

Three children are sitting at a green-topped wooden table in a classroom. They are playing with colorful toys. A girl with blonde hair is on the left, a boy with dark hair is in the middle, and a girl with curly hair is on the right. They are all wearing school uniforms. A large red circle is drawn around the boy in the middle, highlighting him.

THE LOST BOYS



Save the Children

How boys are falling behind
in their early years

THE LOST BOYS

**How boys are falling behind
in their early years**

Every child has the right to a future. Save the Children works in the UK and around the world to give children a healthy start in life, and the chance to learn and be safe. We do whatever it takes to get children the things they need – every day and in times of crisis.

Acknowledgements

This report was written by Claire Read for Save the Children UK.

We extend huge thanks to Gemma Moss and Liz Washbrook – who conducted the thorough and groundbreaking study on which this report is based and advised us throughout the drafting process. We also thank Naomi Eisenstadt, Rebecca Allen and Eunice Lumsden for their comments during writing, and Philip Nye and the team at Education Datalab for the underpinning data.

Finally, we gratefully acknowledge access to the Millennium Cohort Study data, provided by University of London, Institute of Education, Centre for Longitudinal Studies, Millennium Cohort Study (computer files). Colchester, Essex: UK Data Archive (distributor), April 2015. SN: 7712, 7414, 4683, 5350, 5795, 6847, 6411, 6848, 7464.

Published by
Save the Children
1 St John's Lane
London EC1M 4AR
UK
+44 (0)20 7012 6400
savethechildren.org.uk

First published 2016

© The Save the Children Fund 2016

The Save the Children Fund is a charity registered in England and Wales (213890) and Scotland (SC039570). Registered Company No. 178159

This publication is copyright, but may be reproduced by any method without fee or prior permission for teaching purposes, but not for resale. For copying in any other circumstances, prior written permission must be obtained from the publisher, and a fee may be payable.

Cover photo: A boy plays on his own away from a group of girls at a nursery in south London. Boys in England are nearly twice as likely as girls to have fallen behind by five. (Photo: Jack Taylor/Save the Children)

Typeset by Grasshopper Design Company

Contents

Executive summary	iv
Our recommendations	vi
Technical notes	vii
The story in numbers	viii
1 Boys falling behind in language and literacy	1
An issue on a huge scale	2
Things are not getting better	3
A big issue	3
A pervasive issue	4
A particular problem for low-income families	7
2 Why does it matter?	9
a) Immediate impacts	9
b) Effect on primary outcomes	10
c) A lasting impact	13
3 What is causing it?	14
Observable differences between children	14
Observable impact of the behaviour of adults	15
The influence of parents/carers	15
Different development timelines	16
A lack of evidence	16
4 What can be done?	17
Addressing the gender gaps: review of evidence	17
The best protection: quality early education and childcare	18
Investing in the early years workforce is investing in care	18
A way to go	19
Concluding recommendations	19
Endnotes	20

Executive summary

We are allowing too many children in England to fall behind in the crucial early language and communication skills they need to thrive and succeed – and boys are affected most. More than 80,000 boys had fallen behind by the age of five last year; and boys in England are nearly twice as likely as girls to fall behind in early language and communication.

This report sets out the huge impact this has on their childhoods, success at school and life chances.

It also argues that we can turn this around, particularly by investing in the early years workforce. This would ensure that children get the quality early education and childcare that is the best protection from the risk of falling behind.

1. BOYS FALLING BEHIND IN LANGUAGE AND LITERACY

The gender gap is well-documented. It has hardly changed for five-year-olds over the past decade, despite a dramatic improvement in overall results. The difference in outcomes for boys and girls is having a devastating impact; nearly a million boys have fallen behind with their early language skills since 2006. That is nearly a million five-year-olds who may struggle with skills like explaining what they think and how they feel, and engaging with the adults and children around them.

Last year alone, the equivalent of four boys in every reception class in England fell behind in early language.

The gap between girls and boys is increasingly being seen as a major problem in education, but existing

evidence largely concentrates on secondary (and to a lesser extent primary) pupils. So Save the Children commissioned the biggest ever study of the issue focusing on the vital early years of children's development. *The Gender Gap in Language and Literacy Development*,¹ conducted by the University of Bristol, considered all existing evidence and carried out new analysis of the Millennium Cohort Study (MCS). It confirmed that the gender gap is an issue for boys independent of their circumstances. It affects all ethnicities, all social groups and all corners of England. The gender gap varies hugely from place to place, but boys are behind their female peers in every single local authority in England. We have published the data for every local authority on our website.

The risk of falling behind at five is much higher for children, both boys and girls, growing up in poverty. But it is poor boys who need our attention the most because of just how many are struggling. Last year, 38% of boys eligible for free school meals (FSMs) – an indicator of poverty – fell behind in early language and communication, nearly double the national average rate of 20%. New findings in this report confirm that the gender gap is highest in deprived areas.

Staff and leaders in the early years sector – along with teachers, schools, the Department for Education and the policy community – have worked tirelessly in recent years to narrow the poverty gap,² but we must focus more closely on raising the attainment of boys eligible for FSMs if we are to continue to improve the life chances of the poorest children. And improve we must – the circumstances of their birth still have too much of an influence on how well children do and their success later in life.

2. WHY DOES IT MATTER?

A wealth of evidence shows that falling behind in early language and communication affects both boys and girls in the short-, medium- and long-term:

- The immediate impact blights childhoods. Poorer than expected early language and communication skills slow down the incredible amount of social and emotional development that children make in the Early Years Foundation Stage (EYFS). It can stop them being able to express themselves and prevents them from beginning to build their own identities, engage with the world around them and participate in everyday activities. For example, boys who have difficulty making themselves understood may express their feelings through challenging behaviour (affecting both them and their classmates).
- In the medium-term, falling behind at five has a huge impact on how well children do at primary school. The new analysis shows the effect it has on children's Key Stage 2 (KS2) attainment. In its new study, the University of Bristol found that being behind in early language and communication at the age of five had a negative impact on all the indicators they measured at the end of primary school. Children who did not achieve the expected standard of early language and communication at five were found to be over four times more likely to have below Level 4 Reading at 11 than those who did. Those who had good early language development in Reception were six times less likely to struggle with English in Year 6.
- In the longer term, falling behind in the EYFS damages children's life chances. It has a negative impact on their earnings, literacy skills and mental health as adults, and even the life chances of their own children.

More boys than girls experience these negative consequences because more boys start school with below-expected language skills and lower levels of attention. This report examines the long-term impact on boys who fall behind at five, which is more likely for boys, rather than the prospects of boys as a group in general.

The University of Bristol's new study also demonstrates just how big an impact the gender gap in the EYFS has on boys' primary school attainment.

Two-thirds of the total gender gap in reading at KS2 can be attributed to the fact that boys begin school with poorer language and attention skills than girls.

Analysis of the MCS shows that the gender gaps in early language and attention in the EYFS have a huge influence. Our modelling suggests that with all other things being equal, **addressing the gender gap in the EYFS could have meant around 10,000 extra boys meeting the expected standard of reading at KS2 in 2012 alone.**³

3. WHY ARE BOYS FALLING BEHIND BY FIVE?

The available evidence suggests the gender gap in the early years shows itself predominantly in:

- boys participating less in the type of activities and games, such as storytelling and nursery rhymes, that support language and literacy development at home, pre-school and school
- boys being less likely to acquire the characteristics that will one day help them to learn to read and write – such as motivation, self-regulation, confidence and engagement.

WHAT IS DRIVING THESE DIFFERENCES?

Even though differences in boys and girls are reported from as early as nine months of age, there is very little robust research that argues that biology on its own determines the differences in how the two genders behave. It is likely that a combination of biology *and* social interactions (informed by our concept of boys and girls) is responsible, but the research we have cannot quantify this.

There are some recorded differences in the way that parents interact with their children in the MCS, but they are only weakly correlated with the activities that we know significantly affect early language outcomes. In fact, the measurable differences in how parents interact with boys and girls at the age of three can account for only 10% of the gender gap in language at the age of five.

Given how much we know about the importance of this crucial life stage, about just how many boys are falling behind and about the lasting effects that the early years have on children's later life chances, this is a substantial knowledge gap that needs to be addressed. More research is required to understand fully the causes of a problem that affects so many of our children.

4. WHAT CAN BE DONE?

According to the evidence, high-quality Early Childhood Education and Care (ECEC) provision⁴ is the most powerful protection against the risk of falling behind, including and especially for boys.

This is yet further proof of the importance of the quality of early education and childcare, which:

- is crucial for children's development
- improves outcomes right through to KS4
- helps eliminate the gap between children in poverty and their peers.

A well-qualified early years workforce is vital if young children are to have the support they need to thrive and enjoy success in school and then later life. The entire workforce is important – better qualified early years practitioners deliver higher quality care, which means better outcomes for children. England needs to recognise the importance of continual investment in improved professional development, status and progression routes for staff at all levels.

We must also take steps to increase the number of 0–5 Early Years Teachers (EYTs) and those with equivalent graduate qualifications in the workforce. Evidence shows they deliver significant improvements across all aspects of provision, and are linked to better Ofsted ratings and higher-quality early years curricula. The difference in the quality of provision between nurseries in the most and least deprived areas is almost completely wiped out if a graduate is present.

All early years staff have key roles in improving the quality of provision in their setting and EYTs and those with equivalent graduate qualifications can build capacity in other staff. Yet, despite the compelling evidence about the importance of investing in a workforce that can deliver high-quality

early education and childcare, quality is still too variable, there are too few EYTs and staff with equivalent graduate qualifications, and there is now less professional development across the workforce.

The impact of this is being most keenly felt by the 124,500 children across England who fell behind in their early language skills last year. Not only is this too great a number of children, but whether they fall behind or not is still too much influenced by whether they were born a girl or a boy, or into a family in poverty or not.

Every child deserves the best start in life. But in England now, too many children are falling behind before they even get to school, putting their life chances at risk.

OUR RECOMMENDATIONS

We cannot wait for boys – or any child growing up in poverty – to get to school before they receive the support they need. By that time many have already fallen behind, with negative consequences for their childhoods, school attainment and life chances.

Over the past ten years we have allowed nearly a million five-year-old boys to start primary school behind, making it harder for them to ever catch up. We need action now if we are to prevent this happening to another generation of boys.

We are calling on the Government to invest in the best early education and childcare provision, particularly in the most deprived areas, which is led by graduates and supported by skilled staff at all levels.

Do this, and the Government will be investing to give all the children who are falling behind the chance they deserve to have a nurturing and engaging early years experience – one that supports their development and increases their chances of a fulfilled and successful life ahead.

Technical notes

Throughout this report we refer to children falling behind in early language at five. It is a snapshot, a gap illustrated at one point in time, but is the best data we have and is comparable over time and across England.

The use of ‘falling behind at five’ and its variations denote children not working securely in the components of Early Years Foundation Stage (EYFS) in communication and language during their Early Years Foundation Stage Profile (EYFSP) in their Reception year. We know that some children will be four during the EYFSP assessment, but refer to five-year-olds for conciseness.

We use eligibility for free schools meals as a proxy for disadvantage throughout this report. Although this measure does not directly map to poverty, or reflect all nuances or families’ circumstances, it is the best available measure, and consistent with the approach elsewhere in education policy.

The story in numbers

124,500 children fell behind in early language and communication last year

25% v 14%

The percentage of boys who had fallen behind by five last year compared to girls

The proportion of children who met expected early language and communications standards last year:

88% non-FSM girls

77% non-FSM boys

77% FSM girls

62% FSM boys

Since 2006 there has been a:

20 percentage-point improvement in overall attainment

8 percentage-point reduction in the poverty gap

Just 1 percentage-point reduction in the gender gap

2x

Boys are nearly twice as likely as girls to be behind in early language and communication than girls

51% v 66%

Boys made up half of the children starting primary school last year, but two-thirds of those who were behind in their early language and communication

0

Number of local authorities in England where boys performed as well as girls

37,000

The number of extra boys who would have reached a good level of early language and communication if boys achieved as well as girls at the age of five

Two-thirds

How much of the gender gap at KS2 that can be attributed to the fact that boys are falling behind at the age of five

Nearly 1 million

Number of five-year-old boys who have fallen behind over the past decade



PHOTO: JACK TAYLOR/SAVE THE CHILDREN

Aiden (left) and Marcus, both aged five, at a south London nursery. We're calling on the government to make sure staff have what they need to deliver world-class childcare.

1 Boys falling behind in language and literacy

The phenomenon of boys falling behind girls in education – the gender gap – is not new, but it is nonetheless pervasive and sizeable. It affects millions of children around the world. The outcomes for boys and girls are particularly different in literacy, most markedly in reading scores. In 2015, girls outperformed boys in reading at the end of secondary school in all 64 countries and economies in the OECD, and the average gap was equivalent to an extra year of schooling.⁵

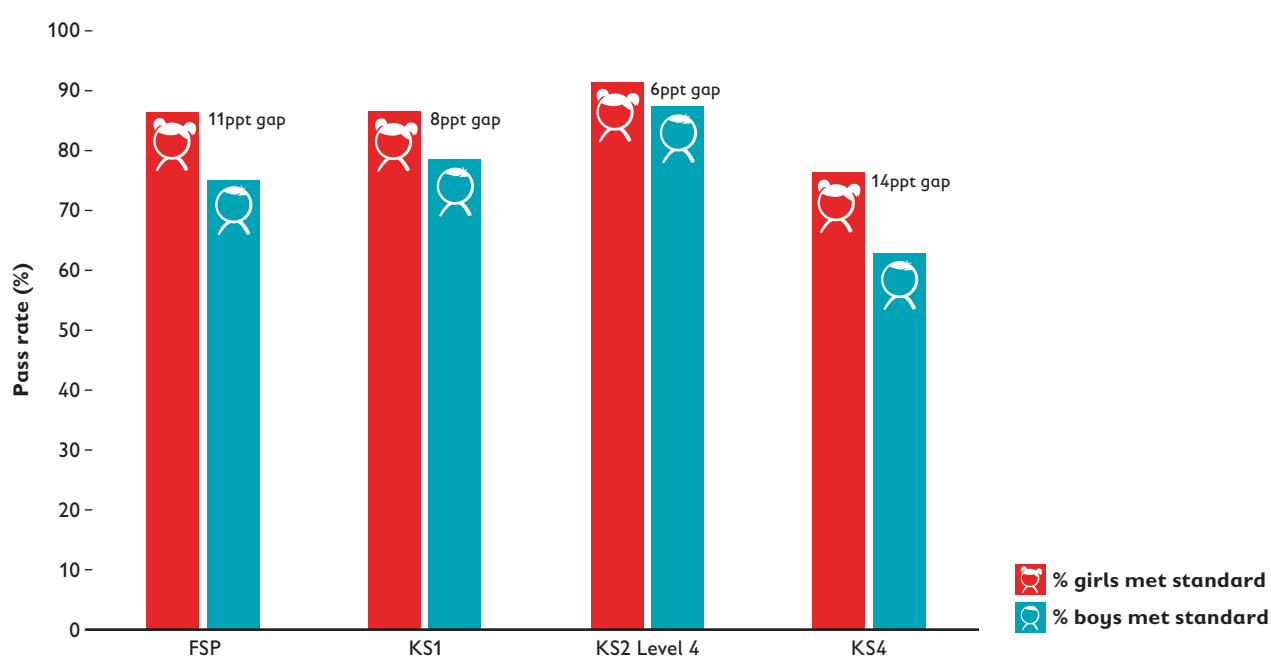
Although the English education system has many strengths, it does not buck this trend. Last year, significantly fewer boys achieved a good English GCSE than girls. This is reflected throughout primary school, and in the Early Years Foundation Stage (EYFS), where boys fall behind girls in

the early language skills that underpin reading and literacy.⁶

The trend of boys falling behind their female peers continues into higher education; recent research from the Higher Education Policy Institute has shown that men make up smaller and smaller proportions of university students, have higher drop-out rates and achieve lower-level degrees than their female peers.⁷

The foundations of this problem are laid in the early years. Before they have begun school, thousands of boys are falling behind. **Boys are nearly twice as likely to be behind in early language and communication skills than girls at the very beginning of primary school.** The early years are the foundation for so much of a child's later life chances. It is a terrible injustice that so many of our boys are struggling during this crucial time.

FIGURE 1: HEADLINE 2014/15 PASS RATES FOR BOYS AND GIRLS EYFS–KS4



AN ISSUE ON A HUGE SCALE

Last year, 124,450 children in England did not meet the expected standard of language and communication when they were assessed during their Reception year (at the age of four or five). That is around 20% of children, or six pupils in an average Reception class of 30 children.

That is six children in every class who are likely to struggle to develop crucial skills like reading, find it hard to learn in the classroom and face difficulties in:

- listening or paying attention to peers or adults
- understanding simple instructions
- expressing themselves effectively
- using tenses correctly
- explaining events or ideas.⁸

Looking more closely at these headlines, there is a significant difference in outcomes for boys and girls. Last year 25% of boys did not meet the expected standard, compared to 14% of girls. That is a notable 11 percentage-point difference at the

very beginning of primary school. Returning to our average Reception class, such a large gender gap means that four of the six children falling behind are boys, and two are girls.

More than 80,000 boys in Reception classes fell behind last year. That is more than 80,000 children who began school without the language and communication skills they need to engage with their peers, teachers and the curriculum. Even controlling for the fact that there are slightly more boys than girls in England, boys are hugely over-represented in the children falling behind at four and five.

This is holding thousands of our children back. If boys reached expected levels at the same rate as girls did last year, around 37,000 more would have reached the expected standard of early language and communication. Even if boys only achieved as well as the national average (which implicitly takes account of the gender gap), we estimate that around 18,000 more would have reached the expected level.

FIGURE 2: RESULTS IN AN AVERAGE RECEPTION CLASS, FOR ILLUSTRATION

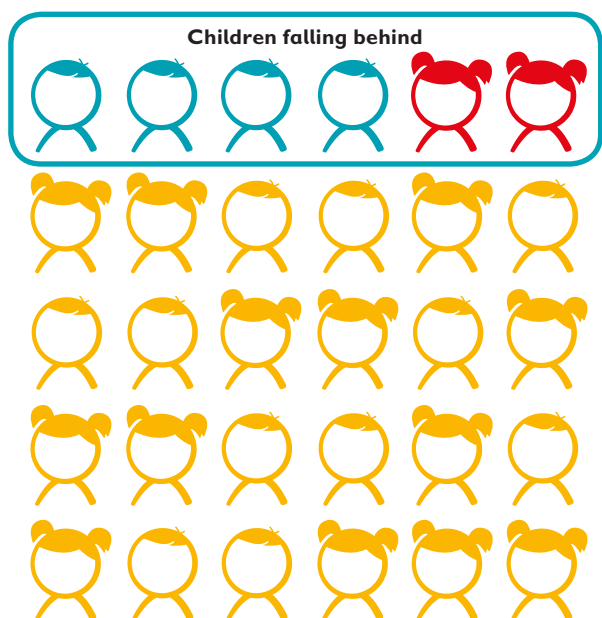
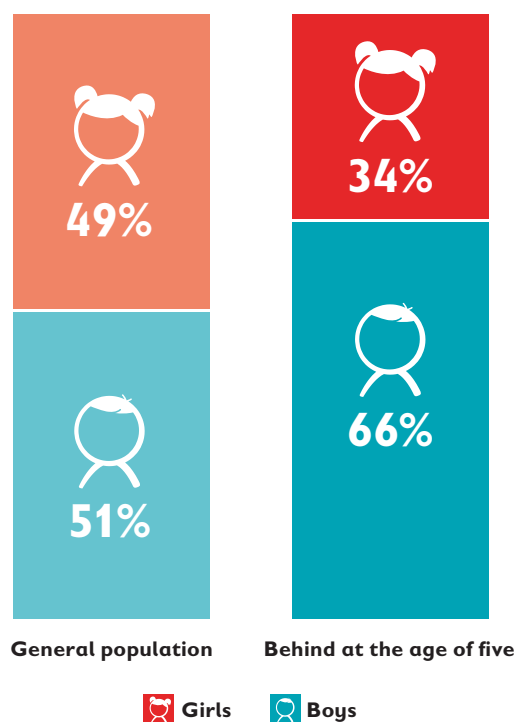


FIGURE 3: GENERAL POPULATION v POPULATION FALLING BEHIND



THINGS ARE NOT GETTING BETTER

Not only is the gender gap affecting thousands of boys each year, it is a stubborn issue, which has not changed significantly over the last decade.

The hard work of schools and early years settings has combined with effective investment, policies and programmes to produce an upward trend in outcomes and equality over the last decade. Even with the impact of the curriculum change in 2012/13, the proportion of children achieving the expected level of language and communication at the age of five has increased steadily since 2006/07. We have also succeeded in reducing the poverty gap from 21% to 13%.

The gender gap, however, has not narrowed. The difference between the number of boys and girls achieving the expected level of early language and communication has remained at around 11 or 12 percentage points. That is at the same time as overall attainment has improved by 20 percentage points.

A decade ago, there was a pressing need to raise standards across the board, but the challenge is now to tackle low achievement among particular groups. Boys falling behind should be a priority; huge numbers of children are affected, from all social and ethnic groups, but our poorest children are hit hardest.

A BIG ISSUE

The cumulative effect of boys falling behind is huge. Since 2006, more than 890,000 boys have not reached the required level of language and communication at the start of primary school, including over a quarter of a million since the new EYFS assessment arrangements were introduced in 2012/13.⁹ That is a big problem; **nearly a million boys have fallen behind in the last decade, and started school without the language skills they need.**

As well as the impact on those individual children and their life chances, this has had a huge and damaging effect nationally. Had boys attained as

FIGURE 4: GRAPH OF OUTCOMES, POVERTY GAP AND GENDER GAP

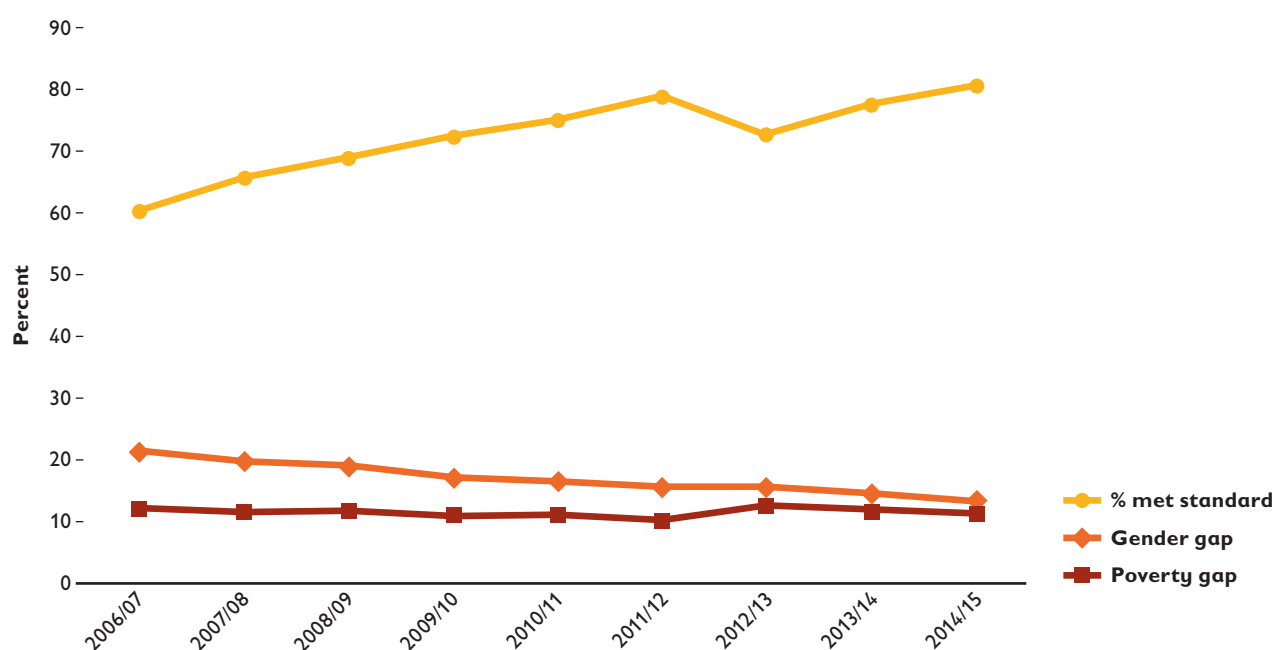
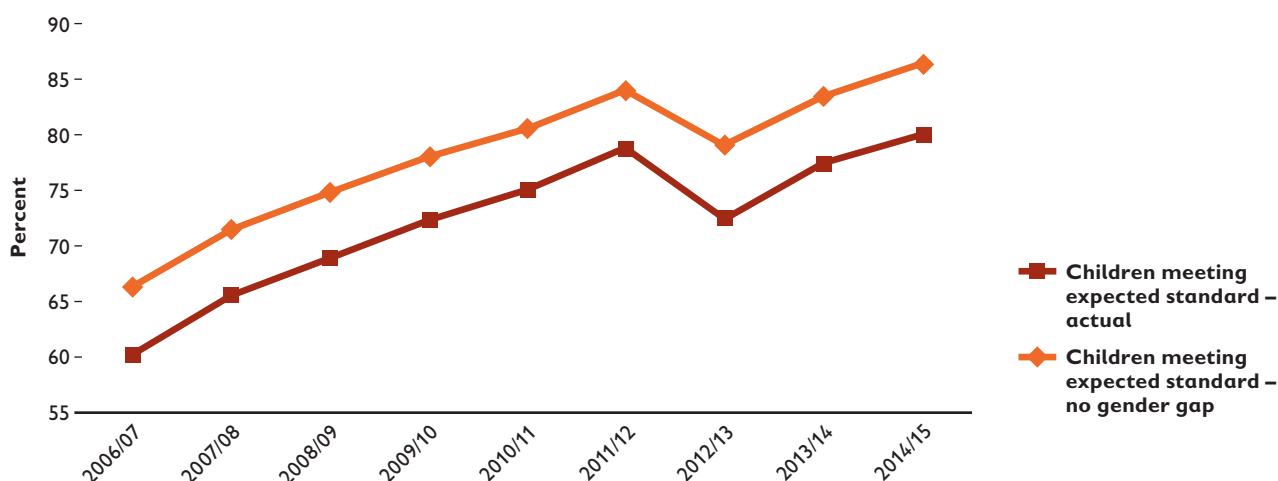


FIGURE 5: OVERALL OUTCOMES OVER PAST DECADE v OUTCOMES IF GENDER GAP ERADICATED



well as their female classmates over the past decade, we estimate an average of 35,000 fewer children would have fallen behind each year, and headline national results would have been around 6% higher.

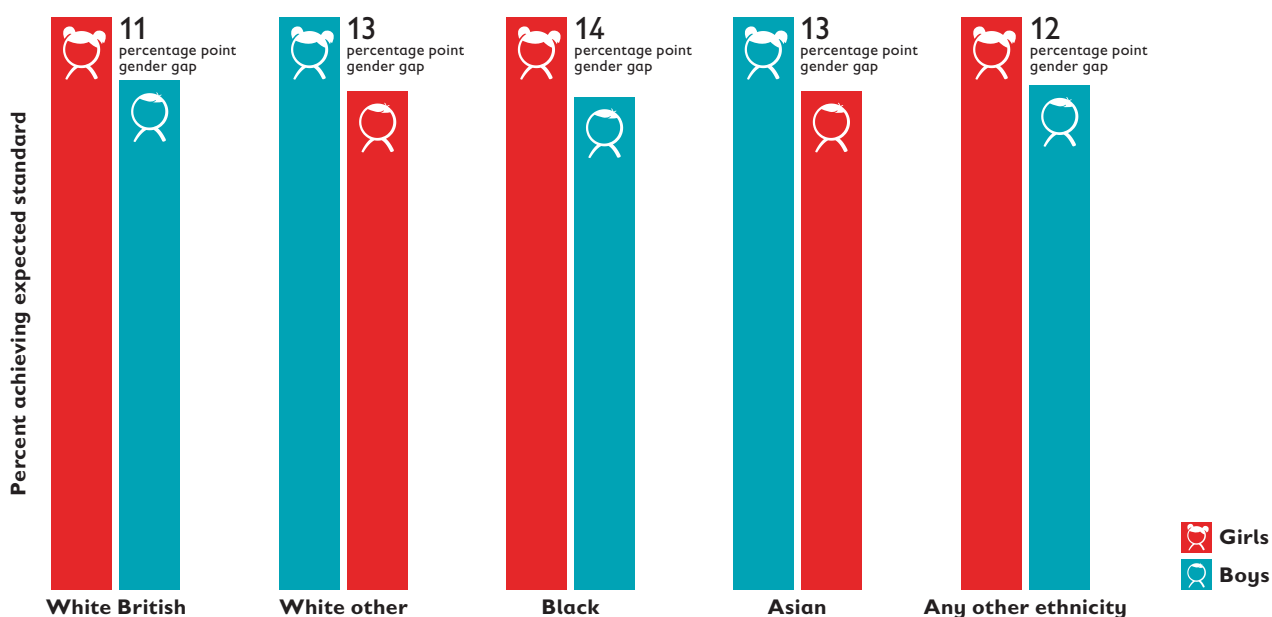
A PERVERSIVE ISSUE

New analysis of the MCS in *The Gender Gap in Language and Literacy Development* by Moss and Washbrook of the University of Bristol confirms that **gender affects language development independently of social class**.¹⁰ While differences in literacy attainment and language development are

slightly smaller between boys and girls (the gender gap) than between children eligible for FSMs and those who are not (the poverty gap) – 11 percentage points compared to 13 percentage points – boys do worse than their female peers regardless of their social background. This is an issue for everyone.

Boys falling behind is also an issue for children of all ethnicities. Much attention has been paid to the low educational outcomes of white working class boys,¹¹ but in *all* ethnic groups in England a far higher proportion of boys fall behind in early language and communication than girls. Gender gaps are relatively similar for every ethnic group.

FIGURE 6: EARLY LANGUAGE AND COMMUNICATION OUTCOMES AND GENDER GAP BY ETHNIC GROUP



The gender gap is also a problem in every *part* of the country. There is no local authority in England where boys did not fall behind in greater proportions than girls last year. The difference between boys' and girls' attainment varies greatly, but boys are behind in every corner of England.

The difference between the number of boys and girls achieving the expected standards at the start of primary school ranges from 5.4 percentage points in Richmond upon Thames to 17.3 percentage points in St Helens.

The gender gap is only lower than 10 percentage points in 29 of England's 150 local authorities. That means that Reception-age boys are 10 percentage points or more behind their female peers in 80% of local authorities in England.

A full breakdown of the data by local authority is available on our website, and the authorities where the gender gap is smallest and largest are shown in the map below.

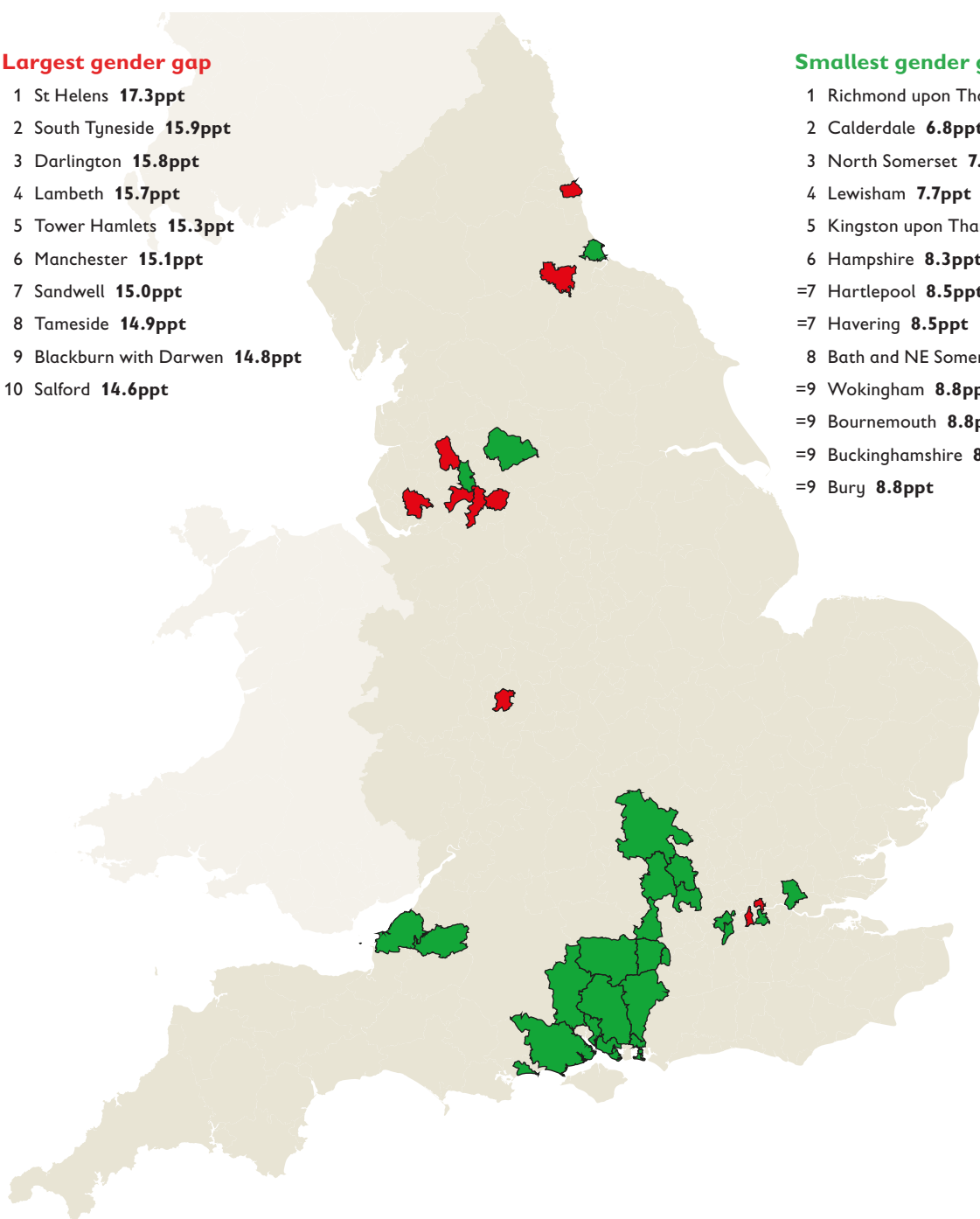
FIGURE 7: GENDER GAP BY LOCAL AREA

Largest gender gap

- 1 St Helens **17.3ppt**
- 2 South Tyneside **15.9ppt**
- 3 Darlington **15.8ppt**
- 4 Lambeth **15.7ppt**
- 5 Tower Hamlets **15.3ppt**
- 6 Manchester **15.1ppt**
- 7 Sandwell **15.0ppt**
- 8 Tameside **14.9ppt**
- 9 Blackburn with Darwen **14.8ppt**
- 10 Salford **14.6ppt**

Smallest gender gap

- 1 Richmond upon Thames **5.4ppt**
- 2 Calderdale **6.8ppt**
- 3 North Somerset **7.2ppt**
- 4 Lewisham **7.7ppt**
- 5 Kingston upon Thames **8.0ppt**
- 6 Hampshire **8.3ppt**
- =7 Hartlepool **8.5ppt**
- =7 Havering **8.5ppt**
- 8 Bath and NE Somerset **8.7ppt**
- =9 Wokingham **8.8ppt**
- =9 Bournemouth **8.8ppt**
- =9 Buckinghamshire **8.8ppt**
- =9 Bury **8.8ppt**



There is a pattern in the distribution of the highest and lowest gender gaps in the country; generally, **higher gender gaps are associated with higher levels of deprivation**. Boys are most behind their female peers in the poorest areas.

Of the 15 most deprived English local authorities (out of 150), only one had a gender gap smaller than the national average. By contrast, in the 15 least deprived authorities, only one was above average.

FIGURE 8: GRAPHIC OF GENDER GAPS OF MOST AND LEAST DEPRIVED LOCAL AUTHORITIES

Most deprived

Rank of average IDACI* score	Local authority	Gender gap	Relationship to average
1 (most deprived)	Tower Hamlets	15%	higher
2	Middlesbrough	13%	higher
3	Islington	11%	equal to
4	Nottingham	11%	equal to
5	Manchester	15%	higher
6	Kingston upon Hull, City of	14%	higher
7	Knowsley	13%	higher
8	Liverpool	13%	higher
9	Blackpool	13%	higher
10	Hackney	11%	equal to
11	Barking and Dagenham	12%	higher
12	Wolverhampton	11%	equal to
13	Enfield	12%	higher
14	Hartlepool	8%	lower
15	Birmingham	12%	higher

Least deprived

Rank of average IDACI* score	Local authority	Gender gap	Relationship to average
151 (least deprived)	Wokingham	9%	lower
150	Rutland	14%	higher
149	Windsor and Maidenhead	10%	lower
148	Richmond upon Thames	5%	lower
147	Surrey	10%	lower
146	Buckinghamshire	9%	lower
145	West Berkshire	9%	lower
144	Bracknell Forest	9%	lower
143	North Yorkshire	10%	lower
142	Wiltshire	11%	equal to
141	Hampshire	8%	lower
140	Oxfordshire	11%	equal to
139	Leicestershire	11%	equal to
138	Bath and North East Somerset	9%	lower
137	Kingston upon Thames	8%	lower

* IDACI: The income deprivation affecting children index

A PARTICULAR PROBLEM FOR LOW-INCOME FAMILIES

In general, the chance of falling behind is much higher for children from disadvantaged backgrounds. In England last year, 69% of children eligible for free school meals (FSMs) reached the expected level of early language and communication by the start of primary school, compared with 83% of children not eligible for FSMs. If FSM-eligible pupils performed as well as non-FSM-eligible pupils, nearly 13,000 more would have gained the expected level of early language and communication. This is an issue that affects both boys and girls; children growing up in poverty are not getting the best start in life.

Things are particularly bad for boys growing up in poverty. **Boys who are eligible for FSMs are most likely to fall behind, and they do so in large numbers and in the highest proportions.** Last year around 19,000 boys eligible for FSMs fell behind in early language and communication at the beginning of primary school. That is only 62% achieving the expected standard, compared to 83% of non-FSM-eligible children, and a national average of 80%.

Boys from disadvantaged backgrounds are also the most behind girls, even girls from similar backgrounds. Last year, 23% of FSM-eligible girls fell behind in early language and communication, compared to 38% of FSM-eligible boys. **Last year the gender gap for the poorest children was 15 percentage points, compared to 11 percentage points for the national average.**

In recent years the early education and childcare sector has, quite rightly, focused on closing the attainment gap between the poorest children and their peers. This work has reduced the poverty gap from 21 percentage points to 13 percentage points. However, boys have not had an equal share in this success. While the poverty gap has narrowed by 10 percentage points for girls since 2006, it has only reduced for boys by seven percentage points during the same period.

Reducing the number of boys falling behind is therefore crucial in our continuing fight to reduce the attainment gap between children in poverty and their peers.

FIGURE 9: FSM-ELIGIBLE BOYS' OUTCOMES COMPARED TO THEIR PEERS

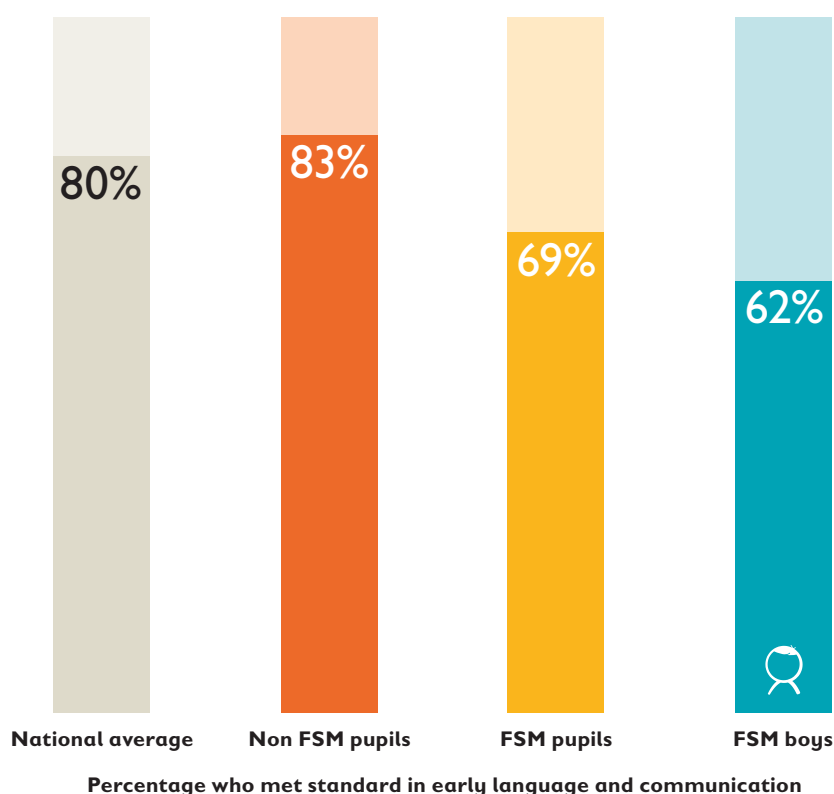


FIGURE 10: CHANGE TO POVERTY GAP OVER LAST DECADE

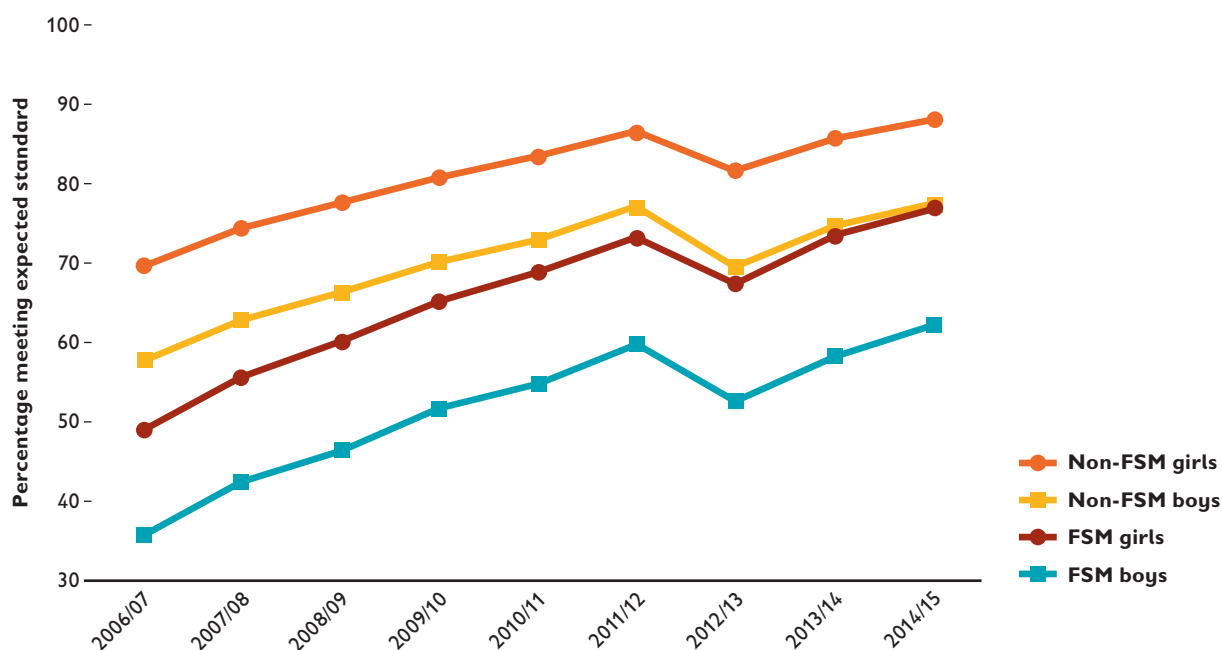


Figure 10 shows just how unequal our early-years system still is – the gap between different groups is still too wide, and outcomes are still largely determined by a child’s gender and family background. The gap between the best and worst performing groups is huge – a full 26 percentage points separates non-FSM-eligible girls and

FSM-eligible boys. We want to do more to support all children to develop the early language and communication skills that they need, particularly those most at risk of falling behind: boys and those children growing up in poverty. The next chapter examines why this is so important.

2 Why does it matter?

The evidence clearly shows that children who start school behind often remain behind. This has negative consequences for their crucial early development, the rest of their school career and their adult lives.

Falling behind at such an early age has short-, medium- and long-term consequences:

- a) It has an immediate impact on children's capacity to express themselves, form friendships, participate in learning activities and develop their social skills.
- b) In the medium-term, it affects their school-readiness and means that some children do not have the solid foundation of skills they need to make the most of primary school when they arrive.
- c) In the longer-term, falling behind in the Early Years Foundation Stage damages their life chances.

This chapter examines each of these impacts in turn.

A) IMMEDIATE IMPACTS

SOCIABLE AND HAPPY CHILDHOODS

Falling behind in their early years means that young children miss out on the language and communication skills they need to express themselves, begin to build their own identities, engage with the world around them and participate in everyday activities. The first few years of a child's life are vital, and having below-expected language skills is incredibly detrimental during this crucial time.

Evidence shows that talking and social interaction play a key role in all children's development,¹² and that language is the vehicle for problem-solving, managing and evaluating experiences, and interacting with those around us.¹³ Below-expected

language skills, on the other hand, are linked to bad behaviour; they have been found to reduce the self-regulation skills of young children to the detriment of their conduct.¹⁴

Poor language and communication skills also present enormous emotional challenges for children, and can mar their first years. It is frustrating and upsetting not to be able to say what you want to do or how you feel, and it is lonely if you cannot play and chat with other children. No child should be 'missed, misinterpreted [or] misunderstood', which the Communication Trust has found is often the reality for children with speech and language difficulties.

It found that difficulties with communication and language can lead to children:

- having behavioural difficulties
- becoming withdrawn
- being less likely to start conversations
- spending more time playing alone
- being less liked by classmates.¹⁵

KEY EARLY SKILLS

There is also a wealth of evidence about the importance of early language and communication for children acquiring key learning-related skills, such as reading, in their first few years.¹⁶ As we set out in our report *Ready to Read: Closing the gap in early language skills so that every child in England can read well*,¹⁷ these skills are the foundations for their later learning and school careers. For example, research has shown that falling behind in early language and communication affects children's ability to 'decode' and understand printed words. Children who experience difficulties understanding the ways that sentences are structured, the meaning of words or the social use of language also have difficulties with early reading.¹⁸

B) EFFECT ON PRIMARY OUTCOMES

New analysis commissioned for this report shows that children's language and communications skills at the age of four and five are a crucial driver of how well they do at the end of primary school.¹⁹

The University of Bristol found in *The Gender Gap in Language and Literacy Development* that **children who did not achieve the expected standard of early language and communication at five were over four times more likely to have below Level 4 Reading at 11 than five-year-olds who did meet the standard.** Those who had good early language development in Reception were six times less likely to struggle with English in Year 6.²⁰

That new analysis also showed that this is an issue that affects all children. Below-expected early language skills are equally as consequential for girls as boys – the impact on attainment at age 11 associated with a poor start in language is the same regardless of gender.²¹

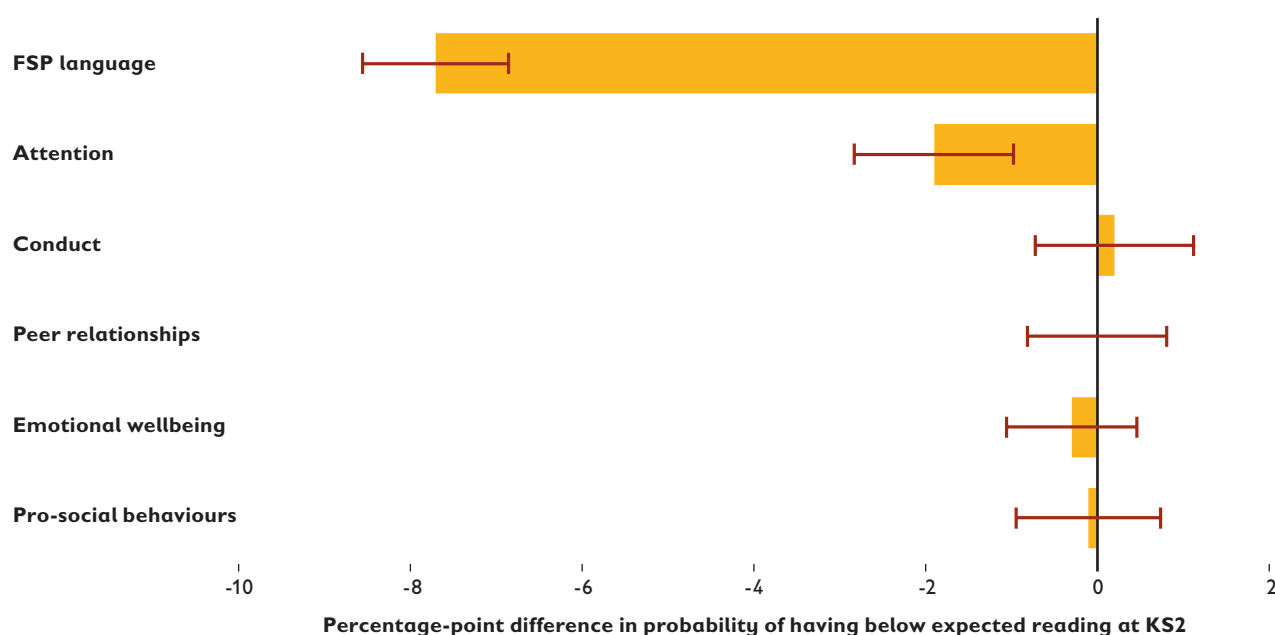
THE IMPORTANCE OF EARLY LANGUAGE AND COMMUNICATION

Of course, early language skills are not the only influence on children's capacity to learn and progress during primary school. This new analysis has shown that they are, however, the most important.

The University of Bristol considered six development markers²² in five-year-olds. It calculated the impact that increases to each one would have, on average, on outcomes at the end of primary school so that they could be compared. It found that only early language and communication, and to a lesser extent attention, significantly predict literacy at 11, when other background factors and correlated skills are held constant.

The University of Bristol found that a one-standardised-unit increase in the language skills of a child at five is associated with nearly an 8 percentage-point reduction in the chance that child has below Key Stage Level 4 Reading at 11. 8 percentage points is significant; the average chance is 10 percentage points (13 for boys, 8 for girls).

FIGURE 11: EFFECTS OF 1 STANDARD UNIT INCREASES IN LANGUAGE AND BEHAVIOURAL SCORES AT AGE 5



WHAT IS DRIVING THIS IMPACT?

The Gender Gap in Language and Literacy Development also sets out how having below-expected early language skills affects individual children and their later experience of school. Moss and Washbrook analysed a range of measures in the MCS of children's skills and attitudes after two years of school, when the children were seven. **Falling behind at the age of five had a negative impact on all measured outcomes.** It puts children off reading, discourages them from trying their best, and affects how much they enjoy school.

The Gender Gap in Language and Literacy Development found children with lower early language and communication skills:

- performed less well in KS1 reading assessment
- were less attentive
- read less often for pleasure
- enjoyed school less
- liked answering in class less
- tried less hard in school.

This was the case even after controlling for family background.

AN ISSUE FOR BOYS

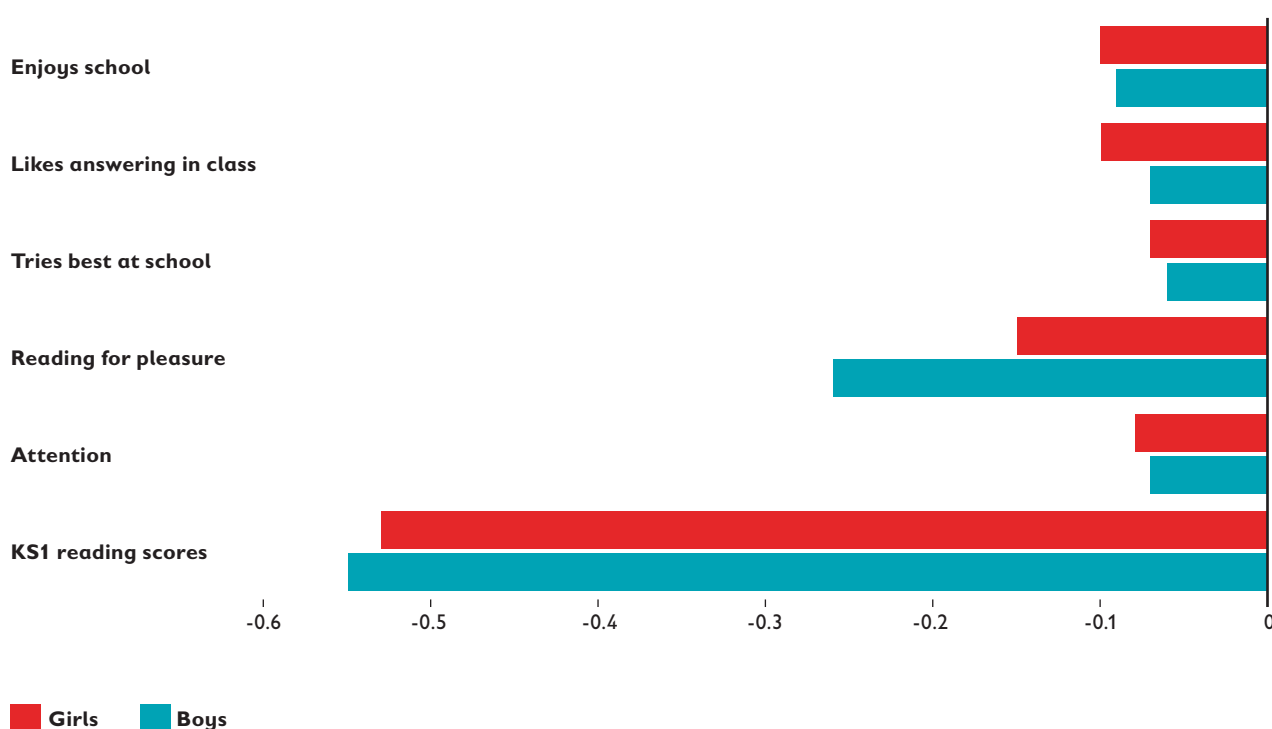
Although, as we set out in Chapter One, falling behind in early language skills is equally as damaging for girls as boys, many more boys than girls have below-expected early language skills in the first place. A higher proportion of boys are falling behind, so a higher proportion of boys are experiencing the negative effects on their attention, attitude towards reading, how hard they try in class and, ultimately, how well they do at the end of primary school.

There is also one crucial difference in the effect of falling behind on boys and girls. The University of Bristol found that struggling with early language discouraged boys from reading much more than it discouraged girls.

This is important because there is growing evidence that reading for pleasure (whether it be at school, at home or in the community) is crucial.

Studies say that children who regularly read for pleasure tend to have better reading skills, even accounting for differences in family background.

FIGURE 12: SHOWING EFFECT OF REDUCED LANGUAGE SKILLS AT FIVE ON MEASURES AT SEVEN



It can be difficult to tell whether skill levels influence frequency of reading or vice versa.²³ What is clear is that the impact of reading for pleasure persists throughout school; studies of older age groups have shown that the amount of time that children spend reading for enjoyment is an important factor in reading attainment.²⁴

In some studies, regular reading for pleasure has even been found to be a more important predictor of children's success in reading than family background – although the two are highly correlated.²⁵ It is also associated with other benefits, including higher attainment in subjects beyond reading, and wider benefits for children's wellbeing and social skills.²⁶

A DRIVER OF THE GENDER GAP AT 11

As set out in Chapter One, there is also marked difference in attainment between boys' and girls' reading scores at the end of primary school. Thousands of boys fall behind their female classmates each year; last year 87% of boys met the required standard, compared to 91% of girls.

We know that the gender gap at five is a major reason why more boys than girls end up with below-expected reading skills at the end of primary school. New findings have quantified the average impact using analysis of the MCS; when boys in the

MCS were assigned the same performance in early language and attention at the age of five as girls, the gender gap fell from 5.4 percentage points to 1.9 points. Thus, **two-thirds of the total gender gap in reading at KS2 can be attributed to the fact that boys begin school with lower levels of language and attention skills than girls.**²⁷

Quantifying the impact in this way also allows us to model the dramatic impact on overall KS2 performance that addressing the gender gap in the Early Years Foundation Stage could have. *The Gender Gap in Language and Literacy Development* found that if boys had the same distributions of language and social skills as girls at five, the proportion in the MCS sample not meeting the expected standard at the end of KS2 is predicted to fall from 13.0% to 9.5%. The difference amounts to 3.5% of all boys moving from falling short of the reading standard at KS2 to passing it. Applying this to the national cohort suggests that, all other things being equal, **addressing the gender gap in the Early Years Foundation Stage could potentially have meant around 10,000 extra boys meeting the expected standard of reading at KS2 in 2012 alone.**²⁸

An extra 10,000 children meeting the standard would have increased the total national Level 4 Reading attainment from 89% to 91% last year.

DOESN'T THE GENDER GAP DISAPPEAR OVER THE COURSE OF PRIMARY SCHOOL?

Although it is smaller than the gender gap in the EYFS, we cannot afford to be complacent about the gender gap at the end of primary school. Boys still do less well than their female classmates in KS2 assessments, far fewer of them catch up if they do fall behind and nearly twice as many of those who start off meeting

expected standards fall behind over the course of primary school.

A significant number of children are still falling behind because of their gender. We are still failing some children. This is limiting both their life chances, and our ability to improve primary school standards.

	Boys	Girls
Children not achieving expected reading standards at the end of KS2	13%	9%
Children who were behind in Reception who stayed behind in Year 6	23%	18%
Children who were not behind in Reception but were behind in Year 6	5%	2%

C) A LASTING IMPACT

There is also evidence that the impact of below-expected language development in the Early Years Foundation Stage isn't just educational; studies show being behind at the start of school has a negative impact on children's earnings, literacy skills and mental health as adults²⁹ – and even the life chances of their own children.³⁰ More boys fall behind in their early years, so more boys experience these negative consequences.

As we set out in our report *Ready to Read: Closing the gap in early language skills so that every child in England can read well*, although there are many factors throughout a person's life that can affect their educational attainment, their mental health or their success in the world of work, a good start is crucial for every child, especially for those growing up in poverty.

There is evidence that below-expected levels of early language and communication are associated with:

- an increased risk of being out of education, employment and training between the ages of 16 and 18³¹
- lower levels of literacy as adults at the age of 34³²
- a higher risk of experiencing mental health issues³³
- lower qualifications and less chance of being in employment in adulthood than adults who had good language as children.³⁴

Although adult men disproportionately occupy positions of power and earn more, on average, than women, this is often not the case for children who fall behind and experience the impacts set out above. It is for these children that we call for change.

3 What is causing it?

We cannot tell from the available data whether early gender gaps are the result of biological or social processes. All the evidence shows that more boys than girls fall behind in learning to read, and that this is not simply a consequence of boys being more likely to be referred for special educational needs assessments.³⁵ There is an ongoing debate about what causes this gender gap.

There is no consensus about whether it is because of differences in boys' and girls' biology and development timelines (biological drivers), or whether it is the result of children responding to the adults and peers around them, whose behaviour is influenced by gender expectations (social drivers).

In *The Gender Gap in Language and Literacy Development*, Moss and Washbrook at the University of Bristol assessed the evidence and concluded that the most important social drivers of gender gaps in the early years are:

- a) boys participating less in the type of activities that support language and literacy development at home, in early years settings and schools
- b) boys being less likely to acquire the characteristics that will help them one day learn to read and write – including motivation, self-regulation, confidence and engagement.

They noted that **there is little high-quality and relevant research arguing that biology on its own determines gendered behaviours.**³⁶ Indeed, epi-geneticists and neuroscientists readily take into account the influence of the environment on development, not just biology as might be expected.

However, in the course of writing *The Gender Gap in Language and Literacy Development*, Moss and Washbrook also found very few studies that focused on the gender gap in children's early years. Given how much we know about the importance of

this crucial period, about the scale of the gender gap and about the lasting effects that the early years have on children's later life chances, this is a substantial knowledge gap.

OBSERVABLE DIFFERENCES BETWEEN CHILDREN

The Gender Gap in Language and Literacy Development did highlight some observable differences in boys and girls that contribute to and reinforce the gender gap, most notably in the pre-school years:

- Girls being more likely to develop the behaviour and attributes that will help them to learn. These include:
 - i) learning-related skills (such as task persistence, learning independence, flexible thinking, organisation and attention control)³⁷
 - ii) pro-social behaviours, self-regulation and self-confidence.³⁸
- Boys being more likely to have challenging or externalising behaviour than girls.³⁹
- Girls being more motivated to read and willing to persist with the task,⁴⁰ and boys spending less time reading and being less engaged by it.⁴¹

It found evidence that gender differences were reported in the MCS in children as young as nine months old.⁴² A sample of nearly 4,000 children showed that parents reported girls to be more advanced than boys in communication skills (smiling, waving, nodding, extending arms and passing objects) and fine motor skills (putting hands together and manipulating toys). Boys were reported to be slightly more advanced in gross motor skills (such as sitting, standing and moving around).

Boys were also reported to be falling behind in both language and behaviour by the age of three, although less so than at the age of five. They were behind in every measure except emotional wellbeing.

It is not clear if parents and carers are responding to these early differences by behaving differently with boys and girls, or if varying expectations of boys and girls mean parents behave differently, which prompts different responses to the world from their children. What is clear is that gender differences that will see boys (on average) scoring less well on a range of measures by the age of five are apparent from the first year of life.

OBSERVABLE IMPACT OF THE BEHAVIOUR OF ADULTS

Differences in the actions of adults – at home, pre-school and school – contribute to and reinforce the gender gap. The University of Bristol found that:

- home environments and pre-school settings give boys and girls different levels of encouragement and resources to engage in a range of pre-literacy and literacy practices, including through play⁴³
- social expectations about gender-appropriate identities, behaviours and norms lead fewer boys than girls to actively think of themselves as readers and writers⁴⁴

- boys and girls have varying experiences of education pedagogy and the formal literacy curriculum, which has a negative impact on the higher numbers of boys who initially struggle with reading.⁴⁵

THE INFLUENCE OF PARENTS/CARERS

Parents and carers are hugely influential in a child's life, and exceptionally so in the early years. They have the first non-biological influence on their children's personalities, including on their gender identities. One theory is that parents and carers interact differently with boys than with girls, on a conscious or subconscious level, so shaping the gender dynamics that lead to factors a) and b) on page 14.

Moss and Washbrook found that a number of parental activities at the age of three are significantly associated with higher language scores at the age of five. They mapped whether parents carried out these activities in different amounts with boys and girls.

FIGURE 13: PARENTAL ACTIVITY WHEN A CHILD IS THREE, AND MEASURABLE IMPACT ON LANGUAGE SCORES AT FIVE

	Is there a measurable difference in how parents behave with their boys and their girls?	Does doing this have a significant impact on language scores at five?
Reads to child	✗	✓
Takes child to library	✗	✓
Takes part in poems/rhymes/songs with child	✓ (more likely with girls)	✓
Draws and paints with child	✓ (more likely with girls)	✗
Teaches child letters	✓ (more likely with girls)	✓
Teaches child numbers	✗	✗
Watches lots of TV	✗	✗
Takes part in sports	✓ (more likely with boys)	✗

Overall, two of the key predictors of development in language and attention – parental reading and library visits – did not vary with the gender of the child. For this reason, we cannot use differences in the measurable⁴⁶ parental interactions with boys and girls to explain why boys have lower language and communication scores than girls at the age of five. New analysis in *The Gender Gap in Language and Literacy Development* showed that **the measurable differences in parental interaction with boys and girls at the age of three can account for only 10% of the gender gap in language at the start of primary school.**

DIFFERENT DEVELOPMENT TIMELINES

Another theory is that boys develop later than girls, and that going to nursery, pre-school or other education settings too early in their development puts them at a disadvantage. This is largely absent from the modern evidence about the gender gap. Although it was explored in the 1930s, 1950s and 1960s it has become less popular as a hypothesis in recent years. As discussed, most of the literature about the gender gap is concerned with social explanations about why there are more boys than girls in the lowest-achieving group.

One recent study that considered the interaction between biology and the early language development of boys and girls was inconclusive because it found it too difficult to disentangle any boy-specific biology from the social factors that interact with biology.⁴⁷

A LACK OF EVIDENCE

In writing this report, Save the Children and the University of Bristol encountered a lack of evidence on the gender gap in the Early Years Foundation Stage. *The Gender Gap in Language and Literacy Development* found that most studies on gender differences in attainment concentrate on primary-age or older children and that few focus exclusively on pre-school age children. It also found very few statistical studies that explore gender and literacy as a topic in its own right. Instead literacy is often used as a proxy for general attainment,⁴⁸ with differences in achievement levels mainly explored by school, region or social disadvantage, rather than by gender.

In addition, very few of the studies that evaluate the impact of interventions that promote language and literacy development in the EYFS report their findings by gender. This is a significant gap in the evidence base that should be rectified. There is particularly little research into how interventions designed to enrich the home learning environment differ in their impact by gender, or whether they address gendered expectations of children's development.

4 What can be done?

The Gender Gap in Language and Literacy Development found that high-quality pre-school provision has the best protective effect for boys at most risk of lower attainment in language and literacy. Both boys and girls benefit from high-quality teaching and a rich early years environment.

This tallies with the extensive evidence base on the importance of quality early education and childcare, and the particularly positive impact that it can have on boys and children growing up in poverty. As we demonstrated in Chapter One, it is exactly these children who are most at risk of falling behind, and do so in the greatest numbers.

The new findings from the University of Bristol make the case even more compelling; investing in the quality of early-years provision to close the gender gap at five could help close the gender gap, and improve headline attainment, at the end of primary school.

ADDRESSING THE GENDER GAPS: REVIEW OF EVIDENCE

In *The Gender Gap in Language and Literacy Development*, Moss and Washbrook assessed the evidence about how to address gender inequalities in language outcomes in the Early Years Foundation Stage. They found the following factors were most important:

IN EARLY YEARS SETTINGS

- The quality of provision, especially the depth of learning opportunities and the amount of interaction between adults and children to support and encourage early reading and learning-related skills.⁴⁹

- Ensuring that both boys and girls participate equally in early reading and play-related activities, which develop their skills and keep them interested in books, reading, talking and learning.

IN FAMILY AND COMMUNITY SETTINGS

- Parents, carers and other significant figures in children's family networks actively developing boys' and girls' language and learning-related skills through play and storybook reading.
- Families having access to sufficient resources to engage young children in reading for pleasure at home, including providing opportunities to listen and respond to story reading from the earliest age.

FOR BOTH PRE-SCHOOL AND FAMILY/COMMUNITY SETTINGS

- Encouraging boys and girls to share their interests in literacy-related activities and helping them to build this into their play.

There were also significant evidence gaps:

- More evidence is needed on how boys as well as girls can be encouraged to develop intrinsic motivation to tackle tasks they may not be immediately drawn to or find difficult at first.
- More evidence is needed on whether challenging gender stereotypes about children's development may raise expectations of boys' involvement in a range of pre-literacy and language-based activities in ways that improve literacy attainment.

THE BEST PROTECTION: QUALITY EARLY EDUCATION AND CHILDCARE

The strongest evidence found was that high-quality early years provision is the best way of closing the gender gap. It is consistent with the findings of a large number of studies that conclude that **high-quality Early Childhood Education and Care is a critical factor in child early language development**.⁵⁰ Analysis shows that attending good-quality childcare in the EYFS continues to have a positive impact into KS4.⁵¹

The Effective Provision of Pre-School Education (EPPE) study and international evidence, including from Germany⁵² and Norway,⁵³ has also shown that **good-quality early education and childcare has particular benefits for boys and children from disadvantaged backgrounds** – not only in the short-term but right through primary school.⁵⁴ This is reinforced by Moss and Washbrook's findings.

The data shows that there are generally smaller gender gaps in local authorities with above-average outcomes in the Early Years Foundation Stage. **The biggest gender gaps are in local authorities with below-average Early Years Foundation Stage outcomes, which reinforces the importance of the quality of provision.**

INVESTING IN THE EARLY YEARS WORKFORCE IS INVESTING IN CARE

The early-years workforce is crucial to the quality of early education provision and creating a high-quality environment in which children can thrive.⁵⁵ Better-qualified EYFS practitioners deliver higher quality care; evidence from Ofsted shows that settings where at least 75% of childcare staff are qualified to level 3 or above are most likely to be rated 'good' or 'outstanding'.⁵⁶ It is crucial that we improve professional development, status and progression routes for staff at all levels.

We must also take steps to increase the number of Early Years Teachers (0–5) (hereafter referred to as EYTs) and staff with equivalent graduate qualifications in the workforce.

The evidence shows that an EYT or staff with equivalent graduate qualifications can play a critical role in creating a high-quality learning environment in an early years setting.⁵⁷ Graduate leaders are associated with significant improvements across all aspects of provision⁵⁸ and better Ofsted ratings.⁵⁹ They have a vital role in developing and leading a high-quality early years curriculum, which is associated with children making more progress.⁶⁰ They are trained to engage parents and work with them to improve the home learning environment where necessary,⁶¹ and they can provide support for children and families in poverty or with multiple needs.⁶²

EYTs and staff with equivalent qualifications can also help improve the skills of less qualified staff through modelling good practice, high-quality leadership, mentoring and peer support.⁶³ They have been found to implement systems to support and appraise staff, and identify development needs.⁶⁴ Improving the skills of the entire early years workforce, not just EYTs, is crucial;⁶⁵ better-qualified early years practitioners deliver higher-quality care.

Substantial evidence shows that settings in low-income neighbourhoods in England were only able to provide the same quality and standards as settings in wealthier neighbourhoods if they were graduate-led.⁶⁶ In fact, it has been shown that where a graduate is present, the difference in the quality of provision between settings in the most and least deprived areas is almost completely wiped out.⁶⁷

A WAY TO GO

Despite the compelling evidence about the importance of high-quality early years provision and investing in the workforce, quality is still too variable, there has been a reduction in continuous professional development across the workforce and there are too few EYTs.

The 2015 Early Years Census found that only around half of private, voluntary and independent (PVI) early years providers (47%) that offer free childcare had staff with EYT status working with three- and four-year-olds.

The most recent data from the Public Accounts Committee shows that recruitment to the new early years initial teacher training programme dropped to a very concerning 41% of target by the second year of the programme.⁶⁸ The committee said this indicated “a shortage of highly qualified staff coming into the sector”. Save the Children has calculated that an additional 11,000 early years teachers are needed to place one in every early education setting.^{69, 70} Yet, recent investment in the childcare sector has focused on expanding the free entitlement rather than on improving the quality of provision or supporting the development of the workforce.

The impact of this is most keenly felt by the 124,500 children who fell behind in their early language skills last year. Not only is this too many children, but whether they fall behind or not is still too influenced by their gender and the circumstances in which they grow up. Every child should have an equal chance in life. Investing in the early years can help achieve this – with benefits that have the potential to last a lifetime.

CONCLUDING RECOMMENDATIONS

We cannot wait for disadvantaged children and boys to get to school before they receive the support they need. By this time many will have already fallen behind, with negative consequences for their childhoods, school attainment and life chances. We must invest in the best early years provision, led by early years teachers and supported by skilled staff at all levels, particularly in the most deprived areas.

Endnotes

- ¹ Moss, G. and Washbrook, E. (2016), *The Gender Gap in Language and Literacy Development*. Bristol: University of Bristol.
- ² The difference in outcomes between children eligible for free school meals and their non-eligible peers.
- ³ 2012 is the year that the MCS cohort sat their KS2 assessments.
- ⁴ In the rest of this report we refer to 'early education' or 'early years provision' for brevity.
- ⁵ OECD (2015), *The ABC of Gender Equality in Education: Aptitude, Behaviour, Confidence*, PISA, OECD Publishing.
- ⁶ In this instance, as measured by pupils: working securely in the components of the Early Years Foundation Stage in communication and language, achieving 2B or above in reading teacher assessment at KS1, achieving level 4 or above in reading at KS2 and achieving A*–C in English Language GCSE at KS4.
- ⁷ Hillman, N. and Robinson, N. (2016) *Boys to Men: The underachievement of young men in higher education – and how to start tackling it*. Oxford: The Higher Education Policy Institute.
- ⁸ Read On. Get On (2015) *Ready to Read: Closing the gap in early language skills so that every child in England can read well*. London: Read On. Get On.
- ⁹ In 2012/13 a new EYFS was introduced, which changed some of the ways children were assessed by teachers. This means the figures before 2012/13 and after are not directly comparable. However, they do indicate the relative performance of boys and girls, as both groups were assessed in the same way.
- ¹⁰ Moss, G. and Washbrook, E. (2016) confirming Connolly (2006).
- ¹¹ Recent examples include Sammons, P. Toth & K. Sylva, K. (2015) *Background to Success: Differences in A-level entries by ethnicity, neighbourhood and gender*. London: The Sutton Trust, and The Centre for Social Justice (2013) *Requires Improvement: The causes of educational failure*, the Centre for Social Justice: London, and the Equality and Human Rights Commission (2015) *Is Britain Fairer? The state of equality and human rights 2015*. London: the Equality and Human Rights Commission; and Impetus: Private Equity Foundation (2014) *Digging Deeper: Why white working class boys underachieve and what can be done about it*. London: Impetus: Private Equity Foundation.
- ¹² Howe, C. and Mercer, N. (2007) *Children's Social Development, Peer Interaction and Classroom Learning*. Primary Review Research Survey 2/1b. Cambridge: University of Cambridge Faculty of Education.
- ¹³ Durkin, K. (1995) *Developmental Social Psychology*. Oxford: Blackwell.
- ¹⁴ Vallotton, C., and Ayoub, C. (2011) *Use your Words: The role of language in the development of toddlers' self-regulation*. Early Childhood Research Quarterly. 26 (2). p.169–181.
- ¹⁵ The Communication Trust (2013) *A Generation Adrift: The case for speech, language and communication to take a central role in schools' policy and practice*. London: The Communication Trust.
- ¹⁶ Roulstone, S., Law, J., Rush, R., Clegg, J., & Peters, T. (2010) *Investigating the Role of Language in Children's Early Educational Outcomes*. London: Department for Education. Also Snowling, J., S., Hulme, C., Bailey, M., A., Stothard, E., S. & Lindsay, G. (2011) *Language and Literacy Attainment of Pupils during Early Years and through KS2: Does teacher assessment at five provide a valid measure of children's current and future educational attainments?* London: Department for Education.
- ¹⁷ Read On. Get On (2015) *Ready to Read: Closing the gap in early language skills so that every child in England can read well*. London: Read On. Get On via Save the Children.
- ¹⁸ Catts, H. (1989) *Phonological Processing Deficits and Reading Disabilities*. In A. G. Kamhi & H. W. Catts (Eds.), *Reading Disabilities: A developmental language perspective* (pp. 101–132). Boston: Allyn & Bacon, and Stackhouse, J. (2000) *Barriers to Literacy Development in Children with Speech and Language Difficulties*. In D.V.M. Bishop & L.B. Leonard (Eds.), *Speech and Language Impairments in Children*. Hove, East Sussex: Psychology Press, and Nation, K., & Snowling, M. (1998) *Semantic Processing and the Development of Word-recognition Skills: Evidence from children with reading comprehension difficulties*. Journal of Memory and Language, 39, 85–101.
- ¹⁹ This corroborates the findings of a recent study by Save the Children and the UCL Institute of Education that quantified the impact of falling behind in the early years on children's primary attainment (Save the Children (2016) *Early language development and children's primary school attainment in English and maths*. London: Save the Children UK).
- ²⁰ Save the Children (2016) *Early Language Development and Children's Primary School Attainment in English and Maths*. London: Save the Children.
- ²¹ Failing to meet the expected standard at five is associated with an increase in the probability a boy will have below Level 4 Reading at 11 by 18 percentage points, compared with 15 percentage points for girls, a difference that is not statistically significant.
- ²² The markers considered were: attention (eg. whether the child sees tasks through to the end and has a good attention span); conduct (eg. whether the child often fights with other children or bullies them); peer relationships (eg. whether the child has at least one good friend); emotional wellbeing (eg. whether the child often seems worried); pro-social behaviours (eg. whether the child volunteers to help others)
- ²³ Evidence includes: Mullis, I., Martin, M., Foy, P. and Drucker, K. (2012) *PIRLS 2011 International Results in Reading*. Amsterdam: IEA; OECD (2011) *Do Students Today Read for Pleasure?* PISA in Focus 8 Paris: OECD; and Twist, L., Schagen, I., and Hodgson, C. (2007) *Readers and Reading: The national report for England 2006 (PIRLS: Progress in International Reading Literacy Study)*. Slough: NFER.
- ²⁴ Moss, G. and Washbrook, E. (2016) referencing Baker and Wigfall (1999); Krashen (2004); Wigfall and Guthrie (1997) and Sullivan and Brown (2015).
- ²⁵ Sullivan, V. 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.
- ²⁶ BOP Consulting (2015) *Literature Review: The impact of reading for pleasure and empowerment*. London: The Reading Agency.
- ²⁷ These are simulated scenarios, designed to explore the impact of the gender gap and using an MCS sample positively selected for boys and girls equally. Other factors will influence the KS2 outcomes of boys who have below-expected levels of language and communication, which are difficult to quantify and include in modelling like this.
- ²⁸ 2012 is the year that the MCS cohort sat their KS2 assessments.

- ²⁹ Parsons, S. & Schoon, I. (2011) *Long-term Outcomes for Children with Early Language Problems: Beating the odds*. Children & Society Vol. 25, pp. 202–214; Schoon, I., Parsons, S., Rush, R. & Law, J. (2010a). *Childhood language skills and adult literacy: A 29-year follow-up study*. Pediatrics, Volume 125, No. 3, pp. e459–e466; Schoon, I., Parsons, S., Rush, R. & Law, J. (2010b). *Children's language ability and psychosocial development: A 29-year follow-up study*. Pediatrics, Volume 126, No. 1, pp. e73–e80.
- ³⁰ De Coulon, A., Meschi, E. & Vignoles, A. (2011) *Parents' Skills and Children's Cognitive and Non-cognitive Outcomes*. Education Economics, pp. 1–24.
- ³¹ ICAN (2006) *The Cost to the Nation of Children's Poor Communication*. ICAN Talk Series – Issue 2, London: ICAN.
- ³² Schoon, I., Parsons, S., Rush, R. & Law, J. (2010a). *Childhood Language Skills and Adult Literacy: A 29-year follow-up study*. Pediatrics, Volume 125, No. 3, pp. e459–e466.
- ³³ Schoon, I., Parsons, S., Rush, R. & Law, J. (2010b). *Children's Language Ability and Psychosocial Development: A 29-year follow-up study*. Pediatrics, Volume 126, No. 1, pp. e73–e80.
- ³⁴ Feinstein, L. & Duckworth, K. (2006) *Development in the Early Years: Its importance for school performance and adult outcomes. Wider benefits of learning research report No. 20*. Centre for Research on the Wider Benefits of Learning.
- ³⁵ Moss, G. and Washbrook, E. (2016) referencing Rutter, M., Caspi, A., Fergusson, D., Horwood, L. J., Goodman, R., Maughan, B. Carroll, J. (2004). *Sex Differences in Developmental Reading Disability*. *Jama*, 291(16), 2007.
- ³⁶ Moss, G. and Washbrook, E. (2016) referencing Hawke et al (2006).
- ³⁷ Moss, G. and Washbrook, E. (2016) referencing Matthews et al (2010).
- ³⁸ Moss, G. and Washbrook, E. (2016) referencing Adlof, Catts, & Lee (2010) and Hawke et al (2009).
- ³⁹ Moss, G. and Washbrook, E. (2016) referencing Limbrick, Wheldall, & Madeline (2008); Matthews, Kizzie, Rowley, & Cortina (2010) and McIntosh, Reinke, Kelm, & Sadler (2012).
- ⁴⁰ Moss, G. and Washbrook, E. (2016) referencing Baker and Wigfall (1999); Krashen (2004); Wigfall and Guthrie (1997); Sullivan and Brown (2015); Brozo et al (2007) and OECD (2009).
- ⁴¹ Moss, G. and Washbrook, E. (2016) referencing Oakhill and Petrides (2007) and OECD (2009).
- ⁴² Moss, G. and Washbrook, E. (2016) referencing Hawke et al (2006), Petersson et al (2009) and Skelton et al (2007).
- ⁴³ Moss, G. and Washbrook, E. (2016) referencing Marsh (2004b) and Millard & Bhojwani (2012).
- ⁴⁴ Moss, G. and Washbrook, E. (2016) referencing Martino (2001); Lingard et al (2002); and Skelton, Francis and Valkanova (2007).
- ⁴⁵ Moss, G. and Washbrook, E. (2016) referencing Sharples et al (2011).
- ⁴⁶ Many elements of the parent-child relationship are difficult to measure so will not be included in studies such as the MCS, despite their influence.
- ⁴⁷ Galsworthy et al. (2000) *Sex Differences in Early Verbal and Non-verbal Cognitive Development* in *Developmental Science* 3(2):206–215.
- ⁴⁸ Moss, G. and Washbrook, E. (2016) referencing Hansen & Jones (2016); Hartas (2011); Mensah & Kiernan (2010); and Sullivan & Brown (2015).
- ⁴⁹ Learning-related skills in this context are: task persistence, learning independence, flexible thinking, organisation and attention control.
- ⁵⁰ Sylva et al 2004, Speight et al 2015, *The NatCen Study of Early Education and Development and the Institute of Education's Early Provision of Pre-School Education*; and Speight, S., Maisey, R., Chanfreau, J., Haywood, S., Lord, C. & Hussey, D. (2015) *Study of Early Education and Development: Baseline survey of families*. London: Department for Education.
- ⁵¹ Sammons, P., Sylva, K., Melhuish, E., Siraj-Blatchford, I., Taggart, B., & Hunt, S. (2008) *Effective Pre-School and Primary Education 3–11 Project: Influences on Children's Attainment and Progress in Key Stage 2: Cognitive Outcomes in Year 6*. London: Department of Education.
- ⁵² Felfe, C. & Lalive, R (2013) *Early Child Care and Child Development: For whom it works and why*, CEPR Discussion Papers 9274, CEPR discussion papers.
- ⁵³ Havnes, T. & Mogstad, M. (2009) *Money for Nothing? Universal child care and maternal employment*, IZA Discussion Papers 4504, Institute for the Study of Labor (IZA).
- ⁵⁴ Sylva et al 2004 (as n.39) and Sammons et al 2008 (as n.40).
- ⁵⁵ Kalitowski, S. (2016) *Towards an Early Years Workforce Development Strategy for England*, Bromley, Kent: the Professional Association for Childcare and Early Years (PACEY).
- ⁵⁶ Ofsted 2015.
- ⁵⁷ Hadfield, M., Jopling, M., Needham, M., Waller, T., Coleyshaw, L., Emira, M. & Royle, K. (2012) *Longitudinal Study of Early Years Professional Status: An exploration of progress, leadership and impact*. London: Department of Education.
- ⁵⁸ Mathers, S., Ranns, H., Karemaker, A., Moody, A., Sylva, K., Graham, J., and Siraj-Blatchford, I. (2011). *Evaluation of the Graduate Leader Fund: Final report*. London: Department for Education.
- ⁵⁹ Mathers, S. & Smee, R. (2014) *Quality and Inequality: Do three- and four-year-olds in deprived areas experience lower quality early years provision?* London: Nuffield Foundation.
- ⁶⁰ Mathers et al 2014 (as n.49).
- ⁶¹ Mathers et al 2014 (as n.49).
- ⁶² Siraj-Blatchford, I. & Siraj-Blatchford, J. (2010). *Improving Children's Attainment through a Better Quality of Family-based Support for Early Learning*. London: Centre for Excellence and Outcomes in Children and Young People's Services.
- ⁶³ Whitebook, M., Gomby, D., Bellm, D., Sakai, L., Kipnis, F. (2009) *Preparing Teachers of Young Children: The current stats of knowledge, and a blueprint for the future. Part 2: Effective teacher preparations in early care and education: Toward a comprehensive research agenda*. University of California, Berkeley: Centre for the Study of Child Care Employment, Institute for Research on Labour and Employment.
- ⁶⁴ Mathers, S., Ranns, H., Karemaker, A., Moody, A., Sylva, K., Graham, J. and Siraj-Blatchford, I., (2011). *Evaluation of the Graduate Leader Fund: Report to the UK Department of Education*, 28. London: Department for Education.
- ⁶⁵ Kalitowski, S. (2016) (as n.44).
- ⁶⁶ Mathers S., Eisenstadt N., Sylia K., Soukakou E., and Ereky-Stevens, K. (2014) *Sound Foundations: A review of the research evidence on quality of early childhood education and care for children under three, implications for policy and practice*. Oxford: The Sutton Trust.
- ⁶⁷ Mathers et al 2014 (as n.49).
- ⁶⁸ Public Accounts Committee (2016) *Measuring quality and outcomes of free childcare*. Available at http://www.publications.parliament.uk/pa/cm201617/cmselect/cmpubacc/224/22408.htm#_idTextAnchor014
- ⁶⁹ Department for Education (2015) *Provision for Children Under Five Years of Age* reports that there are just over 15,000 EYPs/EYTs and over 26,000 settings delivering free childcare to three- and four-year-olds in the PVI sector. If we were to achieve an EYT in every nursery, we would need a minimum of 11,000 additional EYTs.
- ⁷⁰ The definition of 'early years setting' used throughout this report excludes child minders.

THE LOST BOYS

How boys are falling behind in their early years

Every child deserves the best start in life. But in England now, many children aren't getting the support they need to reach their potential.

During their pre-school years children learn so much – discovering through play, and starting to speak and understand others. These are the skills children need for a happy childhood and to thrive when they get to the classroom. Yet a fifth of all five-year-olds are falling behind, a figure which rises to a quarter of five-year-old boys.

This report examines the scale of this hidden issue, and the consequences of falling behind in language and communication. It quantifies, for the first time, the impact of the gender gap at five on primary school attainment.

An independent team of experts have concluded that high-quality childcare is the best protection against the risk of falling behind. It's time for the government to invest in children's futures by supporting parents and making sure staff have what they need to deliver world-class childcare, especially in the most disadvantaged areas of England.

savethechildren.org.uk

Registered charity England and Wales (213890) Scotland (SC039570)