

## Book ownership, literacy engagement and mental wellbeing

### Findings from our annual literacy survey 2017/18

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#### Introduction

National Literacy Trust research has previously found that children and young people who have books of their own at home have more positive attitudes to reading, enjoy reading more, read more frequently and have higher reading attainment than children who don't have books of their own<sup>1</sup>.

These findings are in line with other international studies, which have shown that book ownership has a strong influence on educational attainment irrespective of other factors. 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<sup>2</sup> (Schubert and Becker, 2010). Similarly, another international study of 27 countries showed that the number of books in the home was as strong a predictor of reading attainment as parental education, and a stronger predictor than the father's occupation and the family's socioeconomic background<sup>3</sup>.

In 2017, we consolidated responses across reading and writing variables to create a new literacy engagement score, facilitating a further consideration of the relationship between book ownership and literacy engagement. In addition, we included questions relating to mental wellbeing in our annual literacy survey<sup>4</sup>, allowing us to explore associations between mental wellbeing and book ownership for the first time.

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<sup>1</sup> <https://literacytrust.org.uk/research-services/research-reports/book-ownership-and-its-relation-reading-enjoyment-attitudes-behaviour-and-attainment/>, and <https://literacytrust.org.uk/research-services/research-reports/book-ownership-and-reading-outcomes/>

<sup>2</sup> Schubert, F. & Becker, R. (2010). Social inequality of reading literacy: A longitudinal analysis with cross-sectional data of PIRLS 2001 and PISA 2000 with the pairwise matching procedure. *Research in Social Stratification and Mobility*, 29(1), 109-133.

<sup>3</sup> Evans, M. D. R., Kelley, J., Sikora, J., & Treiman, D. J. (2010). Family scholarly culture and educational success: Books and schooling in 27 nations. *Research in Social Stratification and Mobility*, 28(2), 171-197

<sup>4</sup> <https://literacytrust.org.uk/research-services/research-reports/mental-wellbeing-reading-and-writing/>

## Key findings

- 9% of children and young people say that they don't own have a book of their own at home, a statistic that has remained static over the past year. This means that 1 in 11 children and young people in the UK miss the benefits of having their own books.
- This ratio drops to 1 in 8 pupils who receive free school meals who told us that they don't have a book of their own at home.
- 51.24 is the average number of books owned by children and young people who say that they have books of their own at home.
- Not only do fewer FSM pupils say that they have a book of their own at home than their advantaged peers, but those who do have books of their own report fewer books than their more advantaged peers (39.8 vs. 52.6).

## Book ownership and reading skill

- Children and young people who have books of their own at home are three times more likely to read above the level expected for their age compared with their peers who say that they don't have their own book (12% vs. 4.2%).
- Of those who say that they have their own books at home, those who read below their expected level report having half the number of books than those who read above their expected level (33 vs. 63).
- Alternatively, those who have more than 60 books of their own at home are 5.5 times more likely than those who have fewer than 10 books to read above the level expected for their age.

## Book ownership and literacy engagement

- Those who have a book of their own at home have, on average, a higher literacy engagement score than those who don't have a book of their own (36 vs 28).
- Those who don't have a book of their own at home are three times more likely to have low literacy engagement compared with those who have a book of their own at home (18.9% vs. 57.9%).

## Book ownership and mental wellbeing

- Those who have a book of their own at home have, on average, a higher mental wellbeing score than those who don't have their own books (7.3 vs. 6.8 on a scale of 1 to 10).
- Those who don't have a book of their own at home are twice as likely to have low mental wellbeing than they are to have high mental wellbeing (32.7% vs. 18.0%)

## Who has a book of their own at home?

Of the 44,097 children and young people aged 8-18 in the UK who answered our questions on book ownership in our 2017/18 annual literacy survey, **9 in 10** (91.0%, N = 40,132) **told us that they have a book of their own at home**; much the same as the year before.

However, this also means that the number of children who say they don't own a book (9%) has remained static over the past year, and that these children and young people are missing the benefits of having their own books.

Our survey also allowed us to dig a bit deeper to see who the groups of pupils are who are more likely to say that they have a book of their own at home. As Figure 1 shows, more girls than boys say that they have a book of their own at home, and the difference is statistically significant.

Children and young people who receive free school meals (FSM), our proxy indicator of social disadvantage, continue to be significantly less likely to say that they own their own books compared with their more advantaged peers. Just like last year, **1 in 8 FSM pupils** told us that they don't have a book of their own at home.

Book ownership is highest among children aged 8 to 11 and 11 to 14, while levels drop off markedly in later secondary years. Only 8 in 10 young people aged 14 to 18 say that they have a book of their own at home.

**Figure 1: Percentage of children and young people reporting to own a book of their own by gender, FSM uptake and age group**

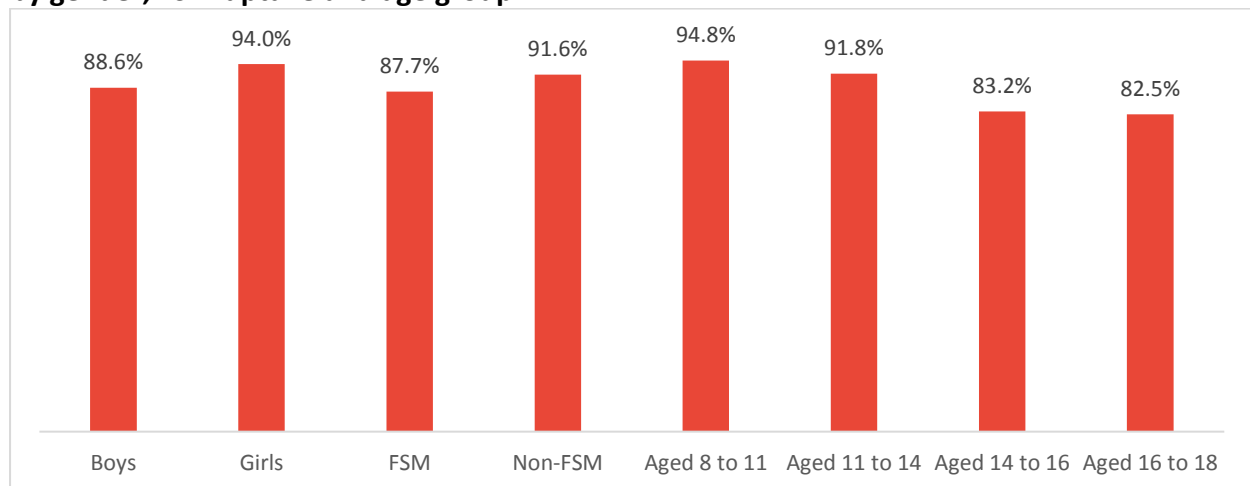
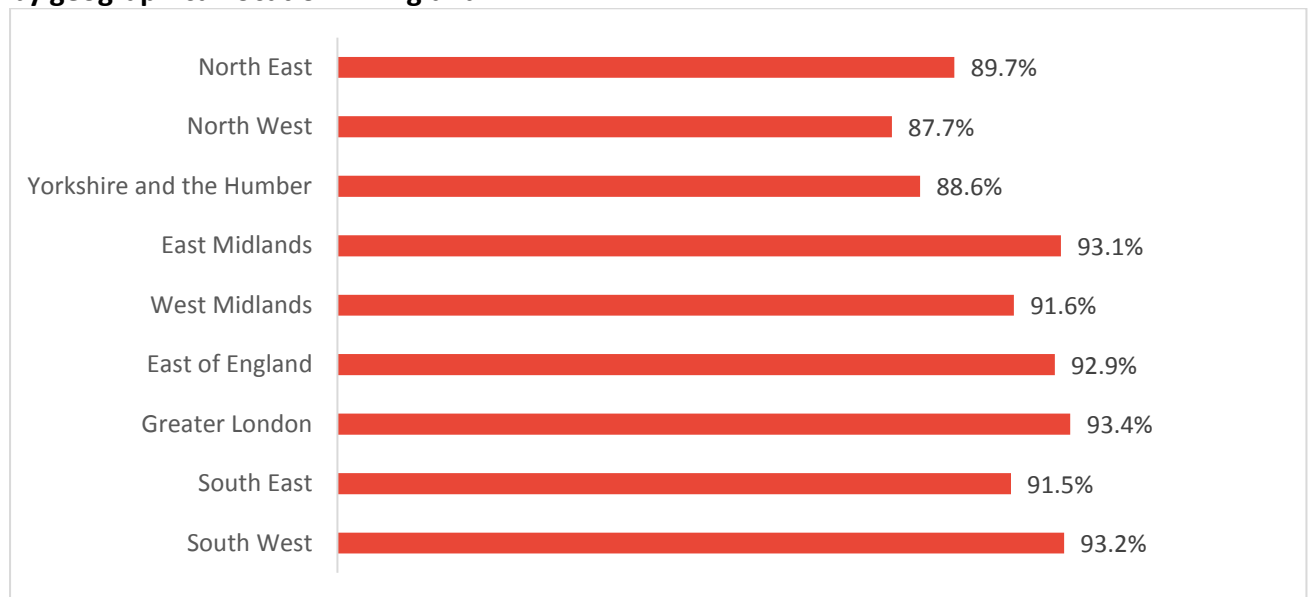


Figure 2 shows book ownership across geographic regions in England. It indicates that children and young people in the North of England (the North West, Yorkshire and the Humber and the North East) have the lowest levels of book ownership, while Greater London, the East Midlands and the South West have the highest levels.

**Figure 2: Percentage of children and young people reporting to own a book of their own by geographical location in England**

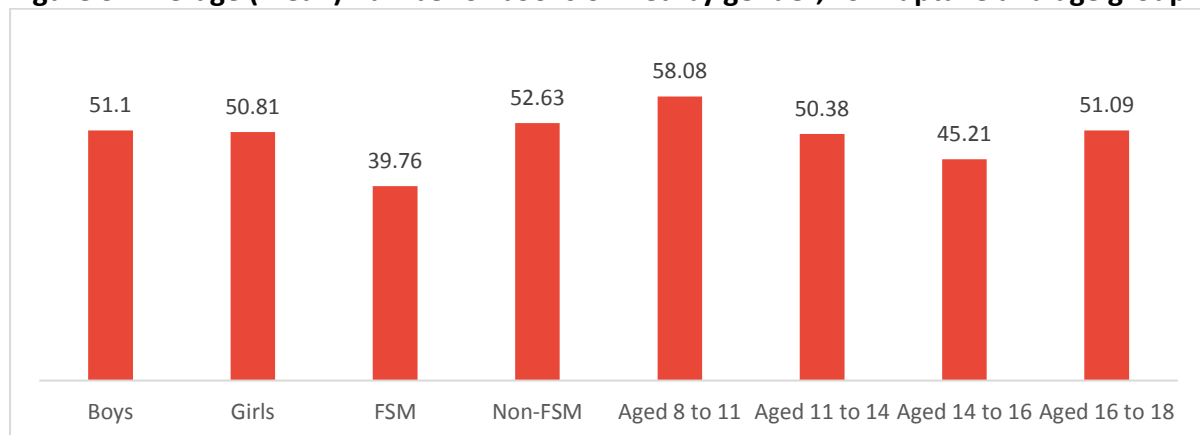


### How many books do children and young people say they own?

As well as asking whether they have a book of their own at home, children and young people who said that they do were asked to estimate how many books they think they have. 34,623 children and young people estimated the number of books they own, with the average number of books being **51.24** (standard deviation 70.21), ranging from 1 to 500. The median, or the number of books that is the mid-point of the distribution, is 28 books.

Although we saw earlier that fewer boys than girls said that they have a book of their own at home, Figure 3 shows that boys and girls who have their own books report a similar quantity of books owned. And not only do fewer FSM pupils say that they have a book of their own at home than their advantaged peers, but the figure also shows that those who do have books of their own report fewer books than their more advantaged peers. Lastly, the figure shows differences by age group, with those aged 8 to 11 reporting the most books of their own, and those aged 14 to 16 reporting the fewest.

**Figure 3: Average (mean) number of books owned by gender, FSM uptake and age group**



As can be seen in Figure 4, the highest number of books are reported by children and young people in the West Midlands and South West, while children and young people from Yorkshire and the Humber, the North West, the North East and Greater London report owning the fewest books.

The finding for Greater London is particularly interesting as this is where we saw the highest level of book ownership earlier. So, while more children and young people in Greater London than their peers elsewhere report having a book of their own at home, they don't own as many books as children in other parts of the country.

**Figure 4: Average (mean) number of books owned by geographical region in England**



## Book ownership and reading skill

In 2017/18 we had reading skill data for 1,098 pupils aged 11 to 15, allowing us to explore the link between reading enjoyment, reading frequency and reading skill.

Schools measured reading skill using different assessments, so pupils were categorised into three groups depending on whether or not they were reading at the level expected for their age: reading below the expected level (13.2%), at the expected level (75.5%) and above the expected level (11.3%).

Table 1 shows that children and young people who have books of their own at home (N = 974) are three times more likely to read above the level expected for their age compared with their peers who say that they don't have their own book (N = 118)<sup>5</sup>. Indeed, those who don't have a book of their own are nearly four times more likely to read below the level expected for their age compared with those who have a book of their own at home.

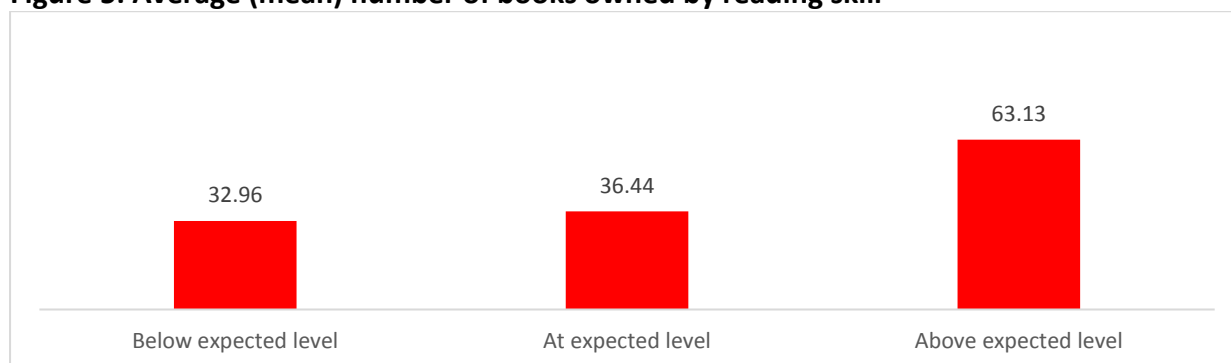
<sup>5</sup> We did not have book ownership data for six pupils for whom we had reading skill data.

**Table 1: Reading skill by whether or not children and young people have books of their own at home**

	<b>Below expected level</b>	<b>At expected level</b>	<b>Above expected level</b>
<b>Have a book of their own</b>	10.3%	77.7%	12.0%
<b>Don't have a book of their own</b>	38.1%	57.6%	4.2%

Of those who say that they have their own books at home, those who read below their expected level report having half the number of books of their own than those who read above their expected level (see Figure 5). This is also true for pupils who read at the expected level for their age.

**Figure 5: Average (mean) number of books owned by reading skill**



Alternatively, we can explore whether the number of books owned by children and young people is associated with their reading skill. To this end, we created quartiles based on the number of books owned, with the bottom quartile containing children and young people who own fewer than 10 books and the top quartile, those who own 60 or more books.

As can be seen in Table 2, those who have more than 60 books of their own at home are 5.5 times more likely than those who have fewer than 10 books of their own to read above the level expected for their age. It is perhaps also worth noting that we don't see the same difference for those who read below their expected level, where the number of books owned has much less of an impact.

**Table 2: Reading skill by how many books children and young people say they have of their own at home**

	<b>Below expected level</b>	<b>At expected level</b>	<b>Above expected level</b>
<b>Have fewer than 10 books of their own</b>	12.7%	83.1%	4.2%
<b>Have more than 60 books of their own</b>	7.5%	69.6%	23.0%

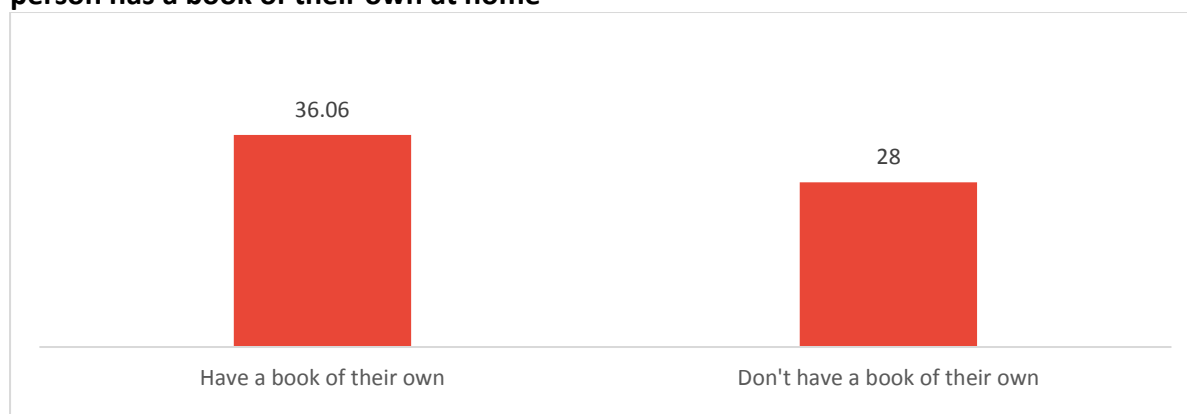
## Book ownership and literacy engagement

In the past, we have looked at the link between book ownership and reading enjoyment, reading behaviours and reading attitudes, exploring the relationships separately. We found that those who say that they have books of their own at home are more likely to enjoy reading, more likely to see themselves as good readers, more likely to read in their free time and more likely to think positively about reading than those who report that they don't have a book of their own. We also previously found that having books of one's own is linked to reading skills, with those who have their own book scoring higher on a standardised reading test than those who don't have a book of their own.

In this report, we take a slightly different tack. Instead of exploring the individual components of reading as we have done previously, we wanted to explore how those who have books of their own at home differ from those who don't in terms of their general engagement with literacy. To this end, we constructed a variable that summed the responses across all of our reading and writing variables, with positive responses being allocated higher scores (for a total of 52 scores). For some of the analyses, we then also divided the sample into four quartiles to explore how those with low literacy engagement (bottom quartile) differ from those with high literacy engagement (top quartile)<sup>6</sup> in terms of their book ownership.

Figure 6 shows that those who have a book of their own at home have, on average, a **higher literacy engagement score** than those who don't have a book of their own. Not only is the difference between the two groups statistically significant<sup>7</sup> but the magnitude of the difference (Cohen's d) between these two groups is 1.07, which in statistical terms indicates a 'large' difference. This also indicates that 84% of the group who have a book of their own at home have higher literacy engagement scores than the average child who doesn't have a book of their own.

**Figure 6: Average (mean) literacy score out of 52 by whether or not a child or young person has a book of their own at home**



<sup>6</sup> Quartiles look at the distribution of responses and divide those into four roughly equal parts. The first quartile (also called the lower quartile) is the number below which lies the bottom 25 percent of data. The second quartile (the median) divides the range in the middle and has 50 percent of the data below it. The third quartile (also called the upper quartile) has 75 percent of the data below it and the top 25 percent of the data above it. In our study, the quartile scores are divided into the following four groups: bottom = 0-29.75; lower middle = 29.76-35.60; upper middle = 35.61-40.58; top = 40.59-52.

<sup>7</sup>  $t(4621.02) = 61.45, p < .001$ , adjusted for unequal variances

Table 3 cross-tabulates those who either have or don't have a book of their own at home with those who score in the bottom and top quartiles for literacy engagement. It shows that nearly 6 in 10 (57.9%) of those who don't have a book of their own at home also have low literacy engagement. Indeed, those who don't have a book of their own at home **are three times more likely** to have low literacy engagement compared with those who have a book of their own at home.

Conversely, those who have a book of their own at home **are five times more likely** to be engaged with literacy compared with their peers who don't have a book of their own.

**Table 3: Cross-tabulation of whether or not a child or young person has a book of their own at home with bottom and top literacy engagement scores**

	Low literacy engagement (bottom quartile)	High literacy engagement (top quartile)
Have a book of their own	18.9%	28.3%
Don't have a book of their own	57.9%	5.5%

## Book ownership and mental wellbeing

For the first time this year, we inserted a few questions about mental wellbeing in our annual literacy survey (for our report on the link between mental wellbeing, reading and writing, please see here: [literacytrust.org.uk/research-services/research-reports/mental-wellbeing-reading-and-writing/](https://literacytrust.org.uk/research-services/research-reports/mental-wellbeing-reading-and-writing/)).

We chose to focus on three aspects of mental wellbeing: life satisfaction, coping skills and self-belief. To explore how mental wellbeing in general is associated with book ownership, we combined responses across these three components to create an overall Mental Wellbeing Index with a range of 1 to 10, where a higher score equals a higher level of mental wellbeing. Again, for some of the following analyses we also split the sample into quartiles to help us explore how those who score at the bottom (N = 10,675) and top quartile (N = 10,863) of our Mental Wellbeing Index<sup>8</sup> differ in terms of their book ownership.

Figure 7 shows that those who have a book of their own at home have, on average, **a higher mental wellbeing score** than those who don't have their own books – a difference that is statistically significant<sup>9</sup>. The actual size of the difference between the two groups was 'small' (Cohen's d = 0.3), indicating that the mean wellbeing score of those who have books of their own at home exceeds the scores of 62% of those who don't have books of their own at home.

<sup>8</sup> Quartile scores: bottom = 0-6.32; lower middle = 6.33-7.50; upper middle = 7.51-8.50; top = 8.51-10

<sup>9</sup>  $t(4546.19) = 16.87, p < .001$ , adjusted for unequal variances



**Figure 7: Average (mean) mental wellbeing score out of 10 by whether or not they have a book of their own at home**

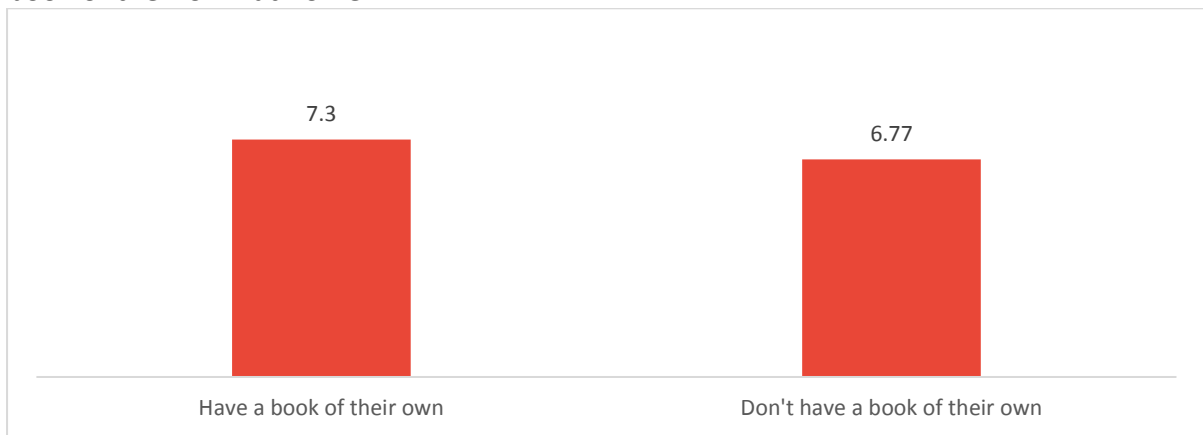


Table 4 cross-tabulates those who either have or don't have a book of their own at home with those who score in the bottom and top quartiles for mental wellbeing. It shows that those who don't have a book of their own at home **are twice as likely** to have low mental wellbeing than they are to have high mental wellbeing. However, the differences between the groups are not as clear cut as we saw earlier with respect to literacy engagement. Those who have a book of their own at home appear to be as likely to have low mental wellbeing as they are to have high mental wellbeing.

**Table 4: Cross-tabulation of whether or not a child or young person has a book of their own at home with bottom and top literacy engagement scores**

	Low mental wellbeing (bottom quartile)	High mental wellbeing (top quartile)
Have a book of their own	22.3%	24.3%
Don't have a book of their own	32.7%	18.0%

## Discussion

Given the many benefits of book ownership on children's reading enjoyment and attainment, it is unfortunate to note that – for a second year running – 1 in 11 (9%) children and young people in the UK say they don't have a single book of their own at home.

It is particularly notable that boys and children from lower-income households are even less likely to be book owners<sup>10,11</sup>, as children in these groups perform less well in reading assessments. Furthermore, recognising the wealth of high-quality young adult titles<sup>12</sup> available in the UK, it is disheartening to see that older teenagers are the age group least likely to say they have a book of their own at home.

In addition to the benefits of book ownership noted in earlier research, these latest findings provide new evidence of a statistically significant relationship between high literacy engagement and having a book of your own at home. Indeed, children who did not own books were found to be three times more likely to have low literacy engagement.

Moreover, children with their own books are more likely to have a higher levels of mental wellbeing than those who do not own books. However, considering book owners alone, it is interesting to note that this group were as likely to have low as they were to have high levels of mental wellbeing. It is difficult to speculate about why this might be the case, and further research looking at other factors relating to associations between book ownership and mental wellbeing could shed light on this area.

The positive impact of book ownership on children's literacy engagement and its association with high mental wellbeing further contributes to the evidence base for promoting book ownership for all children and young people, particularly those with most to benefit, including boys and children and young people from lower-income homes.

Alongside National Literacy Trust initiatives such as the Young Readers Programme<sup>13</sup>, BookTrust's book-gifting programmes<sup>14</sup> and other schemes like the Imagination Library<sup>15</sup>, it is important for families and wider society to recognise the value of giving children and young people the chance to choose and keep books for themselves.

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<sup>10</sup> 88.6% of boys said they had a book of their own, compared with 94.0% of girls

<sup>11</sup> 1 in 8 children eligible for FSMs said they didn't have a book of their own

<sup>12</sup> <https://www.telegraph.co.uk/books/young-adult-books/best-young-adult-books-read-right-now/>

<sup>13</sup> <https://literacytrust.org.uk/programmes/young-readers-programme/>

<sup>14</sup> <https://www.booktrust.org.uk/supporting-you/families/our-programmes/bookstart/>

<sup>15</sup> <https://imaginationlibrary.com/uk/>

## About the National Literacy Trust

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