Is Action Overdue on Boys' Academic Underachievement?

AIM

The aim of this briefing paper is to collate basic factual data on gender and education with a view to informing public debate.

There are efforts on the part of some journalists, for example (Ally Fogg, *Guardian-on-line*, 13-12-12) and government ministers (universities minister, David Willetts, *Guardian-on-line*, 03-01-13) to consider the implications of educational data showing disadvantage to males. However, the typical pattern of media coverage and ministerial comment on gender might be said to paint a picture of disadvantage to females only. In the interest of achieving a balanced view and in order to inform public debate, some basic data is collated here in the hope of clarifying the positions of both males and females within our educational system.

Boys' low achievement in school, by comparison to girls, is not a new issue. A relative deficit in the number of boys securing five or more higher grade (A* to C) passes in GCSE was apparent in the late 1980s[1]. The gender gap continues to the present time and is observed throughout the various school based assessment stages, starting at primary school (ages 5, 7 and 11 years), then at GCSE and A-level, and in the UK university population (see Figures below and Tables 1 to 8 in APPENDIX).

The pattern of low achievement in boys, sustained over an extended period of time, is replicated elsewhere internationally according to OECD research (Vincent-Lancrin, 2008).

Over a period of more than twenty years, boys have remained disproportionately disadvantaged with little apparently done to help. Is boys' underachievement being ignored? Would a gender gap be tolerated if girls were the more disadvantaged group?

SUMMARY

At the primary school stage, around 10% less boys compared to girls reach the target level in externally marked tests at 11 years of age. Close to 9% less boys achieve five good passes at GCSE. As may be expected, males are entered for A-levels in much smaller numbers than females, around 60,000 less males per year. The disadvantage to males is compounded when males are under represented amongst the highest A-level achievers (around 5% less). This pattern is replicated in the UK university population where males are substantially under represented at around 9% less males.

[1] Data from previous government's, Department for Children Schools and Families (DCSF) website. Current online data is available only from 1998.

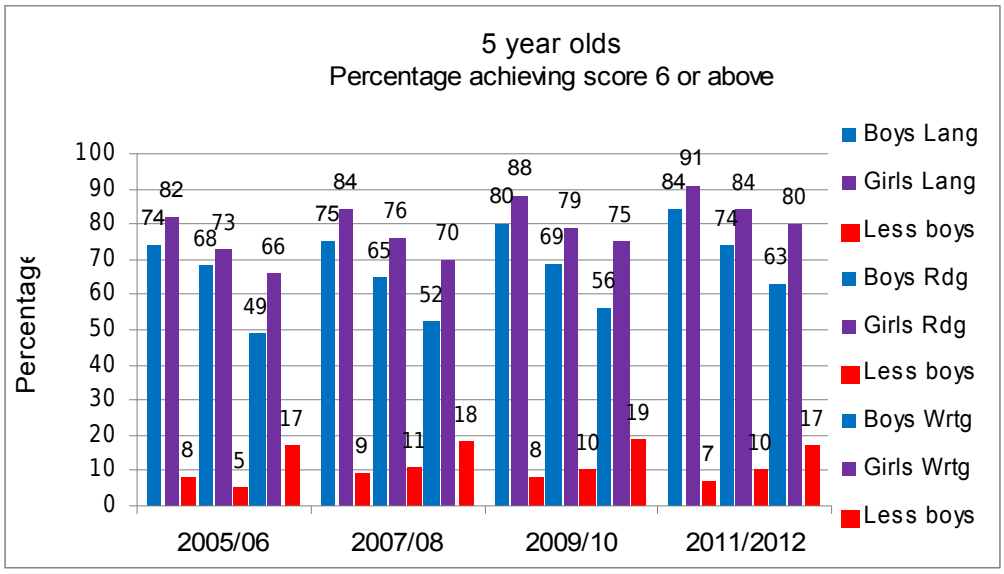
This pattern of disadvantage to males has been established over a lengthy period. It might therefore be expected that the Department for Education (DfE) would have taken comprehensive action to address the issue. A search of the Department for Education website using key words 'boys achievement' reveals only one related document; a four-year project (2000-2004). The project covered Key Stage 2 (11 year olds) and Key Stage 4 (16 year olds) at fifty schools and attempted to identify strategies which helped boys (Younger et al, 2005).

A search using key words, 'ethnicity, social class and gender achievement' revealed other items; a brief response to a 'popular question' dated 17-05-10, worded as 'What is the department doing to address the gender gap?' The question was answered in terms of existing National Strategies which are said to provide guidance on techniques to tailor teaching and learning to the needs and interests of boys. The National Reading Campaign was said to include 'Reading Champions', a national scheme which aims to find and celebrate positive male role models for reading. From spring 2008, there was an 18 month programme referred to as the 'Gender Agenda', which attempted to identify ways to improve the performance of underperforming pupils of both sexes.

TABULATED DATA

All registered early years providers are required to complete an Early Years Foundation Stage (EYFS) profile for each child at the end of the academic year in which the child reaches the age of five years. That assessment is based on school staff's observation of children's learning and development.

Figure 1. Foundation Stage Profile results by gender
(assessment not externally marked)

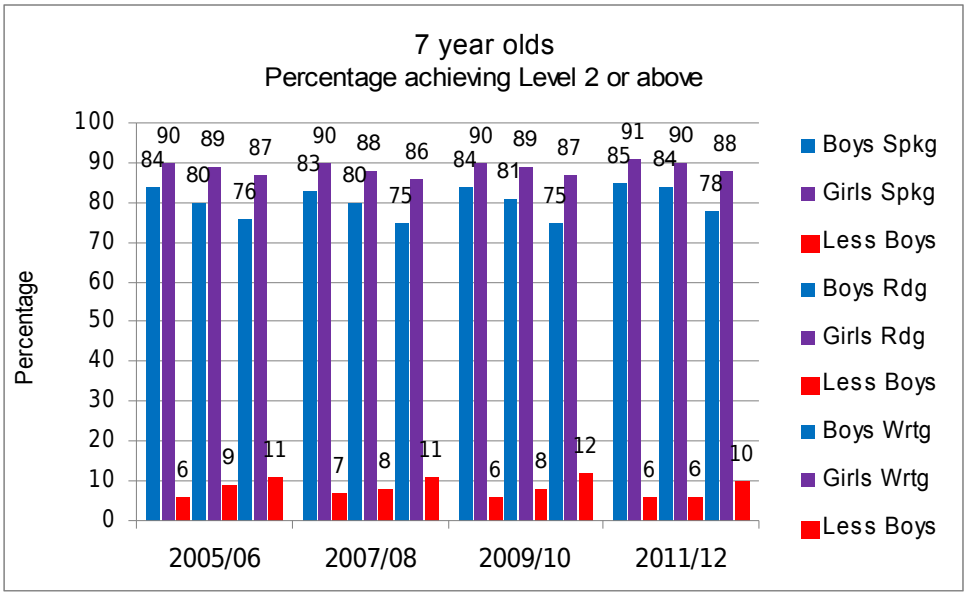


Sources: In each case, first Excel spreadsheet, Table 1.

2011/12: http://www.education.gov.uk/rsgateway/DB/SFR/s001091/index.shtml
2010/11: http://www.education.gov.uk/rsgateway/DB/SFR/s001033/index.shtml
2009/10: http://www.education.gov.uk/rsgateway/DB/SFR/s000961/index.shtml
2008/09: http://www.education.gov.uk/rsgateway/DB/SFR/s000879/index.shtml
2007/08: http://www.education.gov.uk/rsgateway/DB/SFR/s000812/index.shtml
2006/07: http://www.education.gov.uk/rsgateway/DB/SFR/s000752/index.shtml
2005/06: http://www.education.gov.uk/rsgateway/DB/SFR/s000704/index.shtml
2004/05: http://www.education.gov.uk/rsgateway/DB/SFR/s000634/index.shtml

A score of 6 points or above indicates 'working securely within the early learning goals' (target score securely achieved). In Writing, for example, the trend seems to have stabilised at around 18% (average) less boys achieving this standard. A similar pattern at later stages in primary school is shown in Figures 2 and 3.

Figure 2. Key Stage 1 results by gender
(assessment not externally marked)

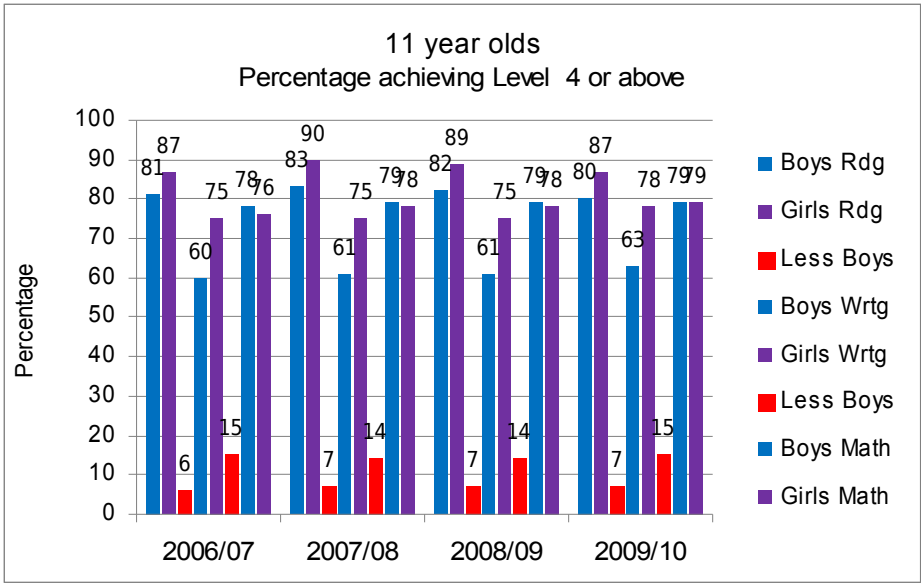


Source:
DfE: http://www.education.gov.uk/researchandstatistics/statistics/allstatistics/a00213773/phonics-screening-ks1-england-2012
Fifth Download, Table 11.

Level 2 is the expected or target score for 7 year olds. The trend seems to have stabilised around an average point of approximately 8% less boys achieving the target score for 7 year olds across Speaking and Listening (Spkg + Listn), Reading (Rdg), and Writing (Wrtg).

In the case of Mathematics,, the boy/girl percentage success rate is still disadvantageous to boys, although less so, being 89/92 for year 2006; 88/91 for 2008; 88/91 for 2010; 89/92 for 2012.

Figure 3. Key Stage 2 Results by gender
(assessment externally marked)



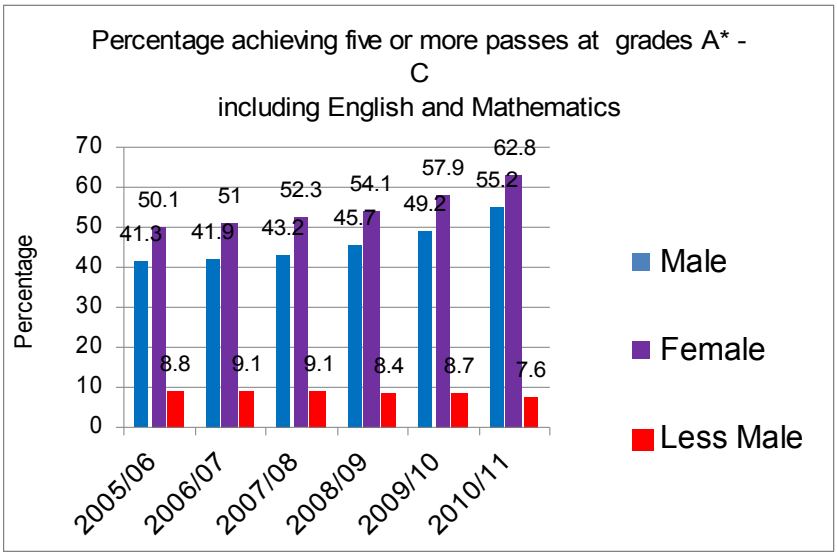
Source:
DfE: http://www.education.gov.uk/rsgateway/DB/SFR/s000975/index.shtml
First EXCEL file, Table 2

Level 4 is the target score for 11 year olds. The trend seems to have stabilised in Reading at around 7% (average) less boys achieving the target score for 11 year olds.

In Writing, boys' success rate seems stable at around 15% (average) less boys achieving the target score.

For Mathematics, boys do not seem disadvantaged at 11 years old, with slightly higher or equal success rates compared to girls. This trend seems not to be maintained to GCSE-level where boys lose any slight advantage. Taking figures for 2010/11 as a sample: mathematics passes, grades A*-G are achieved by 91% boys compared to 93% of girls.
(DfE: http://www.education.gov.uk/rsgateway/DB/SFR/s000975/index.shtml
Second EXCEL file, Table 9).

Figure 4. GCSE results by gender

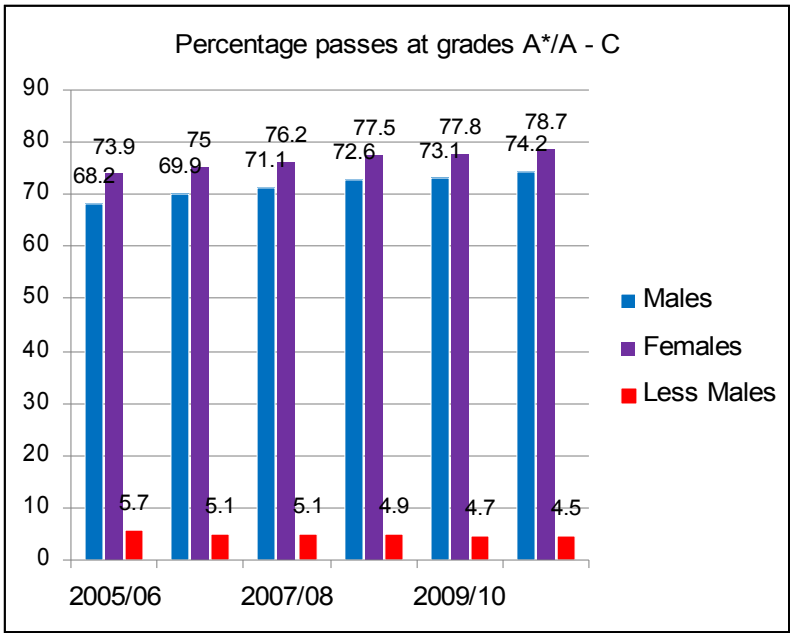


Source:

DfE: http://www.education.gov.uk/rsgateway/DB/SFR/s001056/index.shtml
First EXCEL file, Table 2.

The range A*-C was chosen because this band is used in government targets. Consistently over the time period, males are less successful than females at GCSE. This trend seems stable around an average point of approximately 9% less males achieving five 'good' passes.

Figure 5. A-Level results by gender

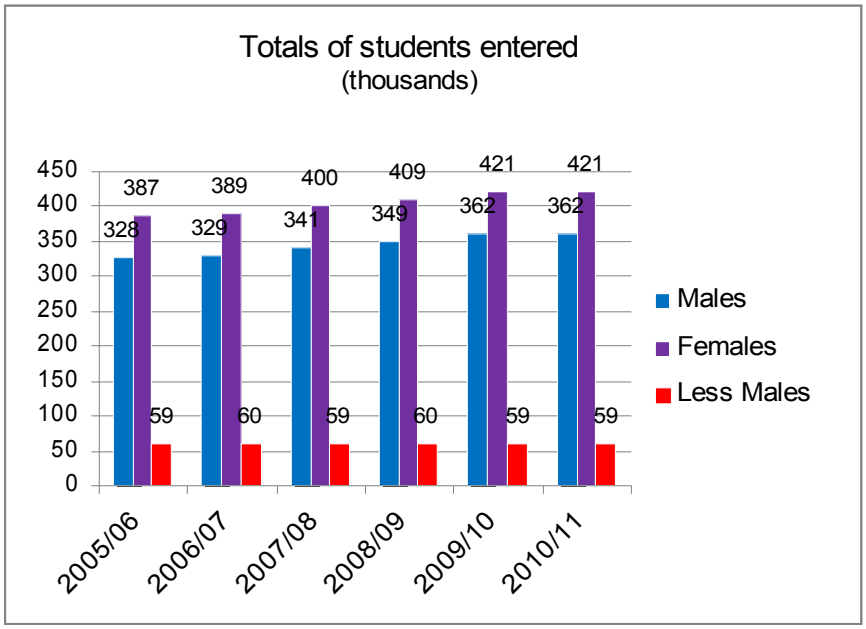


Source:

DfE:http://www.education.gov.uk/rsgateway/DB/SFR/s001055/index.shtml
Fourth EXCEL file, Table 13.

Grade A* is shown on the DfE website only from year 2010. Consistently over the time period, males are less successful than females at A-level. This trend seems stable around an average point of approximately 5% less males achieving high A-level grades.

Figure 6. A-Level populations by gender



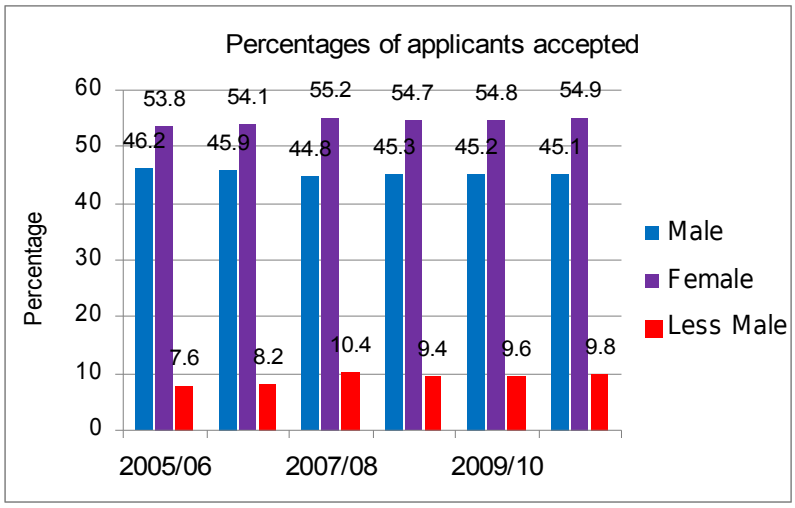
Source:DfE

http://www.education.gov.uk/rsgateway/DB/SFR/s001055/index.shtml

Fourth EXCEL file, Table 13.

Consistently over the time period, less males are eligible to obtain an A-level qualification. This trend seems stable at around 8% (average) approaching 60,000 less males per year entered for A-level.

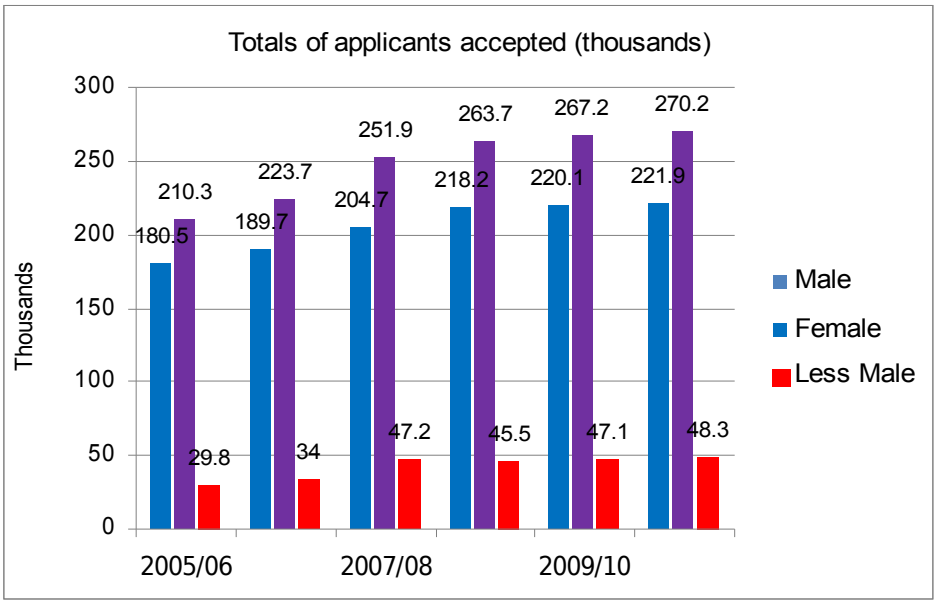
Figure 7. UK University population by gender (1)



Source: UCAS Statistical Services, July 2012

The trend seems stable at around 9% (average) less males gaining a university place.

Figure 8. UK University population by gender (2)



Source: UCAS Statistical Services, July 2012

Unsurprisingly, the relatively small size of the male A-level population and males' lower grades, result in substantially fewer males at university. A marked decrease in the male population seems to have occurred in 2008 with that level of disadvantage sustained over the four year period to date.

DISCUSSION OF DATA

The disadvantage to males seems established over a period of years. The attainment gender gap is apparent from the earliest stage of assessment in school at 5 years old and continues to A-level, with a much smaller proportion of males attending university. It seems likely that the career prospects for many males from their early twenties onwards, are likely to be adversely affected when they are competing in the jobs market without a university qualification.

Boys are disadvantaged on a wider scale. Boys outnumber girls in the population excluded from school. Data for fixed period exclusions, England 2010/11, from 3 plus years old (Nursery) to Year 12 and above: boys 242,030; girls 82,070. In Year R (reception) age 4 plus, there were 1,060 boys excluded compared to 140 girls. The highest rate of exclusion was during the pre GCSE school year (Year 10, aged 14-15): boys 51,490; girls 24,080.
(DfE: http://www.education.gov.uk/rsgateway/DB/SFR/s001080/index.shtml
First Excel file, Table 6).

For permanent exclusions, the figures for the same year, 2010/11, were: boys 3,910; girls 1,170. In Year R (Reception) age 4 plus, there were 20 boys excluded compared to 0 girls. The highest rate of exclusion was in Year 10: boys 1,000; girls 400.

(DfE: http://www.education.gov.uk/rsgateway/DB/SFR/s001080/index.shtml
First Excel file, Table 5).

ISSUES ARISING

There appears to be little discernible action by education departments, under the current and previous governments, to help boys raise their achievement in school. Any action has apparently not been sufficient to effect any tangible improvement.

As to the cause of boys' underachievement, the previous government's Department of Children Schools and Families (DCSF) website (09-05-09) said that girls have greater maturity and more effective learning strategies at all ages; there is an emphasis amongst girls on collaboration, talk and sharing. On the other hand, (some) boys have a disregard for authority, academic work, and formal achievement, and identify with concepts of masculinity which are in conflict with the ethos of the school.

Such comments can maintain a negative stereotype about boys. There is evidence which contests these unfavourable male-female comparisons (Younger et al, 2005; Eckert and McConnell-Ginet, 2003; Frosh, Phoenix & Pattman, 2003; Aries,1987; Crosby, Jose & Wong-McCarthy, 1981; Ickes, 1981; LaFrance, 1981). Perpetuating a negative stereotype may impede successfully addressing a problem.

There may be a difficulty in discerning whether the previous government (DCSF, 09-05-09) had an equality view which extended to boys. "The government is committed to raising the performance of all underachieving pupils, both boys and girls……The crucial point is in ensuring that policies designed to improve boys' results do not do so at the expense of girls."[2] That view may not be as straightforward as it first appears. Clearly no-one seeks to deprive anyone else but it is important to avoid imposing conditions on equality.

Other comments imply that boys are not entitled to an equality position. "Such strategies (which enhance boys' achievement) also have the potential to raise girls' achievement, and so in many cases the gender gap - at least in the short term - is perpetuated. The research team is not unduly concerned about this……" (Younger et al, 2005). Such a lack of concern may seem inappropriate if applied to any other group.

[2] DCSF website, *Gender and Achievement: introduction and key issues*. This data from previous website is no longer posted

Equality measures which might be taken for granted when helping girls, seem lacking when male inequality is addressed. For example, on The Raising Boys' Achievement Project (Younger et al, 2005), amongst ten personnel leading this, seven were female. There may be no objection to this provided that the personnel were the best qualified for the job. However, that view might not hold in the other direction. For example, is it likely that a team gathered to enhance the position of girls would consist of seventy per cent males?

Achieving equality for boys does not rely on identifying the causes of inequality. For example, where females have been in the minority in an occupational group such as members of parliament, positive action has been initiated to address the unequal proportions, independently of identifying causes.

Ways forward may include: addressing negative stereotypes about boys; establishing whether the current government's Department for Education (DfE) has an equality view which extends to boys; research into boys' underachievement which includes work carried out by male researchers; acknowledging the importance of male role models; and making serious and sustained attempts to increase the number of male teachers in schools.

The latest university population figures as set out in the UCAS End of Cycle report, 2012, concluded that, amongst UK domiciled 18 year olds, women were 32 per cent more likely to enter higher education than men; a difference that has increased this cycle. In 2012 the decrease in the entry rate for men was four times greater than for women. If the acceptance rate for men was 100 per cent the resulting entry rate for men would still be below that of women.
(http://www.ucas.com/about_us/media_enquiries/media_releases/2012/2012endofcycle)
(http://www.ucas.com/documents/End_of_Cycle_Report_12_12_2012.pdf.)

Boys have not always underachieved by comparison to girls. Available records for 'school leavers' go back to 1963 when boys had a slightly higher success rate at GCSE/CSE. Girls' higher success rate started in 1970 and by 1989 the rate had increased to 6% more girls than boys at 16 years old achieving the criterion of five or more passes at grades A*- C[3]. It may be that cultural changes over that period, inside and outside school, have worked to the disadvantage of boys.

The underachievement of boys is evident at all stages of education, starting at 5 years of age and culminating in a smaller proportion of male university students. Over a period of more than twenty years boys have remained disproportionately disadvantaged with little done to help. It seems likely that this position would be unacceptable if it were girls experiencing such disadvantage. Are boys being ignored?

REFERENCES

[3] DfE personal communication, 31-12-12. On line records are not available prior to 1998.

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Department for Children Schools and Families (2009); Gender and Education – Mythbusters - Addressing Gender and Achievement: Myths and Realities (Moss, G. Francis, B. and Skelton, C., main contributors). Nottingham: DCSF Publications.

Department for Children Schools and Families (2009a); Gender issues in school – What works to improve achievement for boys and girls? (Moss, G. Francis, B. and Skelton, C., main contributors). Nottingham: DCSF Publications.

Department for Education (2011)
http://www.education.gov.uk/researchandstatistics/statistics/allstatistics/a0020 306/dfe-gcse-and-equivalent-results-in-england-201011-revised Table 2

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UCAS Statistical Services, July 2012

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Younger, M and Warrington, M. with Gray, J., Ruddock, J., Mclellan, R., Bearne, E., Kershner, R., Bricheno, P. (2005). Raising Boys' Achievement. *University of Cambridge Faculty of Education/DfES Research Brief, RB636.*

APPENDIX

The data from histograms are reproduced as tables in the event these offer a more precise format.

Table 1. Foundation Stage Profile results by gender
(assessment not externally marked)

5 year olds Percentage achieving score 6 or above												
	2006			2008			2010			2012		
	Lang For Com + Think	Rdg	Wrtg	Lang For Com + Think	Rdg	Wrtg	Lang For Com + Think	Rdg	Wrtg	Lang For Com + Think	Rdg	Wrtg
Boys	74	68	49	75	65	52	80	69	56	84	74	63
Girls	82	73	66	84	76	70	88	79	75	91	84	80
Less boys	8	5	17	9	11	18	8	10	19	7	10	17

Sources:

2011/12:http://www.education.gov.uk/rsgateway/DB/SFR/s001091/index.shtml
2010/11: http://www.education.gov.uk/rsgateway/DB/SFR/s001033/index.shtml
2009/10: http://www.education.gov.uk/rsgateway/DB/SFR/s000961/index.shtml
2008/09: http://www.education.gov.uk/rsgateway/DB/SFR/s000879/index.shtml
2007/08: http://www.education.gov.uk/rsgateway/DB/SFR/s000812/index.shtml
2006/07: http://www.education.gov.uk/rsgateway/DB/SFR/s000752/index.shtml
2005/06: http://www.education.gov.uk/rsgateway/DB/SFR/s000704/index.shtml
2004/05: http://www.education.gov.uk/rsgateway/DB/SFR/s000634/index.shtml

Table 2. Key Stage 1 results by gender
(assessment not externally marked)

7 year olds Percentage achieving Level 2 or above												
	2006			2008			2010			2012		
	Spkg + Listn	Rdg	Wrtg	Spkg + Listn	Rdg	Wrtg	Spkg + Listn	Rdg	Wrtg	Spkg + Listn	Rdg	Wrtg
Boys	84	80	76	83	80	75	84	81	75	85	84	78
Girls	90	89	87	90	88	86	90	89	87	91	90	88
Less boys	6	9	11	7	8	11	6	8	12	6	6	10

Source:
DfE: http://www.education.gov.uk/researchandstatistics/statistics/allstatistics/a00213773/phonics-screening-ks1-england-2012
Fifth Download, Table 11.

Table 3. Key Stage 2 results by gender

11 year olds: assessment externally marked Percentage of pupils achieving Level 4 or above												
	2007			2008			2009			2010		
	Rdg	Wrtg	Mat	Rdg	Wrtg	Mat	Rdg	Wrtg	Mat	Rdg	Wrtg	Mat
Boys	81	60	78	83	61	79	82	61	79	80	63	79
Girls	87	75	76	90	75	78	89	75	78	87	78	79
Less boys	6	15	*	7	14	*	7	14	*	7	15	*

Source:
DfE: http://www.education.gov.uk/rsgateway/DB/SFR/s000975/index.shtml
First EXCEL file, Table 2

Table 4. GCSE results by gender

Percentage achieving five or more passes at grades A* - C including English and Mathematics						
Gender	Academic year ending 2006	Academic year ending 2007	Academic year ending 2008	Academic year ending 2009	Academic year ending 2010	Academic year ending 2011
Male	41.3	41.9	43.2	45.7	49.2	55.2
Female	50.1	51.0	52.3	54.1	57.9	62.8
Less males	8.8	9.1	9.1	8.4	8.7	7.6

Source:
DfE: http://www.education.gov.uk/rsgateway/DB/SFR/s001056/index.shtml
First EXCEL file, Table 2.

Table 5. A-Level results by gender

Percentage passes at grades A/A* - C						
Gender	Academic year ending 2006	Academic year ending 2007	Academic year ending 2008	Academic year ending 2009	Academic year ending 2010 [A*-C]	Academic year ending 2011 [A*-C]
Male	68.2	69.9	71.1	72.6	73.1	74.2
Female	73.9	75.0	76.2	77.5	77.8	78.7
Less males	5.7	5.1	5.1	4.9	4.7	4.5

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Source:
DfE:http://www.education.gov.uk/rsgateway/DB/SFR/s001055/index.shtml
Fourth EXCEL file, Table 13

Table 6. A-Level population by gender

Totals of Students Entered						
Gender	Academic year ending 2006	Academic year ending 2007	Academic year ending 2008	Academic year ending 2009	Academic year ending 2010	Academic year ending 2011
Male	328,227	329,233	341,016	349,026	362,064	362,062
Female	386,976	389,523	400,340	408,670	421,283	420,717
Males less	58,749	60,290	59,324	59,644	59,219	58,655
Less males %	8.2 [45.9% candidates are male]	8.4 [45.8% candidates are male]	8.0 [46.0% candidates are male]	7.9 [46.1% candidates are male]	7.6 [46.2% candidates are male]	7.5 [46.3% candidates are male]

Source:
DfE:http://www.education.gov.uk/rsgateway/DB/SFR/s001055/index.shtml
Fourth EXCEL file, Table 13.

Table 7. UK university population by gender (1)

Percentages of applicants accepted						
Gender	2006	2007	2008	2009	2010	2011
Male	46.2	45.9	44.8	45.3	45.2	45.1
Female	53.8	54.1	55.2	54.7	54.8	54.9
Less males	7.6	8.2	10.4	9.4	9.6	9.8

Source:
UCAS Statistical Services, July 2012

Table 8. UK university population by gender (2)

Totals of applicants accepted						
Gender	2006	2007	2008	2009	2010	2011
Male	180,556	189,685	204,695	218,185	220,085	221,876
Female	210,334	223,745	251,932	263,669	267,244	270,154
Less males	29,778	34,060	47,237	45,484	47,159	48,278

Source:
UCAS Statistical Services, July 2012

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