

**Boys to Men:
The underachievement
of young men in higher
education – and how
to start tackling it**

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With a Foreword by Mary Curnock Cook



Higher Education Policy Institute

HEPI Report 84

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Foreword

By **Mary Curnock Cook, Chief Executive of UCAS**

HEPI's scan across the evidence and possible solutions to the growing imbalance in educational achievement of boys is enormously useful and highlights just how complex this topic is.

Understanding the challenges presented requires expertise in a vast array of subjects: neurology, psychology, pedagogy, culture, social science, anthropology, education, assessment, geography, economics, humanity, feminism, politics, history and behavioural science – come to think of it, it has the makings of a superb liberal arts / science degree.

But the evidence is compelling. Boys are performing worse than girls across primary, secondary and higher education, not to mention apprenticeships, and the situation is getting worse. On current trends, the gap between rich and poor will be eclipsed by the gap between males and females within a decade. UCAS's latest *End of Cycle report* shows the entry rate for men increased by much less than for women in 2015, widening the gap between the sexes to a record 9.2 percentage points at age 18, meaning young women are now 35 per cent more likely to go to university than men. If this differential growth carries on unchecked, then girls born this year will be 75 per cent more likely to go to university than their male peers.

As Joanna Williams wrote recently in *Times Higher Education*:

Imagine for a minute what would happen if these figures were reversed. I have no doubt there would be panicked calls for an

inquiry into what was causing such dramatic gender inequality. There would be demands for better outreach programmes, publicity campaigns and positive discrimination to get girls into higher education.

Many commentators, including me, have suggested that the dominance of women in the school workforce may play a role in boys' underperformance relative to girls. While this report does not find evidence to support the theory, I remain instinctively convinced that, as in any other area of life, gender imbalance will itself generate further imbalance. Just as the performance of boys at GCSE has declined relative to girls, so the proportion of female teachers has increased. Up until 1993, male teachers in secondary education were in the majority. In the UCAS Teacher Training admissions (UTT) service today, more women apply and they also achieve higher offer and acceptance rates. This results in five women placed through UTT for every two men – nearly 20,000 women against 8,500 men last year.

The higher education sector and the Department for Business, Innovation and Skills have started to tackle the problem. The recent higher education green paper and the Office for Fair Access have signalled clearly that they want to see improved participation by boys, particularly those from disadvantaged backgrounds. They can see that overall inequalities in access to higher education simply cannot be successfully reduced without addressing lower participation by young men, which contributes perhaps the single largest inequality in the system. The higher education sector can and should take action but it is inescapable that boys' lower attainment levels earlier in their education need to be addressed concurrently.

However, the recent Department for Education white paper, *Education, Excellence, Everywhere* makes no mention of the chronic under performance of boys in primary and secondary education. As the white paper title indicates, the Department is more exercised by geographical inequality in education outcomes and the document is peppered with maps to underline the point. There may be pockets of poor standards of education across the country, but the underperformance of boys is pervasive throughout social strata, geographies and phases.

This report is compelling reading as it peels the onion of male underperformance in higher education, and it proposes some imaginative interventions. But its real value is in highlighting the sheer scale of the problem. To me, it suggests the need for a joined-up approach across the Department for Education and the Department for Business, Innovation and Skills, across the country, across primary, secondary and higher education and across society. A national determination to tackle the problem is needed.

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Executive Summary

- After centuries of inequality in UK higher education benefiting men, there has been a reversal over the past three decades. A lower proportion of entrants to UK higher education institutions are male than ever before and they make up less than one-half of the total. Other developed countries have undergone a similar shift.
- Male underachievement is not seen only in the figures for entry but also in non-continuation (drop-out) rates and degree performance statistics.
- Men still outperform women in some of the most prestigious areas – such as entry to the highest-tariff institutions, to Science and Engineering courses and to research degrees. Moreover, on some indicators, men have better employment outcomes. Six months after leaving higher education, women are more likely to be in work but men are more likely to be in professional occupations. Among those with jobs, men also earn higher incomes on average.
- But the overall picture suggests young men are not performing as well in higher education as young women. This is storing up problems for the future. Recognising the challenge does not excuse the past under-representation of women. Nor does it excuse the challenges posed today to female students by 'lad culture' and to female staff by obstacle-laden promotion routes.
- Addressing the underachievement of young men is not a distraction from other inequalities. The weak performance of

people from disadvantaged backgrounds or certain ethnic groups can only be fully addressed by dealing with the differences in male and female achievement. For example, while men underperform overall, poor white men have the worst record of all. So tackling the underperformance of young men is essential if we are to tackle other dismal higher education performance indicators.

- The greater appetite for higher education among women is rational in financial terms because the financial returns from higher education have been larger for women than for men. But this gap is not due to female graduates earning more: in fact, they earn less on average. It is due to non-graduate women typically earning significantly less than non-graduate men.
- Received wisdom identifies the transition from O-Levels to GCSEs as a key factor in the improved educational performance of young women. The evidence is not compelling. Women had nearly caught men up for entry to higher education before the first GCSE students entered higher education in 1990. At best, GCSEs were part of a trend that started long before and continued long afterwards.
- Skilled careers traditionally chosen by women, such as nursing and teaching, did not demand full degrees in the past. When this changed, the number of women in higher education increased dramatically. Discounting students taking Subjects Allied to Medicine and Education reduces the disparity in the total number of male and female higher education students from around 281,000 to just 34,000.

- There is debate among academics and policymakers over whether and how to address the underperformance of young men. Arguably, this is evident in the current Government. The Department for Education says it no longer focuses specifically on boys' underachievement. Meanwhile, the Department for Business, Innovation and Skills has instructed higher education institutions to focus on the under-representation of young men, particularly white working-class boys.
- Even among those who accept there is a problem, there has been a shortage of ideas for tackling it. Moreover, given the centuries of male dominance in higher education, there are few precedents from which to learn.
- It is often said more male school teachers would help raise the achievement of boys by providing positive role models. Yet the evidence suggests this has limited, if any, potential in tackling the educational achievement gap between males and females.

Other policies could do more to help young men enter and succeed in higher education.

i. As widening participation spending is rebalanced from financial support to outreach programmes, we recommend some of the released funding is directed to initiatives aimed at engaging young men, particularly disadvantaged young men, with higher education.

ii. Official sources of information should be addressed fully and appropriately to men. We recommend one specific idea worth exploring is a Take Our Sons To University Day modelled on 'Take Your Daughter To Work Day', with schools, colleges and employers encouraged to provide time off.

iii. Male-only projects are not the only solution and we recommend that male role models are involved in all activities aimed at widening participation in higher education.

iv. Around five-sixths of higher education institutions have more female than male students. Yet, aside from initial teacher training, only two have set statistical outcome targets on the recruitment of more male students in their 2016/17 Access Agreements. We recommend more institutions consider setting themselves targets for male recruitment in future.

v. Neuroscience suggests the differences between men and women may have been exaggerated in the past, but young women's brains do change earlier than young men's. So it is plausible that some young men could benefit from not being rushed into full undergraduate study immediately on leaving school or college. This might mean encouraging the take up of foundation years of the sort already used to help international students enter higher education and to broaden access to medical schools.

vi. Somewhat more focus has been put on male access and retention than on the relatively less good educational achievements of men after entering higher education. Pedagogy needs to reflect any evidence of perceived differences in the way men and women study and learn.

vii. The advent of learning analytics offers a new opportunity to monitor the achievements of individual students. We urge higher education institutions to think about how this provides new ways of helping individual students from under-represented and underperforming groups, including men.

Introduction

1. This report starts by exploring the disparity between male and female entry rates to UK higher education institutions, particularly among those from disadvantaged backgrounds. It is hard to think of other areas of modern life where there is such a big gender gap but so little discussion of it and so few proposals to remedy it. This report shines a light on the problem, explores the causes and makes proposals for helping young men enter and succeed in higher education.

2. As UCAS have repeatedly pointed out, if every male who applied to full-time undergraduate education entered, there would still be more women than men starting each year.¹ By the main UCAS deadline of mid-January 2016, 343,930 women and 249,790 men had applied – a difference of 94,140.² This difference between application rates from men and women is the highest on record.

3. In August 2014, at the time of the annual A-Level results, the Chief Executive of UCAS, Mary Curnock Cook, discussed the underachievement of boys in higher education on *Newsnight*. When asked how the problem might be tackled, she said more attention, more evidence and more discussion were needed. That interview was the original catalyst for this paper.

What are young people doing?

Men aged between 18 and 24 are slightly less likely to be in any full-time education than women, and somewhat more likely to be in work or unemployed. They are less likely to be

'economically inactive', reflecting the greater propensity of women to take on caring responsibilities.

At the end of 2015, there were 5.8 million people aged between 18 and 24 in the UK:

1.9 million were in full-time education of all types
940,000 men and 970,000 women

2.9 million were in work
1,560,000 men and 1,350,000 women

0.4 million were unemployed and looking for work
220,000 men and 150,000 women

0.6 million were economically inactive
200,000 men and 360,000 women

Source: *Office for National Statistics, UK Labour Market: February 2016, 17 February 2016, Table 14. Seasonally-adjusted numbers. Figures do not sum due to rounding.*

4. Women outperforming men is a worldwide trend. In *Education at a Glance 2015*, the Organisation for Economic Co-operation and Development (OECD) reported:

Women make up the majority of entrants into tertiary education in all [OECD] countries except Mexico, Saudi Arabia, Switzerland and Turkey. On average across OECD countries, 54% of new entrants are women.³

5. Yet some people claim male underachievement in higher education is not worth consideration. A 2010 report for the Higher Education Academy summarised this point of view:

Those opposing this refocusing [on men] suggest that it fuels moral panic about women's HE progress, detracts from ongoing female disadvantages, and from a much larger socio-economic gap within the student body.⁴

6. We profoundly disagree. Policymaking is not a zero-sum game in which you have to choose between caring about female disadvantage or the socio-economic gap or male underachievement. All three matter.

7. Moreover, issues of educational disadvantage tend to be interconnected. The socio-economic gap in higher education participation cannot be understood without giving consideration to the particularly poor underperformance of young males from poor households. Or, as UCAS have put it, 'the widening gap between men and women is acting to stall progress in reducing inequality overall.'⁵

Women in UK higher education in the twentieth century

For most of the period since higher education began in the British Isles almost a thousand years ago, men have had far more opportunities than women. This was true up to and including most of the twentieth century: 'the percentage of women students reached a peak at the end of the 1920s, but then declined, and remained stuck at 23-24 per cent until the 1960s.'⁶

When the grandmother of one of the authors joined the University of Liverpool between the wars to study Chemistry and Maths, she found 'four times as many men as women' on her course. But she also found, 'we were more than a match for them academically'.

Famously, the University of Cambridge refused to make women full members of the University until after the Second World War, in 1948. When Professor Dorothy Hodgkin won a Nobel Prize in 1965, there were still only three male colleges where she could be invited to dine.⁷

Important exceptions existed. At the new University of Sussex, women made up 67 per cent of full-time students in 1961/62: '[It] has proved so attractive to women that there has to be discriminatory selection in the arts subjects.'⁸ A few years later, one evaluation concluded: 'It might plausibly be called the rich man's Oxbridge, or at least the rich girl's.'⁹

Elsewhere, however, there was an extraordinary waste of potential. Even when women were able to graduate, they faced fewer employment options and were often expected to end their careers on marriage. The Anderson report of 1960, which led to the introduction of mandatory student grants from 1962, had to look beyond the labour market to sustain its argument that higher education was of similar benefit to men and women:

Full-time paid employment is not the only means of enriching the national life: nor are the benefits that a university or comparable form of education can confer on the individual or the community measurable only in terms of later earning capacity.¹⁰

8. If the gross under-representation of women in higher education in the past represented wasted talent, then the under-representation of men today should be taken seriously too. In 2007, David Eastwood, the Chief Executive of the Higher Education Funding Council for England (HEFCE) and now the Vice-Chancellor of the University of Birmingham, said: 'It [the underperformance of boys in higher education] matters in the sense that it mattered when it was the other way around.'¹¹

9. Nothing in the pages that follow should be interpreted as a lack of concern for the challenges facing women in higher education and elsewhere. Some female students do not have the same opportunities as their fellow male students. The National Union of Students have rightly exposed the problems that can be caused by 'lad culture' on campus.¹² In November 2015, Universities UK established a taskforce 'to examine violence against women, harassment and hate crime affecting university students.'¹³

10. Female disadvantage is particularly evident in senior university appointments. It was not until 2015 that Universities UK (formerly the Committee of Vice-Chancellors and Principals) had its first female President in Professor Julia Goodfellow, Vice-Chancellor of the University of Kent, and it was not until 2016 that the University of Oxford (established in 1096) employed its first ever female Vice-Chancellor in Professor Louise Richardson.

11. While 45 per cent of all academic staff in higher education institutions were female in 2013/14, they made up only one-third of other senior academic appointments (33 per cent) and around one-fifth (22 per cent) of the total number of professors.¹⁴ When non-academic roles are included, men

make up 46 per cent of the total higher education workforce but 70 per cent of those paid above £57,000.¹⁵ Just four of the 24 institutions in the Russell Group are currently headed by women (the University of Liverpool, the University of Manchester, the University of Oxford and Imperial College London).¹⁶ The glass ceiling holding women back has been matched by a glass elevator for men.

12. According to *Times Higher Education*, 'universities have become places where the students are largely female, but the academics mostly male.'¹⁷ Until academic career paths recognise the obstacles faced by women in securing promotion, men will continue to be over-represented in the upper echelons and until the relatively poor educational performance of young men is addressed, female students will continue to outnumber their male counterparts significantly.

The issue

The past

13. Historically, higher education in the UK was a male pursuit. In 1920, 72 per cent of students obtaining a first degree were men (plus 75 per cent of those obtaining higher degrees). The figures became even more imbalanced before improving somewhat in the 1970s. Yet, even by 1980, 63 per cent of those securing a first degree were male (along with 76 per cent of those obtaining higher degrees).

Students obtaining university degrees, UK

	First degrees			Higher degrees		
	Men	Women	Total	Men	Women	Total
1920	3,145	1,212	4,357	529	174	703
1930	6,494	2,635	9,129	1,123	200	1,323
1938	7,071	2,240	9,311	1,316	164	1,480
1950	13,398	3,939	17,337	2,149	261	2,410
1960	16,851	5,575	22,426	2,994	279	3,273
1970	35,571	15,618	51,189	11,186	1,715	12,901
1980	42,831	25,319	68,150	14,414	4,511	18,925
1990	43,297	33,866	77,163	20,905	10,419	31,324
2000	109,930	133,316	243,246	46,015	40,520	86,535
2005	122,155	156,225	278,380	63,035	62,050	125,085
2010	144,980	185,740	330,720	93,375	89,235	182,610
2011	153,235	197,565	350,800	96,280	97,990	194,270

Notes: All figures are for students from all domiciles. Full-time first degree students only

Source: Compiled from various sources and reproduced from House of Commons Library, *Education: Historical statistics*, 2012

14. The pace of change increased in the early 1990s, when the polytechnics became universities. In the middle of that decade, the number of female students overtook the number of male students for the first time.¹⁸ In a speech at Lancaster University in January 1989, the Secretary of State for Education and Science, Ken Baker, had predicted 'in 25 years time women [students] will be in the majority here [in the UK]'.¹⁹ In the event, it took less than ten years.

15. The gap has grown since. The Higher Education Initial Participation Rate (HEIPR) is 'an estimate of the actual entry rate in the current year of people who had not previously entered higher education at each age from 17 to 30'. The figure for 2013/14 in England was 42 per cent for men and 51 per cent for women.²⁰ The story is similar in other parts of the UK.²¹

The present

16. According to UCAS, by 2015, an 18-year old woman was 35 per cent more likely to enter higher education than an 18-year old man. This means 36,000 fewer 18-year old men entered higher education than if the rates for men and women had been equal.

17. Among applicants who have been in receipt of free school meals, young women are 51 per cent more likely to make it to higher education (19.8 per cent compared to 13.1 per cent for men). Entry rates for disadvantaged boys are also relatively worse compared to non-disadvantaged boys than the equivalent picture for girls.²²

Students in 2014/15 by mode, level and gender

	Undergraduate	Postgraduate	Total
Full-time Female	765,945	164,435	930,380
Full-time Male	625,590	140,935	766,525
Full-time Total	1,391,705	305,445	1,697,150
Part-time Female	204,405	138,550	342,955
Part-time Male	131,705	94,140	225,845
Part-time Total	336,190	232,740	568,930
Total Female	970,350	302,985	1,273,335
Total Male	757,295	235,075	992,370
Total	1,727,895	538,180	2,266,075

Source: HESA, *Statistical First Release 224*, 14 January 2016

18. In 2014/15, 56 per cent of all students in the UK were female. Men were in a minority among:

- undergraduate students;
- postgraduate students;
- full-time students; and
- part-time students.

Separate UCAS data on entry to full-time undergraduate courses suggest men are in a minority on 112 out of 180 subject areas.²³

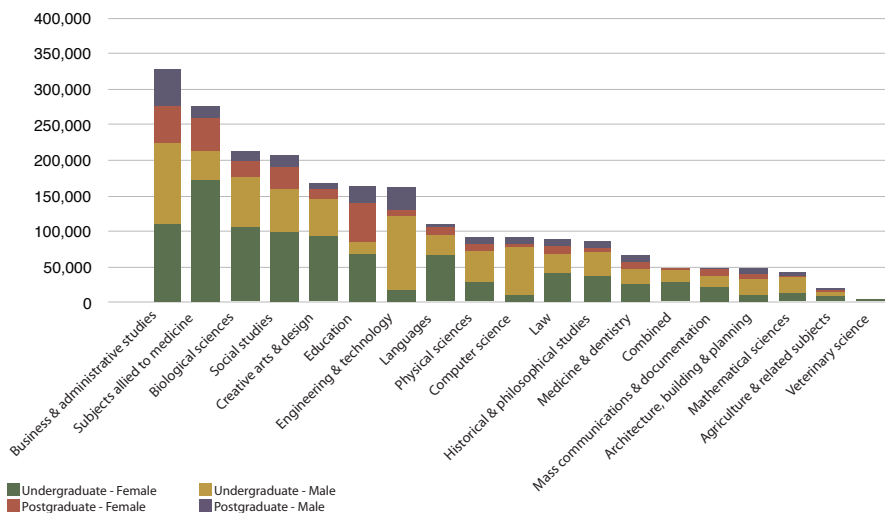
19. In contrast, a slight majority of international (non-EU) students were male in 2014/15 (51 per cent to 49 per cent). Men also outnumbered women on postgraduate research degrees (53 per cent to 47 per cent), reflecting the high number undertaken by men in Science, Technology, Engineering and

Mathematics (STEM) subjects. Women outnumbered men on postgraduate taught degrees, however, by a big margin (59 per cent to 41 per cent).²⁴

Discipline differences

20. The gender disparities among undergraduates and postgraduates vary markedly according to discipline. Only 17 per cent of undergraduates studying Education are men; only 15 per cent of undergraduates studying Computer Science are women. The ratios are typically lower for postgraduate degrees but they remain significant: 31 per cent of postgraduates studying Education are men; 26 per cent of Computer Science postgraduates are women.

Students studying at UK Higher Education providers by Subject area, Level of Study and Sex 2014/15



Source: Chart kindly provided by the Higher Education Statistics Agency and used with permission

21. The data underlying the chart (shown in the Annex) confirm it is not as simple as boys being attracted to scientific disciplines and girls preferring arts and humanities. For example, the gender balance is comparatively small in both Medicine and Historical and Philosophical Studies (and in both cases it favours women). Nor is it a static picture. Women make up almost four-fifths (78 per cent) of undergraduates and two-thirds (66 per cent) of postgraduates in Veterinary Science, which is a discipline that was dominated by men until fairly recently.

Differences by institution

22. The gap between entry rates among women and men is biggest among higher education institutions with lower entry criteria, but it is significant even among those with higher entry criteria. In 2015, 18-year old UK women were:

- 45 per cent more likely to enter a lower-tariff institution than 18-year old men;
- 33 per cent more likely to enter a medium-tariff institution than 18-year old men; and
- 28 per cent more likely to enter a higher-tariff institution than 18-year old men.²⁵

23. At the very highest tariff institutions, the picture is different as men outnumber women: at each of Oxford and Cambridge, 46 per cent of undergraduates and 44 per cent of postgraduates were women in 2014/15.²⁶

24. While women comprise the majority of students, at an institutional level it is not only at Oxbridge that men make

up a majority. UCAS data for 2015 entry suggest 123 higher education institutions that recruit large numbers of students (around 500 or more) had more acceptances from women than men while 26 had more from men than women. Aside from Oxbridge, the smaller group included a diverse mix of institutions with different histories and missions:

- **long-standing universities**, such as Heriot-Watt University, Imperial College London, the University of Leicester, the University of Sheffield and the University of Warwick;
- **former Colleges of Advanced Technology**, such as Aston University, the University of Bath, Brunel University and Loughborough University;
- **former polytechnics**, such as Coventry University, Leeds Beckett University and the University of Portsmouth;
- **newer universities**, like the University of Bolton and Southampton Solent University; and
- **alternative providers**, such as the Academy of Contemporary Music, BIMM and the London School of Business and Management.

Ethnicity

25. The underperformance of boys in entry to higher education varies markedly according to ethnicity, as noted in the 2015 higher education green paper:

Only around 10% of white British men from the most disadvantaged backgrounds go into higher education;

they are five times less likely to go into higher education than the most advantaged white men. Participation by this group is also significantly lower than participation by the most disadvantaged from BME [black and minority ethnic] backgrounds: the participation rates for men of black Caribbean heritage are over 20%; for men of Indian heritage they are nearly 50%; and for men of Chinese heritage they are over 60%.²⁷

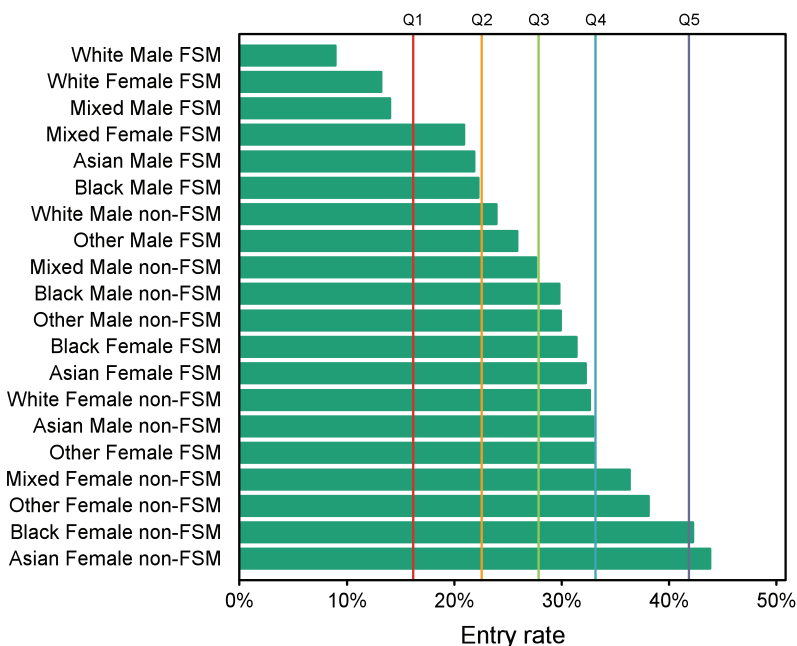
26. Even though white males do worst of all, this serves as a useful reminder of the call made by Policy Exchange in 2014 to treat different groups classified jointly as 'BME' (or BAME – Black, Asian and Minority Ethnic) as separate, in need of different policy interventions.²⁸ Or, as the journalist Matthew Parris has put it:

once you start scrutinising figures within the 'black or minority ethnic' group you see that many of the interesting differences arise between the communities it lumps together. Averaging across them under the umbrella 'BME' buries those differences.²⁹

27. The need for a more sophisticated picture is clearly demonstrated in recent research by UCAS. The higher education entry rate for 18-year old former state school pupils from POLAR quintile 3 areas (that is, in the middle) was 27.9 per cent in the period 2011 to 2015.* However, when split by

* 'The Participation of Local Areas classification (known as POLAR) is a UK-wide area-based measure that groups geographical areas [into five areas] according to the proportion of young people living in them who participate in higher education (HE) by the age of 19. This is known as the "young participation rate". The POLAR classification is used for a variety of purposes, perhaps most importantly to distribute HEFCE's student opportunity allocation to higher education institutions, and for the monitoring of local and national patterns of young HE participation.' From <http://www.hefce.ac.uk/pubs/year/2014/201401/>.

different characteristics, the entry rates for groups in quintile 3 areas vary from 8.9 per cent for White men who were on Free School Meals (FSM) to 43.8 per cent for Asian women not on Free School Meals. The variation within this single quintile is bigger than the variation between the most disadvantaged and most advantaged quintiles (Q1 and Q5 respectively).³⁰



Source: UCAS, *End of Cycle Report 2015*, 2015, p.130

28. This complex picture needs to be reflected in policies aimed at rebalancing the chances of reaching higher education. The Government have two clear commitments. First, they want a doubling in the likelihood of the most disadvantaged young people reaching higher education.³¹ Secondly, to ‘increase by 20 per cent the numbers of students in HE from ethnic minority

groups by 2020'. As with many official targets, the easiest way to succeed could be to bolster groups who already perform relatively well by nudging those who currently just miss out. But meeting the true spirit of the targets needs initiatives that recognise the interaction of characteristics evident in UCAS's data.

Gender disparities after entry to higher education

29. It is not only at entry to higher education that men underperform. Data kindly provided by the Higher Education Statistics Agency for this report show that, in 2013/14, the proportion of (HESA), full-time, first-degree students no longer in higher education following their year of entry was 8 per cent for men and 6 per cent for women. Earlier work by the Higher Education Academy also found a higher proportion of male students withdrew with a lower level qualification than they had originally hoped to achieve or no award than women in nearly all disciplines. One of the biggest gaps was in Education, which men were much less likely to enter in the first place: one-in-ten (10 per cent) men withdrew without their award against one-in-17 (6 per cent) women.³²

30. The new HESA data also show that, in 2014/15, 73 per cent of female and 69 per cent of male first-degree qualifiers secured a so-called 'good' degree of a 2:1 or above.³³ The Higher Education Academy's analysis of earlier data for 2010/11 suggests men's degree results are worse than women's in nearly all disciplines:

Women achieved higher percentages of upper degrees in 27/30 disciplines; only in Built Environment, Philosophy and Religious Studies, and Social Work and Policy did men secure one more

often and their advantage over women in these disciplines was marginal in all cases – only a 1-2% lead. Conversely, in some of the disciplines where women secured higher percentages of upper degrees than men, their lead was more substantial; for example, it was 13-14% higher in GEES [Geography, Earth and Environmental Science], Hospitality, Leisure, Sport and Tourism, Marketing, and Veterinary Medicine.³⁴

31. This record of relative underachievement is not explained by controlling for other factors. For both non-continuation and degree performance, 'men were not more likely than women to possess intersecting characteristics that were also related to lower attainment, such as mature status, lower SEC [socio-economic classification] etc.'³⁵

Graduation

32. The *Destinations of Leavers from Higher Education* survey, which seeks information from people six months after they have successfully completed a higher education course, shows a mixed picture on performance in the labour market after study. Women are more likely to be in work but men are more likely to be in professional work:

Female survey respondents were more likely to be working, and less likely to be unemployed than male respondents. 74% of female graduates were working compared to 71% of male graduates. Furthermore, 6% of female graduates were unemployed compared to 8% of male graduates. However male graduates were more likely to be employed in professional occupations (51%) than female graduates (49%).³⁶

33. Male UK-domiciled first-time first-degree leavers who find full-time work in the UK earn more on average than their female counterparts: 30 per cent of these men earn £25,000 or more, compared to 19 per cent of women. This may partially reflect different subject choices.³⁷

34. Analysis of data for seven research-intensive universities in England reveals substantial differences in how male students seek work. Compared to female undergraduates, male undergraduates typically:

- start their job search earlier;
- are more confident about their prospects;
- are less daunted by approaching employers;
- are less concerned about many of the steps in making a job application;
- are less likely to seek job security;
- are less likely to desire work for 'a cause they feel good about';
- believe job stereotypes less; and
- are not as keen on careers with less structured entry procedures (such as cultural, charitable and media jobs as opposed to financial, engineering and information technology roles).³⁸

Causes

35. There is no obvious or simple single reason for the differential performance of men and women in higher education. No one has a perfect and comprehensive understanding of the gap.

36. However, among the most important contributory factors are: differential educational attainment; gender differences in the labour market; and the upgrading of nursing and teaching to the status of graduate professions.

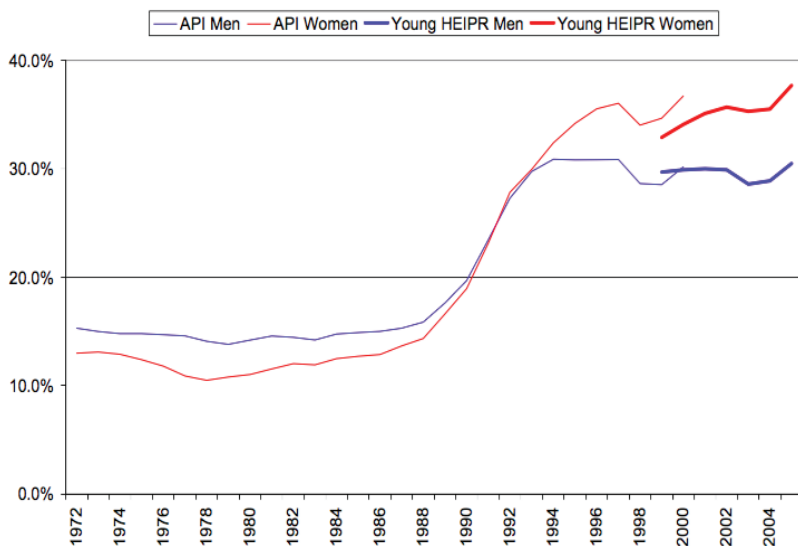
Assessment and attainment

37. One standard explanation for the relatively poor performance of men in higher education is the substantial disparity in educational achievement between males and females beforehand. Once young men's lower achievements in GCSEs are accounted for, they do no worse than young women: 'amongst the cohort who sat their GCSEs in 2008, boys are actually slightly more likely to go to university than girls once we account for prior attainment.'³⁹

38. This difference in attainment is often dated back to the shift from O-Levels to GCSEs in 1988.⁴⁰ GCSEs are thought to have been particularly female friendly, with more focus on coursework and less on examinations.⁴¹ Girls were more likely than boys to achieve five or more A-to-C GCSEs and the gap gradually increased over the next few years before stabilising at around 10 percentage points in the middle of the 1990s.⁴² In 2013/14, 58.9 per cent of girls achieved at least five A*-to-C GCSEs or equivalent (including English and Mathematics) compared to 49.0 per cent of boys.⁴³

39. However, the female Age Participation Index (API), which is the former measure of participation in higher education, had been rising somewhat faster for females than males for many years before the first GCSE cohort left school in 1990.⁴⁴ There was a sharp rise in the API for women then, but there was also a sharp increase for men. In 2015, the Department for Education confirmed 'girls' results were on an upward trajectory before the move to increased coursework in 1988 and continued after the reduction in GCSE and A level coursework.⁴⁵

Participation in higher education by gender



Source: Stijn Broecke and Joseph Hamed, *Gender gaps in higher education participation: An analysis of the relationship between prior attainment and young participation by gender, socio-economic class and ethnicity*, Department for Innovation, Universities and Skills, 2008, p.2

40. The perceived differences between men and women over assessment by coursework have been overcooked. A literature review of examinations versus coursework concluded:

*Women tend to produce better marks than men in both coursework and examinations, but both men and women tend to obtain higher marks in coursework than in examinations, and both men and women prefer to be assessed by coursework than by examinations.*⁴⁶

41. Jannette Elwood has cautioned that the relative educational achievements of men and women need to be considered in a broader context:

*an historical perspective on issues of gender and achievement suggests that we cannot look at current concerns about the apparent underachievement of boys as a 21st century phenomenon. Nor have girls' improved achievements at school occurred overnight. The story is a much more complex one, and one that is continually shifting in perspective.*⁴⁷

42. Today, boys typically work less hard at school across the world. The OECD found:

- Boys are 8 percentage points more likely than girls to regard school as a waste of time (although the figure for the UK is lower at only around 3 percentage points).
- Boys are nearly ten times more likely to play collaborative online games every day, which can lead to lower performance, than girls (19.6 per cent versus 2.2 per cent): 'Because boys tend to be daily users of video games and are much more likely than girls to play online collaborative

games, the gender gap in video gaming translates into a performance advantage for girls.⁴⁸

- Boys spend less time reading for enjoyment: 'in 2000, 60% of boys and 77% of girls read for enjoyment; by 2009, these percentages had dropped to 54% and 74%, respectively.⁴⁹ The gap was of a similar magnitude in the UK: 51 per cent to 70 per cent.
- Boys across OECD countries spend over one hour less per week on homework than girls (5.5 hours versus 4.2 hours), with the data for the UK being identical to the OECD average.⁵⁰

Differences in learning among boys and girls, according to the Programme for International Student Assessment (PISA)[†]

- Boys are more likely than girls to play video games.
- Boys are more likely than girls to spend time on computers and the internet.
- Boys are less likely than girls to read outside of school for enjoyment.
- Boys are less likely than girls to enjoy activities connected with reading.

[†] 'The Programme for International Student Assessment (PISA) is a triennial international survey which aims to evaluate education systems worldwide by testing the skills and knowledge of 15-year-old students. To date, students representing more than 70 economies have participated in the assessment. The most recently published results are from the assessment in 2012.' <https://www.oecd.org/pisa/aboutpisa/>

- Boys are more likely than girls to play chess and program computers.
- Boys are less likely than girls to do homework.
- Boys are more likely than girls to have negative attitudes towards school.
- Boys are more likely than girls to arrive late for school.
- Boys are less likely than girls to engage in school-related work out of intrinsic motivation.

The evidence emerging from PISA is that, while some after-school activities are more popular than others in certain countries, in virtually all countries boys and girls use their free time in distinctly different ways; and these differences have a significant impact on the skills that boys and girls acquire.

Reproduced from OECD, *The ABC of Gender Equality in Education: Aptitude, Behaviour, Confidence*, PISA, 2015, pp.36-37

43. This is not just a matter of gender. Ethnicity makes a difference too. Leicester City Council told the House of Commons Education Select Committee of their experience that in parts of Leicester, 'the white working class culture is characterised by low aspirations and negative attitudes to education' in a way not seen with other ethnic groups.⁵¹

44. This is confirmed by analysis of the Longitudinal Study of Young People in England, which shows that white disadvantaged young people are more likely than others to 'indicate that the best jobs did not necessarily go to those who

had been to university' and to 'believe that university wasn't for people like them':

Parents of White disadvantaged pupils were also more likely to believe that leaving school at 16 did not necessarily limit an individual's career opportunities and aimed for their child to begin an apprenticeship or full-time work at the end of Year 11.⁵²

45. So focusing on gender alone will not deliver equality of opportunity. But nor can it be ignored. The OECD's work on the differential performance of boys and girls concluded:

Giving boys and girls an equal opportunity to realise their potential demands the involvement of parents, who can encourage their sons and daughters to read; teachers, who can encourage more independent problem solving among their students; and students themselves, who can spend a few more of their after-school hours 'unplugged'.⁵³

The graduate earnings premium

46. In one sense, the greater likelihood of women attending higher education reflects economically rational behaviour. Research undertaken for the Coalition Government on the additional income achieved by graduates compared to comparable non-graduates shows a larger earnings premium for women than for men:

the private benefit of a degree, in terms of lifetime earnings net of tax and loan repayments, is large - in the order of £168k (£252k) for men (women) on average. The social benefit to the government is also large of the order of £264k (£318k) from men (women) graduates - far in excess of likely exchequer costs.⁵⁴

47. Other research comes to a similar conclusion: 'We found that women graduates earn three times as much as women without a degree, while male graduates earn around twice as much as male non-graduates.'⁵⁵

48. The difference is not because female graduates earn more than men: 'Despite having the same UCAS entry tariff points, attending the same type of institution and studying the same subject, men are commanding higher salaries than women.'⁵⁶ Rather, non-graduate women tend to do jobs that are paid less than non-graduate men. So the gap between the earnings of graduates and non-graduates is bigger among women than it is among men.

Why do non-graduate women earn so much less?

One possible underlying explanation from the United States for the shifting picture between men and women is that, once it became easier for women to secure better-paid work, the option was not solely entering male-dominated blue-collar jobs but also taking on 'clerical work or teaching, higher status and better paying but still traditionally female jobs.'

Upwardly-mobile women whose reference group were already in careers requiring some form of additional education, such as teaching, meanwhile entered 'traditionally male jobs' such as management and medicine in larger proportions because there were few traditionally female professions with status.

At the same time, low pay for jobs traditionally undertaken by women meant there was 'little incentive for men to make the gender revolution a two-way street.'

Source: Paula England, 'The Gender Revolution: Uneven and Stalled', *Gender and Society*, 2010, vol. 24 no.2, p.159 and p.162

Nursing and teacher training

49. During the 1990s, the responsibility for nursing education shifted from hospitals to universities, and all nurse training programmes have now moved from diploma to degree level. These changes boosted the number of women counted as being in higher education. Today, women outnumber men by around four-to-one in Subjects Allied to Medicine, which is dominated by Nursing.⁵⁷ Teacher training underwent a comparable shift and, today, over three times as many women as men take courses in Education.

50. Removing Subjects Allied to Medicine and Education from the data reduces the gender disparity in entry to higher education to around one-eighth of its original level.⁵⁸ That so few men study Subjects Allied to Medicine and Education compared to women means that the gender distortion in the whole higher education sector could persist until more males are attracted to such courses.

Total higher education enrolments by subject and gender

Total students	Male	Female	Difference (Ratio)
Total enrolments	992,370	1,273,335	280,965 (1:1.28)
Subjects Allied to Medicine	56,845	218,585	161,740 (1:3.85)
Education	39,405	124,965	85,560 (1:3.17)
Other enrolments	896,120	929,785	33,665 (1:1.04)

Source: Analysis of Higher Education Statistics Agency, *General student numbers: Statistical first release 210*, January 2015, Table 4

51. The recent decision by the Government to shift Nursing, Midwifery and Allied Health students from a system of grant support to the loans system used for other disciplines, along with the removal of the student numbers cap for these courses, could have an impact on demand. The University Alliance mission group fears the changes 'could adversely affect the diversity of the applicant pool.' It has called on Ministers to 'monitor the impact of the changes and intervene where necessary.'⁵⁹

Recommendations

52. To tackle the underachievement of young men in higher education, there needs to be recognition of the problem. Not everyone is convinced. For example, groups representing men's interests claim to have found areas where hard evidence has been ignored.⁶⁰ One UK academic has claimed understanding of the problem stems from skewed academic priorities:

*Rather than evaluating the nature and meaning of female success and the creation of new sites of gender inequality, researchers instead seek out the few remaining areas where women can still claim to be at a disadvantage. ... Alternatively, current research into higher education and gender focuses on the 'problem' of masculinity in universities.*⁶¹

53. The Department for Education, which in an earlier guise took a keen interest in differential achievement rates by gender, says it no longer focuses specifically on boys' underachievement. For example, in reply to a recent Freedom of Information request, the Department said it:

*does not fund any initiatives that just focus on addressing boys' underachievement. The Government's education reforms are designed to ensure that all children, whatever their gender, have the opportunity to attain well at school.*⁶²

54. The Universities and Science Minister, Jo Johnson, is, however, committed to tackling the underperformance of boys. New guidance to the Director of Fair Access published in 2016 calls on:

*institutions to set themselves benchmarks and targets ... for particular types of students from disadvantaged backgrounds, as well as more general targets and benchmarks. In many cases it will be appropriate to encourage targets and benchmarks relating specifically to students from Black and Minority Ethnic communities, young White males from disadvantaged backgrounds, disabled students and those with learning difficulties, to support our ambitions in these areas.*⁶³

55. It is easier to set targets or benchmarks than to hit them and there are no easy or certain solutions to the underachievement of boys entering higher education. Even if there were, higher education institutions would not be able to solve the problem on their own, given how far back in the education system the differences in achievement emerge. As one official report found:

*our analysis suggests that no additional gender effect appears at the point of entry to Higher Education and, hence, that efforts to reduce the gender gap in HE participation should predominantly be aimed at increasing the relative attainment of young men prior to HE.*⁶⁴

56. Yet concentrating only on the earlier stages of the education system risks a sequence in which underachievement is blamed:

- by higher education providers on colleges and secondary schools;
- by secondary schools on primary schools; and
- by primary schools on early years' providers and parents.

When blame bumps down the age spectrum, the end result is likely to be little change.

57. Higher education institutions may not be able to solve the disparity in achievement on their own, but they are a necessary part of any solution. This has become better understood in recent years with, for example, greater use of contextualised admissions. Moreover, the abolition of student number controls has removed one obstacle against recruiting people from under-represented groups. Admitting an extra student no longer means having to turn another one away (or risk a fine for over-recruitment).⁶⁵ It is difficult to see how the number of young men in higher education could be boosted were a tight numbers cap to be reimposed, as then it could only happen if fewer women entered higher education.

58. However, letting institutions recruit as many undergraduates as they like cannot on its own tackle male under-representation because it does not directly affect demand. To make a bigger difference, more men need to apply to higher education, more men need to complete their courses and more men need to achieve a 'top' degree (2:1 or above). We should consider new cost-effective policy interventions aimed at helping people before entering higher education and while studying.

59. Any changes have to be implemented against the backdrop of further cuts to the direct public funding of higher education, including to budgets directed at disadvantaged students, such as the Student Opportunities Funding and maintenance grants (which are being abolished in favour of higher loans). Interventions that do not require significant

extra public funding therefore have more chance of being implemented. One common proposal is to increase the number of male role models, particularly male teachers, so we start by evaluating that idea.

More male teachers?

60. It is often said boys, in particular, would benefit if there were more positive male role models in schools: in English primary schools, 85 per cent of teachers are female and, in secondary schools, the figure is 62 per cent.⁶⁶ A more even balance could conceivably help reflect wider society, make up for a lack of male role models at home and raise achievement levels.⁶⁷

61. The barriers against men entering teaching have been summarised as: ‘experiences and attitudes related to status, salary, working in a predominantly female environment, and physical contact with children.’⁶⁸ Perceptions of teaching as a female profession can start young: in one piece of research, a male primary school teacher in the UK recalled a five-year old pupil saying, ‘You’re not a teacher, you’re a man.’⁶⁹

62. Universities could help tackle the shortage of male teacher trainees through more active recruitment and increasing retention, potentially triggering a virtuous circle of more male role models producing more male higher education students. The University of South Australia runs a ‘MENtor Program for Males in Early Childhood Education’, which provides male students with support and mentorship as well as professional experience placement with successful male educators.⁷⁰ The Government could take the initiative too by applying a similar effort to raising the number of

males training to teach as it does to raising the number of females studying STEM subjects.

63. However, past initiatives to raise the proportion of male adults in classrooms have had only a limited impact. Moreover, even if new initiatives had greater success, it might still be a red herring in terms of boys' achievements. The evidence on whether male teachers raise the achievement of boys is contradictory.

- A research experiment in which 1,200 secondary school pupils in England placed bets on their examination results found boys reduced their stakes when female teachers did the marking – and were right to do so. Women teachers 'did tend to award lower marks to male pupils than external examiners.'⁷¹
- Earlier research among pupils in England published in 2006 found 'a strong and significant perception that teachers treated boys more negatively than girls.' Yet there was also a perception expressed that, compared to men, 'female teachers are more fair in the way they treat the different gender groups and less likely to be influenced by the pupil's gender.'⁷²
- Other research among 9,000 primary school pupils in England 'found no empirical evidence to support the claim that there is a tendency for male teachers to enhance the educational performance of boys and, conversely, for female teachers to enhance the educational performance of girls.'⁷³ The research also found pupils of both genders taught by women were more likely to have positive attitudes about school.

64. One researcher, Elina Lahelma, has concluded that ‘Female numerical dominance of the teaching profession seems to be more a problem for adults than for young men and women.’⁷⁴ Debra Myhill and Susan Jones, believe aiding boys in the classroom could depend less on securing a greater balance in the gender of teachers and more on attitude:

*if pupils’ perceptions of inequity of treatment according to gender are a true reflection of classroom practice, then there is a greater need to address social justice in the classroom and the gender stereotypes which underpin current inequities.*⁷⁵

65. So it seems more male teachers could only have, at best, a limited impact on the proportion of new higher education students who are male.

Seven policy ideas

66. Data from Wave One of the HEPI / YouthSight Monitor, collected in October 2015, suggests young males who enter higher education conduct their research and choose their institutions in different ways to young women. Among the 61 per cent of female students and the 56 per cent of male students who said they looked at ‘information on the quality of teaching at the universities you were considering’, women were more likely to make use of:

- university-provided websites (61 per cent to 54 per cent);
- formal open days (55 per cent to 49 per cent);
- official prospectuses (57 per cent to 45 per cent);

- the UCAS website (53 per cent to 48 per cent); and
- talking to former and current students (41 per cent to 30 per cent).

Other differences when considering higher education

Among the subset of students (61 per cent of female students and 56 per cent of male students) who said they looked at 'information on the quality of teaching at the universities you were considering', the following differences were observed:

- 43 per cent of women but only 36 per cent of men considered the 'number of contact hours';
- 37 per cent of women but only 27 per cent of men looked at the 'balance between lectures and seminars'; and
- 34 per cent of women but only 25 per cent of men considered 'information on assessments'.

Of the 12 options, the only two which men chose more often than women were 'course accreditation' (52 per cent to 49 per cent) and 'teacher/student ratio' (31 per cent to 28 per cent), although the differences here were small.

67. The fact that young men make less use of official sources of information may lie behind the perception that they make less well-informed decisions. A review by the Higher Education Academy of male-focused outreach activities undertaken within Aimhigher included the following observation:

Boys have a limited perception of what university is. It is associated with passive learning, sitting and listening and long

*boring lectures ... there is also a view of a very narrow range of occupations – you might be a lawyer or an accountant.*⁷⁶

68. It is widely accepted that the balance of spending on widening participation should be shifted from inefficient bursaries to more effective outreach initiatives. According to the Office for Fair Access, in 2013/14 higher education institutions spent almost five times more (£436 million) on financial support than on outreach (£93 million).⁷⁷ **As the rebalancing takes place, some of the money could go on initiatives aimed at engaging young men with higher education, and disadvantaged young men in particular.**

69. Some charities have considerable expertise in this area: for example, Brightside, a national mentoring charity, is working with a network of universities and colleges in Greater Manchester to raise the aspirations of white working-class boys by raising their soft skills.⁷⁸ If £100 million were spent on encouraging a further 36,000 men aged 18 to enter higher education, thereby equalising the number of male and female entrants, it would amount to substantial funding of almost £3,000 per extra entrant.

70. There may also be a case for ensuring official sources of information target men. **One specific idea worth exploring is a Take Our Sons To University Day modelled on 'Take Your Daughter To Work Day'**, which began in the United States in 1993 as a way to inform girls about the full range of careers.⁷⁹ A new take on a simple idea, parents and carers could take their young men to a higher education campus at a dedicated time to hear tailored information, including on the non-academic

benefits of attending university. As with Take Your Daughter To Work Day, schools, colleges and employers could be encouraged to provide time off.

71. Crucially, Take Our Sons To University Day could also serve to tackle a lack of understanding among parents and carers on the benefits of higher education in general and for men in particular. This could have wider benefits because the advantages of learning are thought to be contagious within families.

72. Male-only projects are not the only solution, however. The Higher Education Academy evaluation of outreach projects aimed at men recommended that **male role models should be involved 'in all widening participation activities.'**⁸⁰

73. The Office for Fair Access has conducted a new analysis of higher education institutions' 2016/17 Access Agreements specifically for this paper. It shows that 58 out of 183 institutions have identified males as a priority group for their widening participation activities (compared to 16 which have identified females as a priority group). However, only 26 (19 higher education institutions and seven further education colleges) have statistical outcomes targets on the recruitment of male students. Of these, only 8 (two higher education institutions and six further education colleges) have targets that are not specifically related to initial teaching training.⁸¹ **So it is clear more universities could set themselves targets for male recruitment.**

74. In February 2016, the Scottish Funding Council set a sector-wide target to ensure 'No subject has an extreme gender imbalance', defined as less than 25 per cent of one gender, by

2030.⁸² As well as necessitating a rebalancing in the gender of students taking Nursing, Education, Psychology and Languages towards men, this also necessitates the rebalancing of many STEM subjects towards women (and could risk some perverse behaviours like recruiting fewer students to ensure a high percentage for the less well-represented gender).

75. Whether there are important cognitive differences between men and women has divided neuroscientists. But many experts now think the differences have often been exaggerated. One reason why is that experiments have shown environment affects behaviour. In one test, participants played a computer game that involved dropping bombs: when participants were singled out, men dropped more bombs than women; when they were 'deindividuated', women dropped somewhat more than men.⁸³ As explained in the box below, assuming cognitive differences on the basis of gender could be 'a very bad bet.'

What neuroscience tells us about gender

Why should we investigate sex differences in the brain? And if we find them, what are their implications for public policies? Many people are rightly concerned that demonstrations of biological differences in brain structure between males and females will be used to reinforce the idea of systematic differences in cognitive abilities and justify sexism. Of course, even if such differences were large and consistent across individuals, it would not imply one version is better than the other.

But more importantly, the distributions for cognitive domains are so overlapping and the sex effects typically so small that inferring anything about the cognitive profiles of individuals on the basis of these group differences is, simply put, a very bad bet. Sex differences for interests are a little bit bigger, but still by no means categorical and there is likely a strong cultural reinforcement of gender norms in this area.

Reproduced from Kevin Mitchell, 'Sex on the brain – a tale of two studies', 4 January 2016 at <http://www.wiringthebrain.com/2016/01/sex-on-brain-tale-of-two-studies.html>

76. Nonetheless, research from the University of Newcastle on brain fibres suggests that young women's brains change earlier than young men's.⁸⁴ The selective loss of brain fibres during adolescence between regions of the brain, known as preferential detachment, allows a faster way to communicate messages from one region to another. This typically occurs in women some years before men:

*This process seems to occur earlier in females than in males and could explain why cognitively, women tend to be ahead of the curve in terms of maturity. The brains of females are further along in the reorganization process and, for at least a few years, may be working more efficiently than a male's.*⁸⁵

77. So it is plausible that some young men could benefit from not being rushed into full undergraduate study immediately on leaving school or college. This might mean not so much encouraging gap years but rather encouraging the take up of foundation years of the sort already used to help international students enter higher education and to broaden

access to medical schools. These provide increased academic and pastoral support in order to make it easier for people to dive into higher education. HEPI's work on the Australian higher education system found, 'Students who have been to pathway colleges tend to do better at university than would have been expected given their original school results.'⁸⁶

78. One purpose of higher education is to bring out the potential of all students, irrespective of their gender or other characteristics. But past research has suggested that the lower attainment of men is often explained by those working in universities through a 'deficit model', in which a lack of success is linked to students' own characteristics. In contrast, explanations for the relative performance of students from different ethnic groups tend to mix the deficit model with other reasons to do with institutional processes and discrimination.⁸⁷

79. So helping male students more should also mean altering pedagogy to take full account of perceived differences in the way men and women study and learn. Research published by the Higher Education Academy in 2011 concluded that less focus has been put on the relatively poor educational achievement of men in higher education than on access and retention:

The strategies designed to support male access and retention that have been developed in many HEIs [Higher Education Institutions] do not directly address the differential performance of men and women once at university, and parallel developments designed specifically to address comparative male under-attainment have not emerged to any significant degree.⁸⁸

80. Australian universities have been 'introducing teaching-only academic positions and encouraging the use of specialist staff with high level skills in first-year teaching.'⁸⁹ That could conceivably help first-in-family entrants settle into university life and reduce the risk of dropping out.

81. In addition, the advent of learning analytics offers a new opportunity to monitor and address the achievements of individual students. We urge higher education institutions to think about how this provides new ways of helping individual students from under-represented and underperforming groups, including men.

The shift from modular to linear assessment at A-Level

Some people fear the shift from modular to linear assessment at A-Level may pose an additional challenge to young men. One-in-five (21 per cent) schools have chosen not to offer the reformed AS-Levels at all, while another 15 per cent are doing so only in some subjects and a further 5 per cent are undecided.⁹⁰ So higher education institutions increasingly have to use GCSEs as a predictor of final test scores, which arguably disadvantages boys that mature and improve their grades aged 16 to 18 relative to others.⁹¹ Another consequence could be, in the words of Mary Curnock Cook, the removal of an examination that acted as 'a helpful kick up the backside for boys lulled into complacency'.⁹²

Conclusion

82. HEPI first seriously addressed the issue of male educational underachievement seven years ago.⁹³ At the time, despite the growing evidence, there was scepticism about the scale and seriousness of the problem.⁹⁴ In the intervening period, the problem has become somewhat worse but recognition of it has grown.

83. The challenge now is that, while the issue is better understood, there is a shortage of solutions for dealing with it. The policies put forward in this paper are proposed tentatively. They are neither perfect nor complete, but it is hoped that they will stimulate further debate and discussion.

Annex

HESA Record 2014/15	Level of study	
	Undergraduate	
Subject area	Female	Male
Business & administrative studies	109,715	114,035
Subjects allied to medicine	172,105	40,720
Biological sciences	106,265	70,285
Social studies	100,045	59,425
Creative arts & design	92,140	53,145
Education	68,860	14,095
Engineering & technology	17,690	103,975
Languages	66,985	28,960
Physical sciences	29,160	44,720
Computer science	11,770	64,710
Law	42,935	25,210
Historical & philosophical studies	38,040	31,930
Medicine & dentistry	25,555	20,050
Combined	29,025	18,205
Mass communications & documentation	21,725	16,500
Architecture, building & planning	11,175	22,130
Mathematical sciences	13,790	22,340
Agriculture & related subjects	9,405	5,725
Veterinary science	3,955	1,130
Total	970,350	757,295

N.B. Students with a Sex of 'Other' have been excluded from the figures.

Undergraduate Total	Postgraduate		Postgraduate Total	Total
	Female	Male		
223,750	51,775	51,400	103,175	326,925
212,825	46,480	16,125	62,600	275,430
176,555	22,380	12,215	34,590	211,145
159,475	30,555	17,845	48,400	207,875
145,280	13,705	7,885	21,590	166,870
82,960	56,100	25,310	81,405	164,365
121,665	9,340	30,415	39,755	161,420
95,950	10,390	4,980	15,370	111,315
73,880	7,920	11,940	19,860	93,745
76,480	4,275	12,475	16,755	93,230
68,145	10,610	8,825	19,435	87,580
69,970	8,030	8,305	16,335	86,305
45,605	11,780	8,610	20,390	66,000
47,230	1,255	665	1,920	49,150
38,225	7,050	3,320	10,375	48,600
33,305	6,190	8,755	14,945	48,250
36,130	2,165	4,100	6,260	42,390
15,130	2,450	1,625	4,075	19,205
5,085	540	275	815	5,900
1,727,645	302,985	235,075	538,060	2,265,705

Endnotes

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May 2016 ISBN: 978-1-908240-14-9

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99 Banbury Road, Oxford OX2 6JX
Tel: 01865 284450 www.hepi.ac.uk

Printed in the UK by Oxuniprint, Oxford
Typesetting: Steve Billington, www.jarmanassociates.co.uk