on their score: having a below average score (< 85), having an average score (85 to 115) and having an above average reading score (>115). As can be seen in Figure 3, nearly four times as many children who don't have a book of their own at home read below the average expected for their age compared with their peers who own a book. Conversely, 15 times as many children who own a book read above the expected level compared with their peers who don't have a book of their own.

Figure 2: Percentage of children reading below average, average and above average in 2016 by whether or not they have a book of their own at home



Linking book ownership and wider reading

Figure 4 shows that children and young people who say that they have a book of their own at home are more likely to **enjoy reading**³ than those who say that they don't have a book of their own. Indeed, three times as many children and young people who have a book of their own at home own enjoy reading "very much" and twice as many say that they enjoy reading "quite a lot" compared with children who don't have a book of their own.

Conversely, 5.5 times as many children and young people who say that they don't have a book at home say that they don't enjoy reading at all compared with those who have their own book.

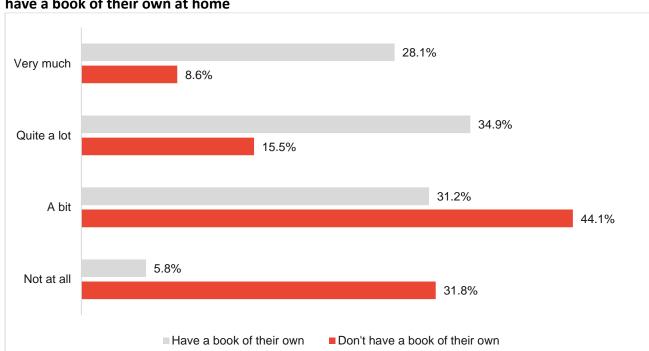


Figure 4: Levels of reading enjoyment in 2016 by whether or not children say that they have a book of their own at home

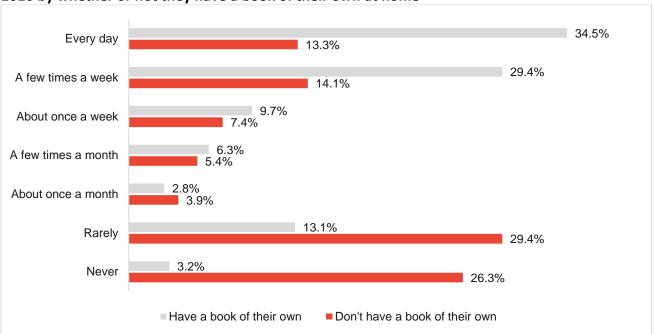
In addition to finding out how reading enjoyment differs depending on whether or not children say that they have their own books, we also want to know whether there are differences in **how often they read in their free time**⁴. As Figure 5 shows, 1 in 3 children and young people who have a book of their own said that they read something in their free time every day compared with only 1 in 7 children who don't have their own book. Whereas, eight times as many children and young people who don't have a book of their own as those who do say that they never read in their free time.

⁴ To assess whether owning a book predicts whether or not children read daily once other variables we know are associated with reading frequency are included at the same time, it was entered into a regression model alongside other variables, such as gender (male, female), key stage (aged 8 to 11, aged 11 to 14 and aged 14 to 16), free school meal uptake (FSM, non-FSM), ethnicity (White, Mixed, Asian, Black, as well as whether or not children enjoy reading (enjoy vs. don't enjoy). The model's successful prediction was 69.7%, with all variables, apart from ethnic background contributing significant predictive power according to the Wald criteria.



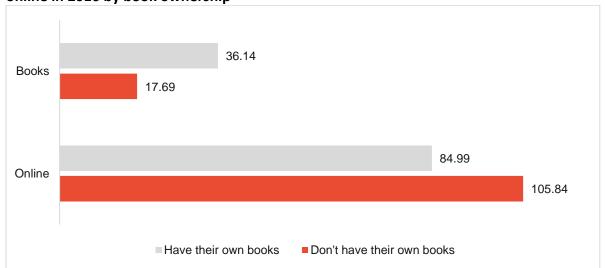
³ To assess whether owning a book predicts whether or not children enjoy reading once other variables we know are associated with reading enjoyment are included at the same time, it was entered into a regression model alongside other variables, such as gender (male, female), key stage (aged 8 to 11, aged 11 to 14 and aged 14 to 16), free school meal uptake (FSM, non-FSM), ethnicity (White, Mixed, Asian, Black, as well as whether or not children read daily (daily vs. non-daily). The model's successful prediction was 68.8%, with all variables, apart from FSM uptake, contributing significant predictive power according to the Wald criteria.

Figure 5: Levels of frequency with which children and young people read outside class in 2016 by whether or not they have a book of their own at home



We also asked children and young people to estimate how many minutes in a typical day they spend reading materials online and how many minutes they spend reading a book in their free time. As can be seen in Figure 6, children and young people spend, on average, more minutes in a typical day reading something online than they spend reading a book, regardless of whether or not children have a book of their own at home. However, children who have books of their own spend on average twice as many minutes reading a book than their peers who don't own a book, who, in turn, spend more minutes reading something online.

Figure 6: Average number of minutes per day spent reading either a book or something online in 2016 by book ownership



We also asked children and young people a few book-related questions. For example, we asked them to estimate how **many books they read in a typical month**. Our data show that



children and young people who have books of their own at home said that they read, on average, 4.87⁵ books in a typical month compared with their peers who don't own books who read an average of 2.58 books in the same time period.

We also asked a few questions about their self-perceived reading skill and motivation for reading. When asked how good a reader they are on a scale of 1 - 10, children who have their own books also rate themselves as more proficient readers than children who say that they don't have a book of their own (see Figure 7).



Figure 7: Average ratings of reading skill in 2016 by whether or not children own books

On a scale of 1 - 10, where 1 = not very good to 10 = very good

Finally, our 2016 survey also included items that tapped into children's and young people's **motivation to read**⁶. In particular, we wanted to know to what extent pupils are motivated to read by:

- interest i.e. choosing to read because of personal interest
- approval i.e. choosing to read to receive praise or a reward
- achievement i.e. choosing to read because it helps to achieve something, such as learning more
- self-efficacy i.e. driven by a sense of their own capabilities.

The data show that children and young people who have a book of their own at home are much more likely than those who don't to be motivated to read by interest⁷. As can be seen in Figure 8, which demonstrates the percentages of pupils who are motivated to read (by interest, approval, achievement and self-efficacy), children who own books are often twice as likely to agree with the statements that reading is cool, that they are excited and cannot wait to read more and that there are lots of things that they would like to read. Conversely, children who say that they don't have a book of their own are more likely to agree that they cannot find things to read that interest them and that they only read when they have to.

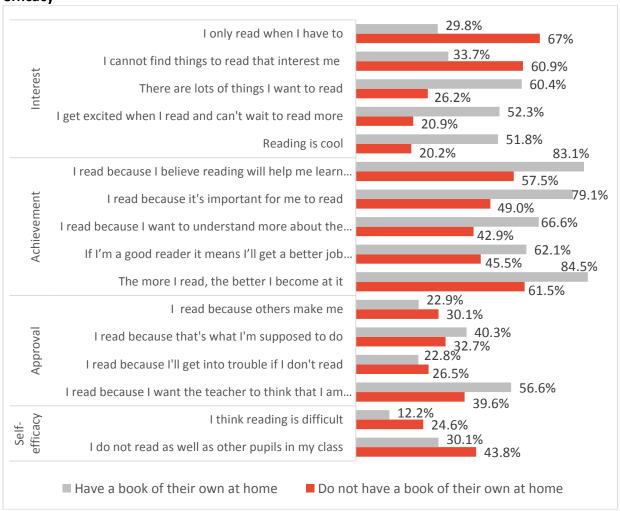
⁶ Several of these were used by Coventry University in the independent evaluation of one of our programmes, Premier League Reading Stars. We changed the response options to an agreement Lickert scale for these items to align them with the rest of the survey.

⁷Own books: M = 2.53, SD = 1.00; don't own books: M = 3.63, SD = 1.01; t(39095) = -62.985, p < .001, Cohen's d = 1.09



⁵ Range: 0 -30, SD = 5.87

Figure 8: Percentages of pupils (those who have a book of their own at home and those who do not) who are motivated to read by interest, achievement, approval and self-efficacy



Similarly, children who own books are also more likely to be motivated to read by achievement than children who don't have books of their own⁸. The figure overleaf shows that more children who own books agree with the statements that the more they read the better they become, that if they read well they will get a better job when they go up, that reading teaches them about the world, that reading is important and that reading helps them learn.

Children who have books of their own are also more motivated to read by approval than their peers who don't have their own books. Figure 7 shows that more children who have books of their own agree that they read because they want their teacher to think they are a good reader and because that is what they are supposed to do, whereas children who don't own books are more likely to agree that they read because otherwise they would get in trouble and that they read because others make them.

 $^{^8}$ Own books: M = 1.99, SD = 0.73; don't own books: M = 2.68, SD = 0.99; t(39095) = -52.68, p < .001, Cohen's d = 0.79 for the contract of the contract of



Finally, regarding self-efficacy, children who don't own books are less likely to believe in their own reading capabilities⁹. For example, they are more likely to agree that reading is difficult and that they don't read as well as other pupils in their class.

In sum,

Our 2016 data suggest that a substantial percentage of children and young people do not have a book of their own at home. Our data also suggest that more girls than boys have a book of their own at home, that this gender gap in book ownership widens as children get older, that more Key Stage 2 pupils than Key Stage 3 pupils or Key Stage 4 pupils have a book of their own at home, that more non-FSM pupils than FSM pupils have a book of their own (compared with Mixed, Asian and Black ethnicities) and that at KS3 more pupils in the South West have a book of their own than pupils in eight other areas of England.

Finally, the data suggest that children and young people who have a book of their own have, on average, higher reading scores than those who don't. In addition, they are more likely to enjoy reading and read in their free time daily and to consider themselves to be a good reader. Conversely, children who don't have a book of their own are more likely to say that they only read when they have to and when others make them read, and less likely to believe in their own reading capabilities.

 $^{^{9}}$ Own books: M = 2.40, SD = 1.02; don't own books: M = 2.83, SD = 1.13; t(4335.604) = -22.566, p < .001, Cohen's d = 0.40; adjusted for unequal variances and variables reverse scored so that higher means indicate higher agreement



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About the National Literacy Trust

We are a national charity dedicated to raising literacy levels in the UK. Our research and analysis make us the leading authority on literacy. We run projects in the poorest communities, campaign to make literacy a priority for politicians and parents, and support schools.

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