

お茶の水女子大学
Ochanomizu University



NEWNHAM COLLEGE
CAMBRIDGE

2016 Tanner Lecture on Human Values

**Women : Education, Biology,
Power and Leadership**

Tokyo, 18 May 2016

Dame Carol Black

**Expert Adviser on Health and Work
Department of Health and Public Health England**

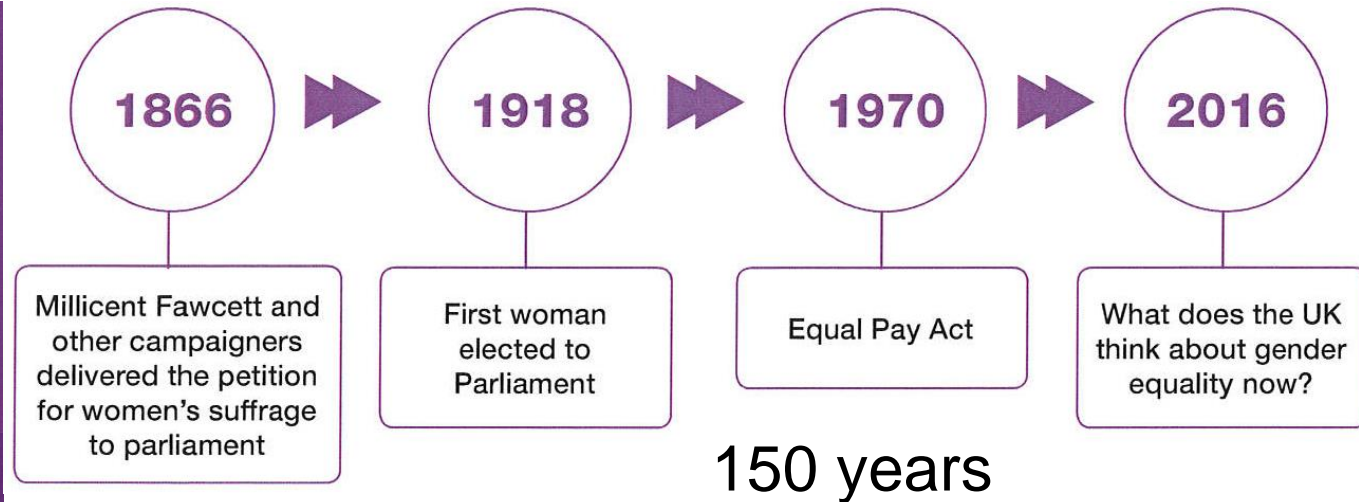
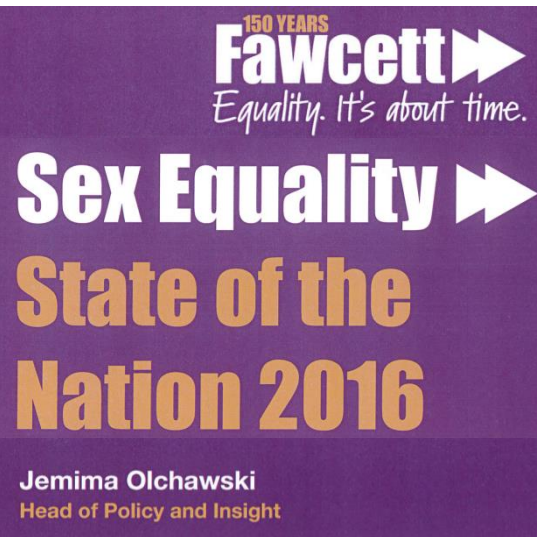
Principal, Newnham College, Cambridge



Content of the Lecture

- Equality survey data and observations
- Home and schooling influences
- Women, higher education and women's colleges
- The University of Cambridge
- Challenges and progress to date in careers
- Enablers of leadership and power
- Reflections on my own career

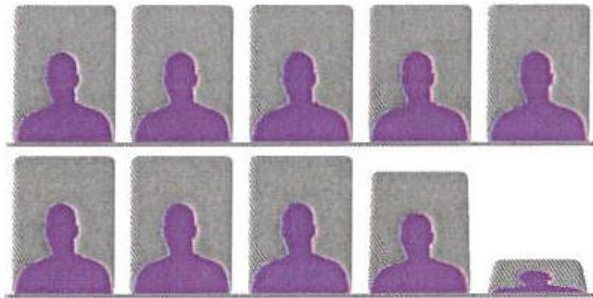
Equality Survey UK 2016



8165 UK residents aged 18+ surveyed December 2015

- The poll has good news of support for gender equality (83% overall but rather less among work recruiters).
- Only 7% of people describe themselves as 'feminist'.

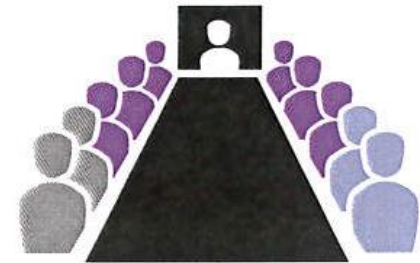
Fawcett Survey : Key findings



Nearly 9 in 10 men want the women in their lives to have equality of opportunity with men. **Support for equality of opportunity is higher amongst older men**



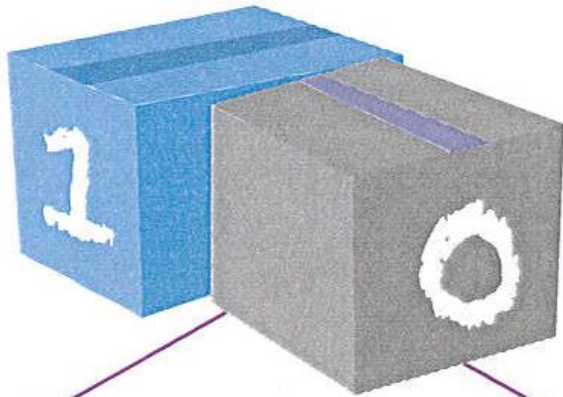
39% – over a third of men believe that they would benefit if we had a society where men and women are more equal



6 in 10 people believe that men in top jobs won't make room for women unless they have to

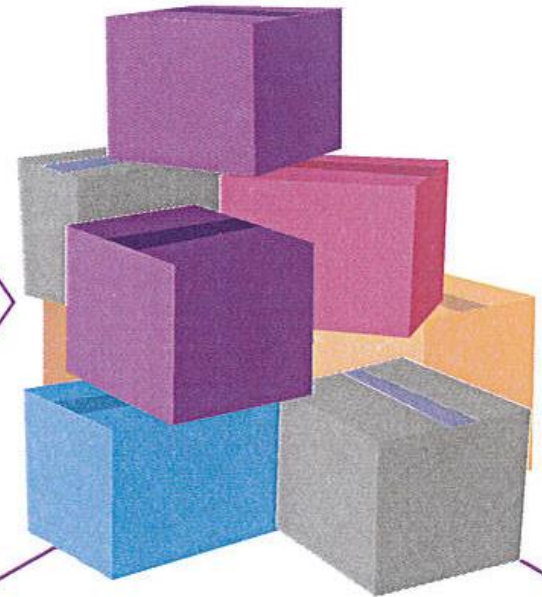
People want equality for women and men – it would be good for the economy – but 62% believe that more needs to be done to achieve equality.

Perceptions: binary gender identity



Those who describe themselves as opposed to feminism or see it as irrelevant are more likely to hold more traditional views on gender. Just over 70% of these groups say that there are only two genders

44% of people think gender is not binary but can be expressed as a range of identities



Women (48%), young people aged 18-34 (50%) and feminists (68%) are more likely to agree that gender can be a range of identities

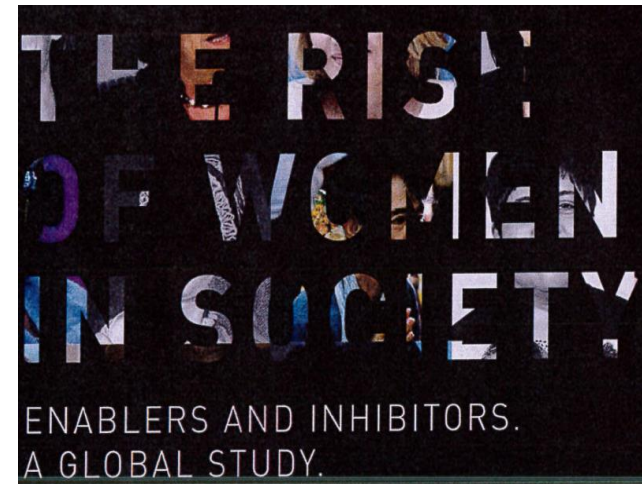
Fawcett Society :
“UK’s leading campaign for equality between women and men.”

Women's Economic Power – education and the labour market

“ Landmark **global study** unveils factors affecting women's rise.”

- **Years in education and being in labour force** have greatest impact on women being in the boardroom – a reflection of women's economic power in society.

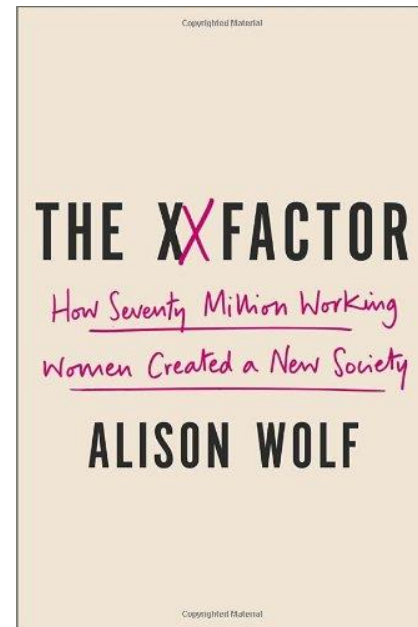
**Judge Business School
Cambridge 2015**



- A country's **values and beliefs** – on gender egalitarianism, humane orientation and assertiveness – are big influences.

Alison Wolf: *The XX Factor ... 2014* – the world has been transformed

- Now, **at the top**, men & women study, work and live together.
- You no longer have to be a truly extraordinary woman to have a successful career.
- As formal credentials become more important, women benefit.
- Women are the majority of university students in so many institutions.
- **For 15% of women this means a life increasingly like men's**
 - **but for 85% life remains highly 'gendered'.**

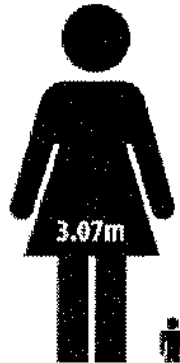


Alison Wolf: *The XX Factor ...* – the world has been transformed

Number of women and men employed, by occupation

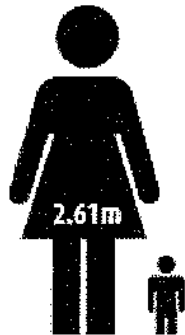
Secretaries and
administrative
assistants

97% female



Registered
nurses

92% female



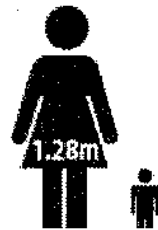
Nursing,
psychiatric and
home health aides

89% female



Maids and
housekeeping
cleaners

90% female



- Lower-status, lower-paid jobs are still predominantly done by women
- “Inequality is growing faster among women than among men – inevitable if more women are getting to the top.”

- Many male and female graduates remain childless.

Should women, out of sisterhood, be more helpful to other women, and not strive for the top ?

Women and work

Polly Toynebee, *Guardian* journalist : Book ‘ *Hard Work*’

She explores the disadvantages for low-paid workers, by undertaking poorly-paid, poorly-regarded jobs.

Often she worked as a casual agency employee at or near the minimum wage.

Her experience indicted policies that have widened the gap between rich and poor in the UK

.... and highlighted working realities for thousands of women.

Some 80% of the ten lowest-paid occupations are undertaken by women.



Home and School

- My background working class in an industrial village.
- My home – no culture of education, relatives worked in factories or shops, if lucky.
- Grammar School – great headmaster, committed teachers.
- I began wanting to be a teacher of Domestic Science (good at cooking and sewing).
- Initially lacking in confidence, a teacher encouraged me to strive for university (I didn't know what it was). First degree History, then Medicine.
- A sense of wanting to become something, but what ?
- **Education allowed me to escape and grow.**



OECD Report on gender equality

May 2015, focussing on **teenage girls' choice of subject**.

Assertion: no natural born differences in ability, but boys more confident of their abilities, less anxious about performance – they go for gold and girls play safe.

“ Parents can give their children equal encouragement.”

Unconscious bias persists.

Evidence shows:

- parents expect a son to be more successful in science, even when their daughter has better grades;
- a CV said to be for a man is rated higher than the same CV said to be for a woman ;
- women who state their sex at start of a test do worse !

“Barbie dolls will never inspire girls to be engineers”, says expert

Dame Athene Donald

THE TIMES Sept 4 2015

Professor of Experimental Physics and Master of Churchill College Cambridge

“We stereotype by what toys young boys and girls are given.”

“If girls always play with dolls, worrying about hair style or making tea, how can they imagine themselves as engineers or chemists ? ”

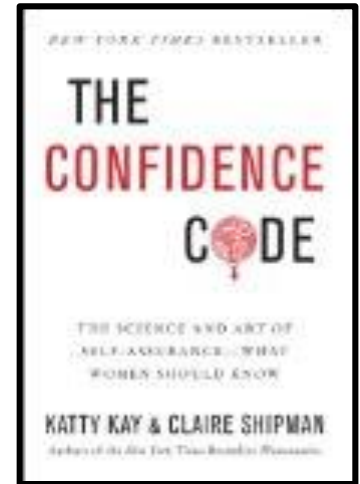
“**Peer pressure at school** : half of mixed-sex schools send no girls to do Physics A-level; girls at single-sex schools are 2.5 times more likely to do it”

“Work experience is too often gendered – girls to a hairdressing salon, boys to the local vehicle garage.”



Building confidence in the young

- Many girls learn to avoid taking risks and making mistakes. **Kay and Shipman, 2014**
- Many psychologists believe that risk-taking, failure, and perseverance, are essential to confidence-building.



- Boys tend to absorb more scolding and punishment, and in the process learn to take failure in their stride.
- Girls and boys get different patterns of feedback.
“Boys’ mistakes attributed to lack of effort, girls see mistakes as reflecting their deeper qualities.”

(Dweck: *Mindset*)

Women and Higher Education

- **Worldwide**, more women are going on to higher education, though in many places it is still a preserve of the elite.
- Some warn against the ‘feminisation of education’ and the apparent alienation of men from schooling.
- In many industrialised countries women are now a majority of all university students (but not in STEM subjects).
STEM = Science, Technology, Engineering and Mathematics
- **But** the female proportion of faculty posts is still poor.
- Academic progression for women is still poor in many countries, worse in science than humanities.

Academic medicine : less progress

- Explicit overt gender bias in academic medicine has much decreased over the past 50 years, **but ...**
- **Cultural stereotypes** and implicit bias remain :
 - women “communal” (kind, nurturing, caring etc)
 - insufficiently “agentic” (logical, independent, strong)
 - so unsuited to lead, although technically qualified.
- Women ‘self-select’ out of agentic roles such as leadership & are under-rated in evaluation processes for top roles.

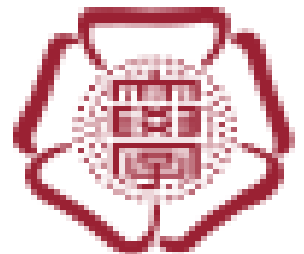
Deconstructing the Glass Ceiling, Isaac et al, 2012

Why is John more likely than Jennifer to become Dept Chair? Carnes et al, 2015

Women's Colleges and Universities

- **19th century, higher education for women** developed.
- In USA, e.g Vassar 1861, Wellesley 1870 – ‘seven sisters’ Liberal arts, often granting own degrees.
- In Britain, universities beyond Oxford and Cambridge started, some admitting women (my own Bristol).
- **In Japan**, Tokyo Women's Normal School 1875, first graduates 1879, established 1949 as Ochanomizu women's university, now with full degree programme up to doctoral level.

“ A place where all women who are motivated to learn can realize their earnest dreams.”



Women's Colleges in Cambridge

- 1869 Girton, **1871 Newnham** founded as women's colleges within the University of Cambridge (other colleges then all male).
- 1881 Women students admitted to exams, but not to actual degrees until 1948.
- 1972 other colleges began to admit women, now all Cambridge Colleges (inc. Girton) are mixed, apart from women's **Newnham**, Murray Edwards, and Lucy Cavendish (all Oxford colleges now mixed).



My vision for Newnham: “A place in which women can develop their potential and self-confidence, and leave with aspiration and ambition for leadership.”

Transgender issues

- Biology is not so binary (on male or female) as it once was.
- What does it mean to be a women's college “ .. in an era of changing understanding of gender identity.”
- In US, all ‘seven sisters’ now admit transgender students.
- **Wellesley** “will consider for admission any applicant who lives as a woman and consistently identifies as a woman.”
- **Mount Holyoke** will consider any biologically-born female, whatever the current self-identification, and some males. Those who transit to male may continue as students.

Cambridge Equality and Diversity Report 2013-14

31 January 2015

Female students are 46% of all undergraduates (36% in STEMM subjects, 58% in AHSS) and 45% of all postgraduates.

Women enter as undergraduates with similar school achievement grades to men.

4.1.4 Undergraduate degree attainment by gender

| | Class I | Class II Division I | Class II Division II and lower |
|-------|---------|---------------------|--------------------------------|
| Men | 29.1% | 48.4% | 22.6% |
| Women | 19.7% | 59.6% | 20.7% |

20% of women gained First Class exam. results, 29% of males.

Why is this – in almost all subjects ?

What underlies these differences ?

- early stereotyping ?
- unconscious bias ?
- lack of self-confidence ?
- unwillingness to take risks ?
- the need to be courageous ?
- 'perfectionism' ?

Is it self-confidence ?

“ Men don't let doubts stop them, as women do.”

“ The natural result of low confidence is inaction.
Women hold themselves back – taking no risks.”

“ What doomed the women was not their actual ability to do well on the tests. It was the choice not to try.”

“ If a woman speaks up first at meetings, she risks being disliked or – let's be blunt – being labelled a bitch.”

The Confidence Code, 2014, Katty Kay and Claire Shipman

The Science and Art of Self-Assurance: What Women should know.

Is it perfectionism ?

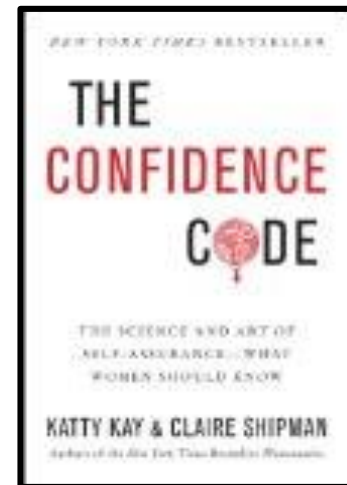
– a confidence killer

Largely a female issue, extending throughout lives.

Women : ...

- don't answer questions until totally sure, or submit a report unless edited exhaustively;
- watch male colleagues take risks, holding back until sure they are perfectly ready and qualified;
- fixate on performance, everywhere, obsess in everything.

“ This tendency is the ‘enemy of the good’, leading to hours wasted. Striving to be perfect actually keeps us from getting much done.”



Newnham : Curriculum to Career

- Career Seminars in Principal's Lodge
- Courses on presenting oneself (Veronica Crighton)
- Support from 60 successful alumnae – 'Associates' – on CVs, interviews, internships
- SPRINT programme since 2014 – self awareness and confidence
- Life Skills course – started October 2015

Also in pilot, with Oxford University Careers Service, 'Ignite' career confidence courses for schools.

Sprint Programme for Women

Personal and Work Development, at Newnham

Designed for undergraduates, over 3.5 days of Workshops, with role models, guest speakers, group sessions etc.

Subjects covered include :

- building personal power
- emotional intelligence
- goals from core values
- assessing personal potential
- leveraging successes
- achieving peak performance
- positive assertiveness
- managing pressure
- setting compelling objectives
- developing personal brand
- powerful networking
- practical strategies
- implementing action plans.

**Who are you
dancing for ?**



Sprint 
women's development for undergraduates

NEWNHAM COLLEGE
LUCIA WINDSOR ROOM

12TH – 14TH JANUARY 2014 (WORKSHOPS 1-3)
13TH MARCH 2014 (WORKSHOP 4)

PROGRAMME

Sprint : Quotes from participants

Before course :

- “ Lack of self-belief in my communication skills is letting me down in interviews against more-assertive males. ”
- “ I would benefit from the networking skills and assertiveness sections, not having confidence to do things easily. ”
- “ I need reminding that my life is mine to succeed in and live.”

After course :

- “ **Sprint** works with the best of the raw materials inside you, polishes them, really bringing out the best in you.”
- “ I now feel positive and strong – more confident.”

Newnham : Life Skills Course 2015-16

Topics, Autumn Term 2015, Mondays at 6 pm

- Resilience and Wellbeing
- Interacting with Media and Press
- Public Speaking
- Money, starting own business
- Taking charge of your own development
- Effective membership or chairing of committees.

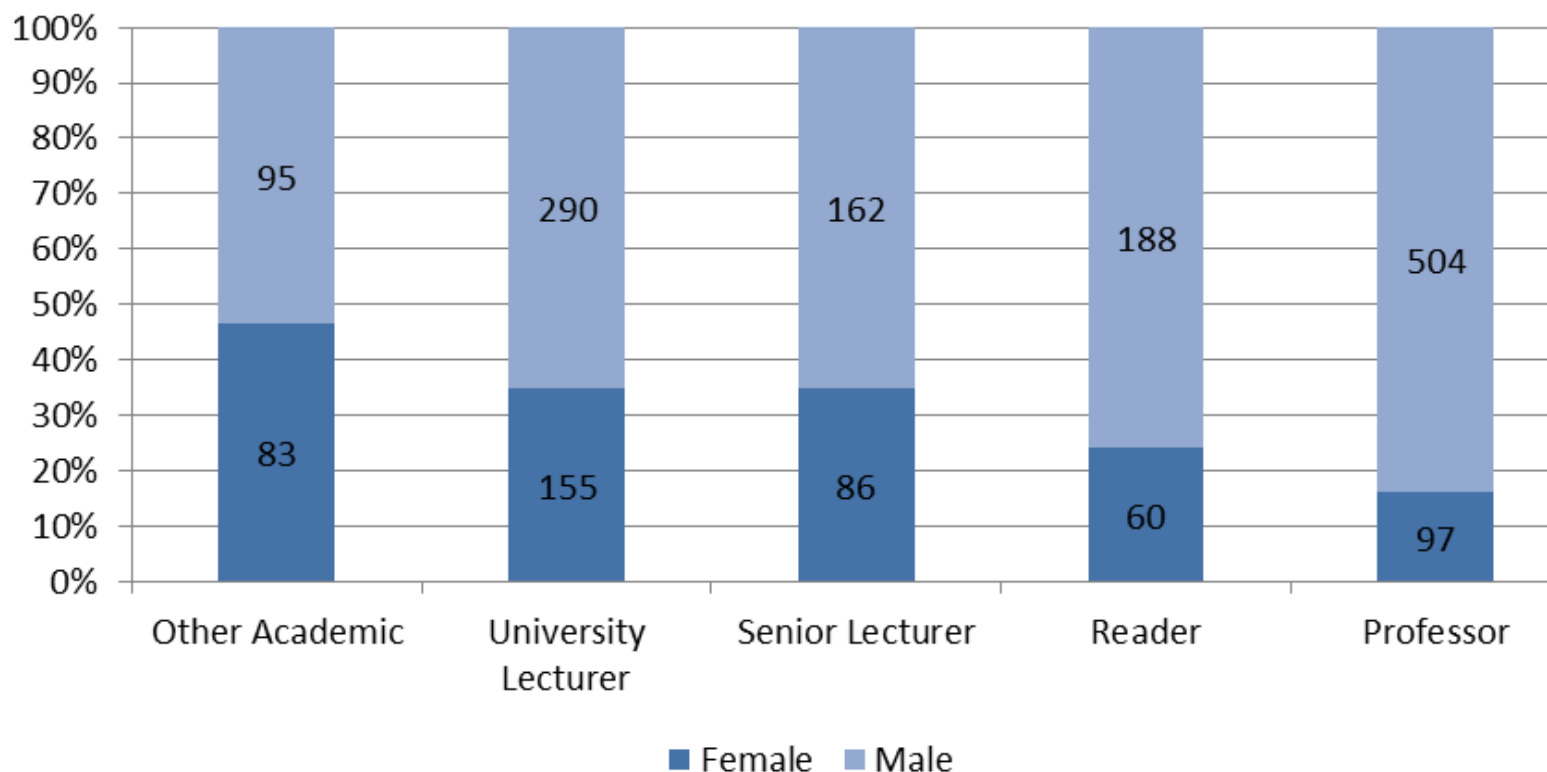
Topics all chosen by students, undergraduate and graduate



Cambridge Equality and Diversity Report 2013-14

31 January 2015

Females are 28% of all academics (35% of Lecturers and Senior Lecturers, but **only 16% of Professors** (14% in STEMM and 22% in AHSS – against 20% in Russell Group).



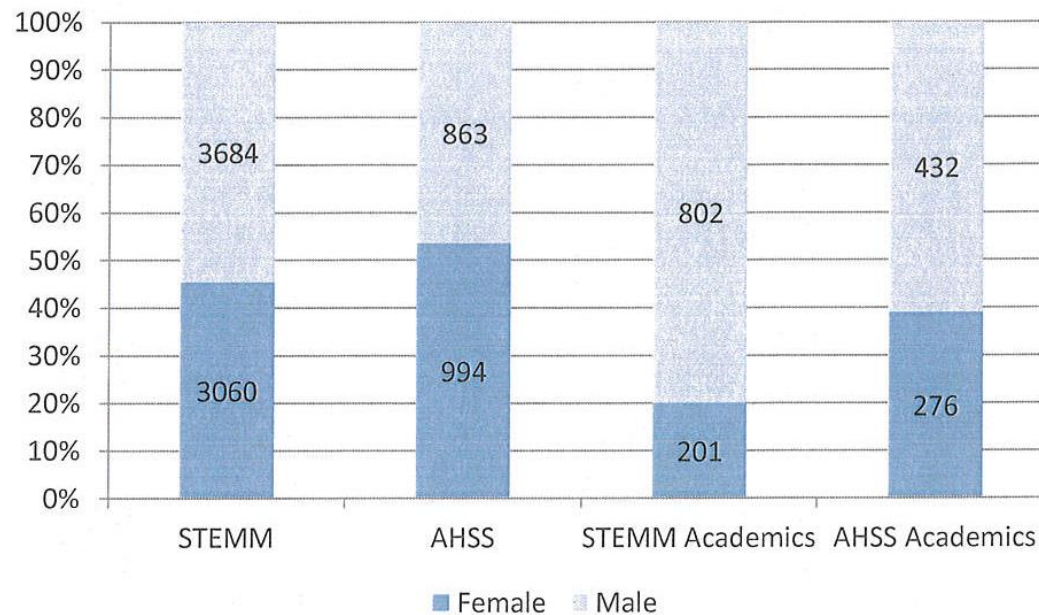
STEMM = Science, Technology, Engineering, Mathematics, Medicine AHSS = Arts, Humanities, Social Science

Cambridge Equality and Diversity Report 2013-14

31 January 2015

Females comprise 45.4% of all STEMM and 53.5% of all AHSS staff.

Female Academics in STEMM and AHSS comprise 20.0% and 39% of Academic staff respectively.



Senior University Committees have 158 occupied positions : 28% of the members are female.

The University Council, the largest and most senior committee, is 42% female.

Women and Careers

Attitudes and beliefs about promotion and new jobs :

- “ Women may also perceive promotions as undesirable.
“Men are more likely to put themselves forward for leadership/senior positions than women”
- “ Women tend to wait until they meet all the criteria for promotion, whereas men tend to be more speculative in their applications.”
- “ Women often perceive that aggressive political skills are required at the top of the career ladder or in positions of authority” and they “may not want to adopt this style.”

Women in scientific careers.

The Meaning of Success

“ This book is a potent reminder that there is **no unique path to ‘success’** , which is not a single thing that we can all agree upon, but a complex multi-dimensional set of factors which are frequently different from those commonly ascribed to the successful in life.”



“ These factors must always be consistent with the woman’s own belief systems if they are to provide fulfilment.

Only then can they ensure that the woman herself believes in her success.”

Professor Dame Athene Donald DBE FRS
Gender Equality Champion, University of Cambridge

Women and top academic jobs

Letter *Times Higher Education* Feb. 2014 : more than 50 senior Cambridge staff called for broader inclusive approach to academic appointments and promotion, prizes and grants not to be only indicators of success.

Professor Dame Athene Donald said:

“ ... there are opportunities to reward and embed different types of success, **such as teaching, outreach and departmental support**, activities that very talented women are involved with, but which are not currently a meaningful part of recognition and advancement in universities.”



University of Cambridge

Strategic approach to advancing change

Key elements:

- Support at the most senior levels within the University, Gender Equality Champions and Senior GE Network
- Integrated and embedded Governance structures
- Core Equality and Diversity and Human Resources policies and practices
- Commitment to Athena SWAN Charter – benchmarking .
- **Significant additional resources** (~£500k per annum), for workshops, mentoring programmes, Returning Carer's Scheme, funding to the STEMM Schools.

Athena SWAN - National Benchmarking of Universities

- Scheme established 2005 to encourage and recognise commitment to advancing careers of women employed in STEMM higher education and research.



- Expanded 2015 to cover all subjects.
- Currently 137 Athena SWAN members, holding 536 awards

- **Cambridge is one** of only seven UK Universities to hold a Silver institutional award



- 1 Gold, 1 Silver, 16 Bronze Departmental awards

- Key component : develop gender action plans



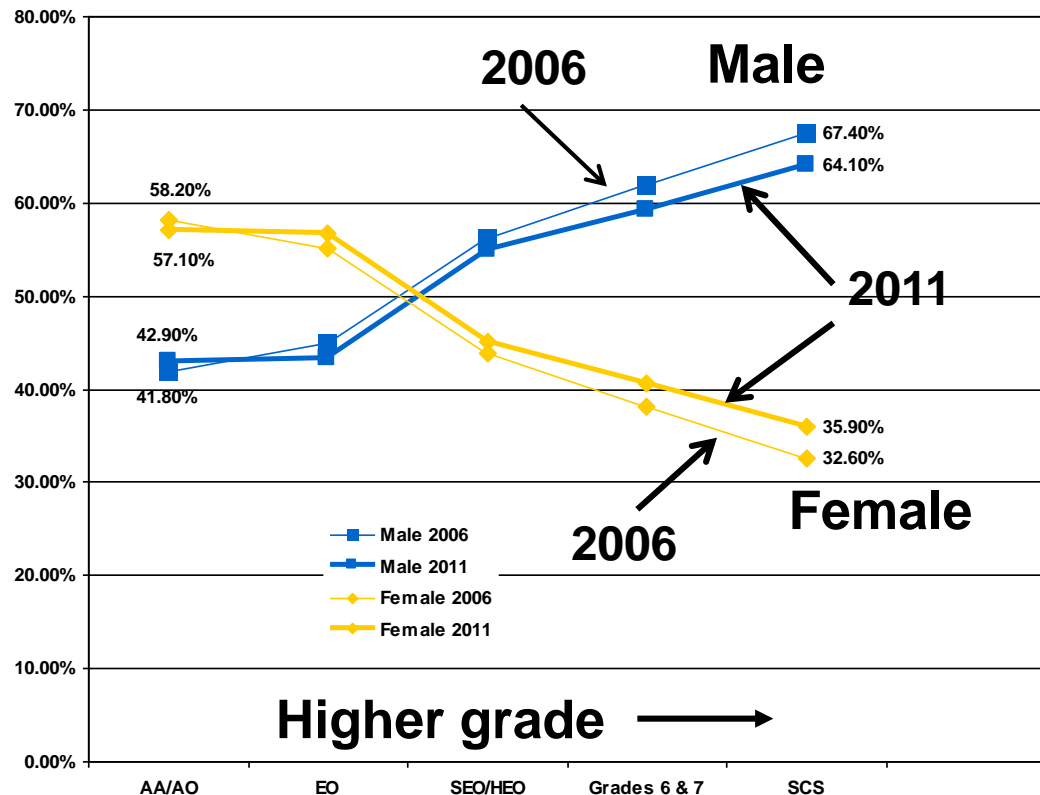
- Award renewal depends on delivery against action plans

Women in the Senior Civil Service : Two key issues

- Building pipeline of internal women for SCS roles in longer term
- Progression internal women to Director & Dir General

But the shortfall starts further back in the pipeline :

Proportion of staff



Courtesy Sue Owen,
Perm.Sec. DCMS

What action is needed ?

Combination of self help and holding to account

Better talent management :

- Developing women; assemble field; encourage to apply
- Evaluation of talent schemes for impact on females
- Supporting women to get other experience, e.g. NED roles, “stretch” roles.

Better selection processes :

- No all-male selection panels !
- Junior staff on panels favouring diverse leadership styles
- All-male shortlists for SCS should be exceptions only



Confidential feedback from women unsuccessful at interview

Public Voice of Women : Prof. Mary Beard (Newnham)



“ Contrast the ‘deep-voiced’ man with all the connotations of profundity that the simple word ‘deep’ brings.

Hearing a female voice, people don’t hear a voice that connotes authority, nor a voice of expertise outside the traditional spheres of women’s sectional interests.

Being Minister for Women (or Education or Health) is fine – but no woman has ever been Chancellor of the Exchequer.

How can we make ourselves more aware of the processes and prejudices that make us not listen to women ? ”

Lecture: The Public Voice of Women, January 2014

UK Politics – too few women in Parliament

Where are all the women ?

Women are 41% of workforce in firms in the Association of Political Consultants, but **only 23% of MPs** are female.



Networking, party support and updated working practices are key to addressing Westminster's gender imbalance, says

Róisín Watson, **guardian** 30 Jan 2014

Women who show a real interest in politics should be actively encouraged to make the leap to elected office.

High-Achieving Women from Harvard Business School

Rethink What You “Know” About High-Achieving Women

Robin J. Ely, Pamela Stone and Colleen Ammerman, Harvard Business Review, Dec 2014

Survey of HBS graduates on career success. Findings:

- Men, women start with similar goals, men likelier to achieve.
- Few women ‘opt out’ to have children, but women advance more slowly because they prioritize family over career.
- Men expect their career to take precedence over partner’s, as they usually do. **Women expect their careers to be as important as their partner’s, often disappointed.**
- Women are consistently less satisfied than men with their careers and with the compatibility of work and family.

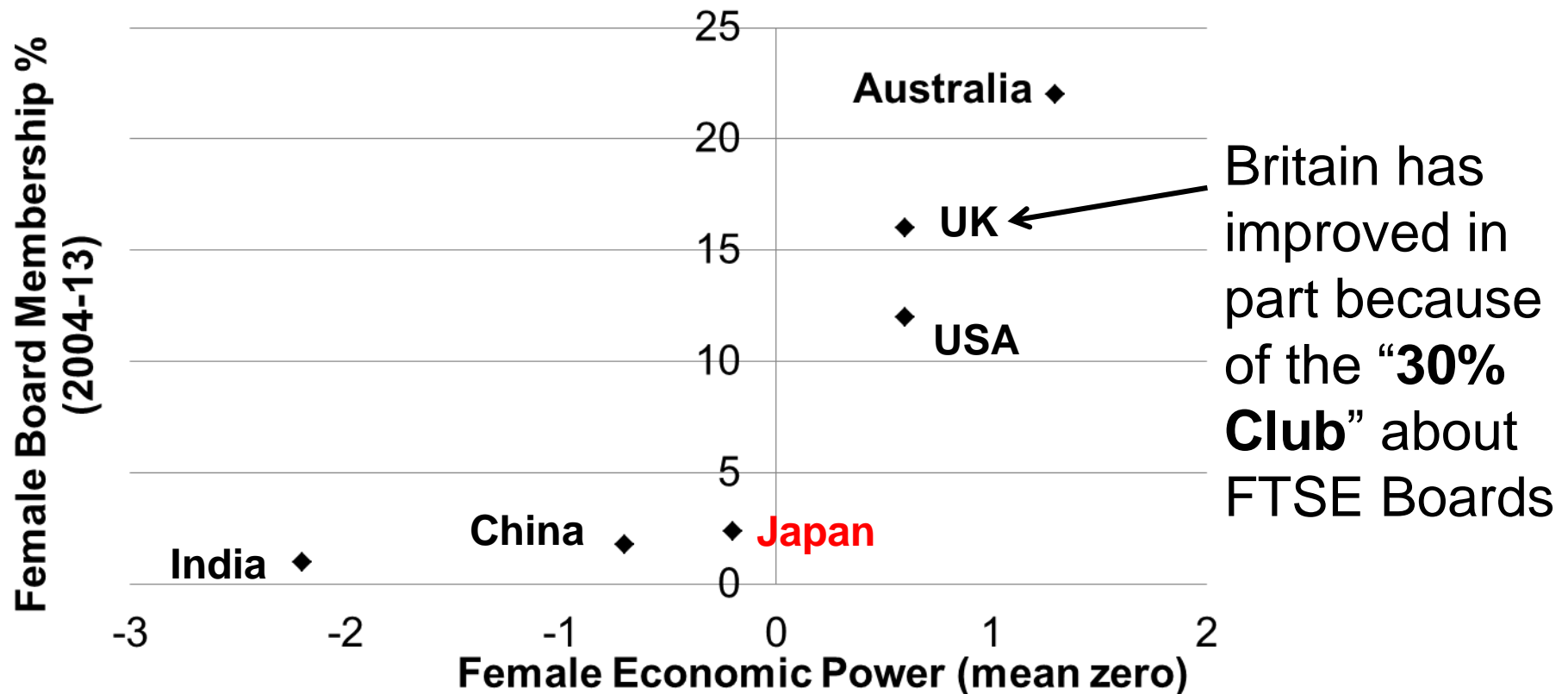
Article in Harvard Business Review : Organisational Solutions

- Companies need to provide adequate re-entry points to full-time work for women recently working part-time or taking a career break.
- Companies need to move beyond 'family friendly' policies in order to retain and develop high-potential women.
- Women want more meaningful work, more challenging assignments, and more opportunities for career growth.

PLUS

“ Make your partner a real partner ”

Female Board Membership and Economic Power



‘Female economic power’ in a country is assessed from a combination of statistics on higher education, the labour force, salaries etc.

Women make up 25% of FTSE Boards



The Davies Review, 30 October 2015:

26.1% of FTSE 100 Board members are now women, up from 12.5% in 2010, above Govt's 25% target. No longer any all-male FTSE 100 Boards.

Prime Minister David Cameron announced new rules requiring companies to publish gender information regarding bonuses, in a further crackdown on inequality.

BUT

- Company Boards are still dominated by men, especially FTSE 100 **executive directorships** (women hold just 9.6%).
- “ Pipeline of female talent ‘too slim’ to sustain progress. Companies should focus on nurturing female talent.”

Women in Scientific Careers

- Despite clear imperatives & multiple initiatives to improve diversity, women remain under-represented at senior levels in every discipline.
- Currently only 13% of all UK STEM jobs are occupied by women, and only 17% of STEM professors are female.
- Another compelling reason to tackle this problem is that the UK economy needs more STEM workers, and the demand cannot be met without more STEM women.

Women in scientific careers.

House of Commons Science and Technology Committee, Feb 2014

Career Progression in Civil Engineering

Issue : at 9%, the UK has the lowest number of female engineers of any European country (Engineering UK 2010)

Survey : to consider how social factors affect career progression for civil engineers, all sectors. 400 to 500 responses for each of two surveys, 16% women, full age range.

Result: Women civil engineers are :

- more highly qualified , but paid less
- less satisfied with their careers
- more likely to leave Civil Engineering mid-career,
- **more likely to leave than in other professions.**

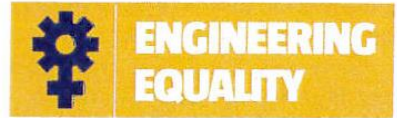


- Dr Alice Moncaster, Department of Engineering, Cambridge
- Dr Mia Gray, Centre for Gender Studies, Cambridge
- Institution of Civil Engineers

Why ?

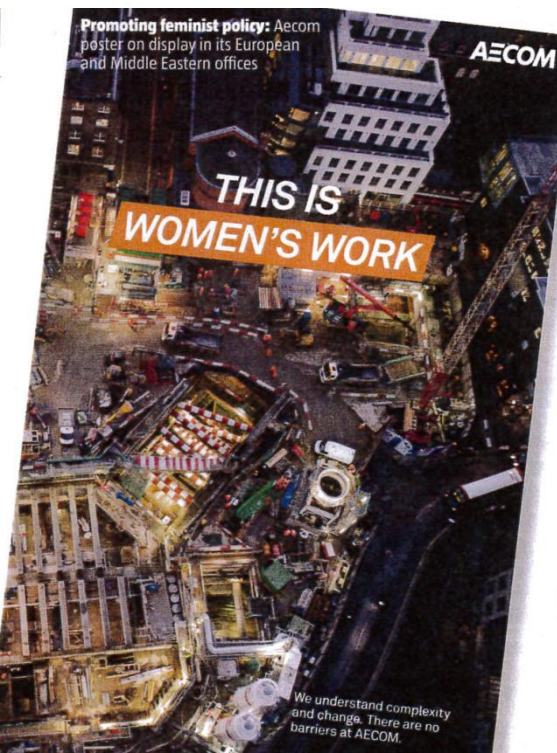
Support for Women in Civil Engineering

Aecom boss uses feminism to stamp out ignorance



By Ruby Kitching

Consulting giant seeks to lead by example with a 50/50 gender balance. *New Civil Engineer*, Sept 2014



Steve Morriss, Aecom CEO Europe, said :

“ We actively advocate equality of women.

Our 50% aspiration is no different to that of zero accidents on site. Industry has embraced safety but not diversity.”

Currently 27% of Aecom’s UK workforce is female.

Women in Academic Scientific Careers

Research Grants :

- Women do not put themselves forward for Research Council grants, because the criteria stipulate excellence and future leadership. Women are less confident than men to make such claims for themselves.
- By applying for smaller grants, women researchers have less money to engage additional researchers to provide statistical or analytical support.

Publication is key to successful career development, but women are less likely to get published or be first author.

Open University

Smaller grants, less publication, poor career progression

Female entrepreneurs in digital technology

Low female numbers in STEM subjects is a major bottleneck in getting women into entrepreneurship.

Technology-literacy is critical – especially computer coding.

Fewer than 20% of venture-backed businesses have a female founder (and of the 100 fastest-growing UK private tech companies, the first woman founder/CEO mentioned is in no. 50) (SUNDAY TIMES 6 September 2015) .

When women do become entrepreneurs they outperform male peers – women-led companies do significantly better than average (First Round Capital).

There are some phenomenal female entrepreneurial role models (Facebook, Yahoo).

Addressing gender imbalance

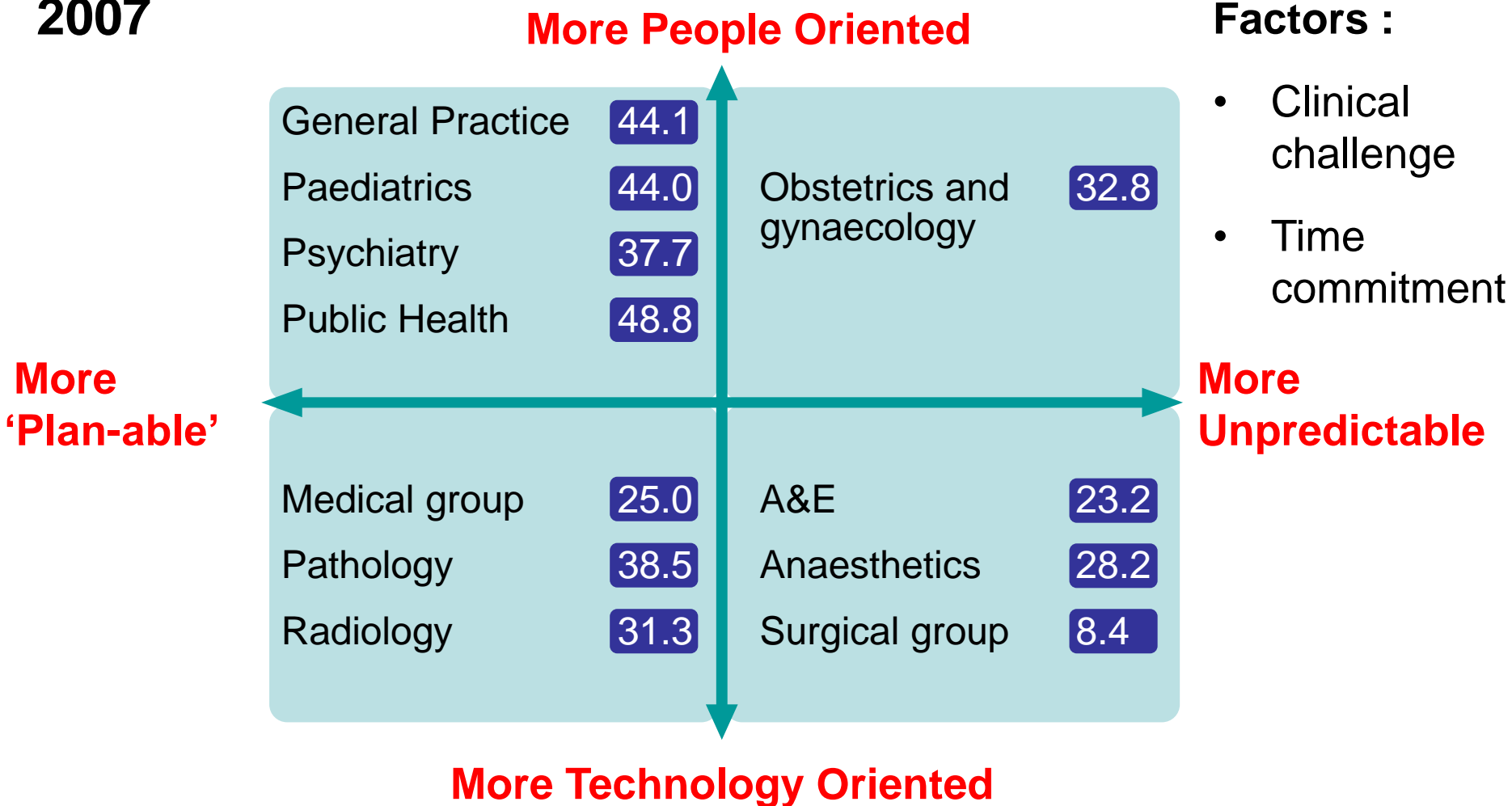
1. We need to change our culture <http://www.virgin.com/disruptors>
“This is not a genetic issue, but a cultural one”
2. **Coding should be in our curriculum**
“Computer coding is OK, whether you are boy or girl.”
3. The tech world is broader than you think : “ People narrowly define technology as programming, but other exciting disciplines are essential to the digital industry”
4. Young women need tech. role models :
“ Confident female tech. founders need to speak up as women in technology – to show young women that if they want to they can do it too.”

Medicine : the good news

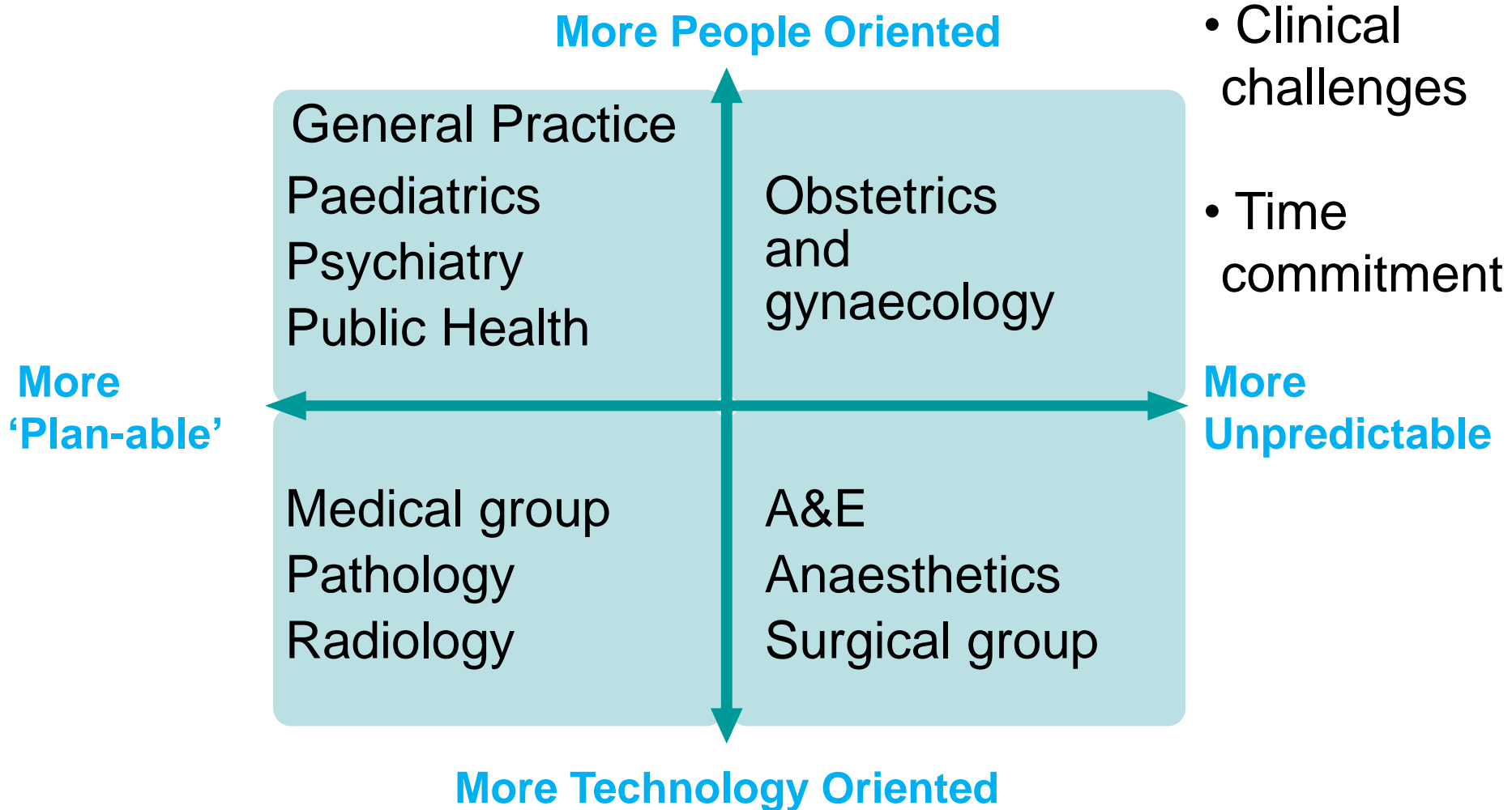
- **Meritocracy has been achieved** at medical school.
- No report yet provides independent evidence of systematic barriers against women's advancement in the profession.
- Many specialty choices : women doing very well in 10 of 11, with a growing range of sub-specialties to choose from.
- Progress to consultant stage is similar, for those pursuing a full-time career.
- Female intake **and retention** both high. Common pay scale.
- Academic Medicine: not such a cheerful picture.

Female share of all consultants by specialty

2007



Specialty Characteristics

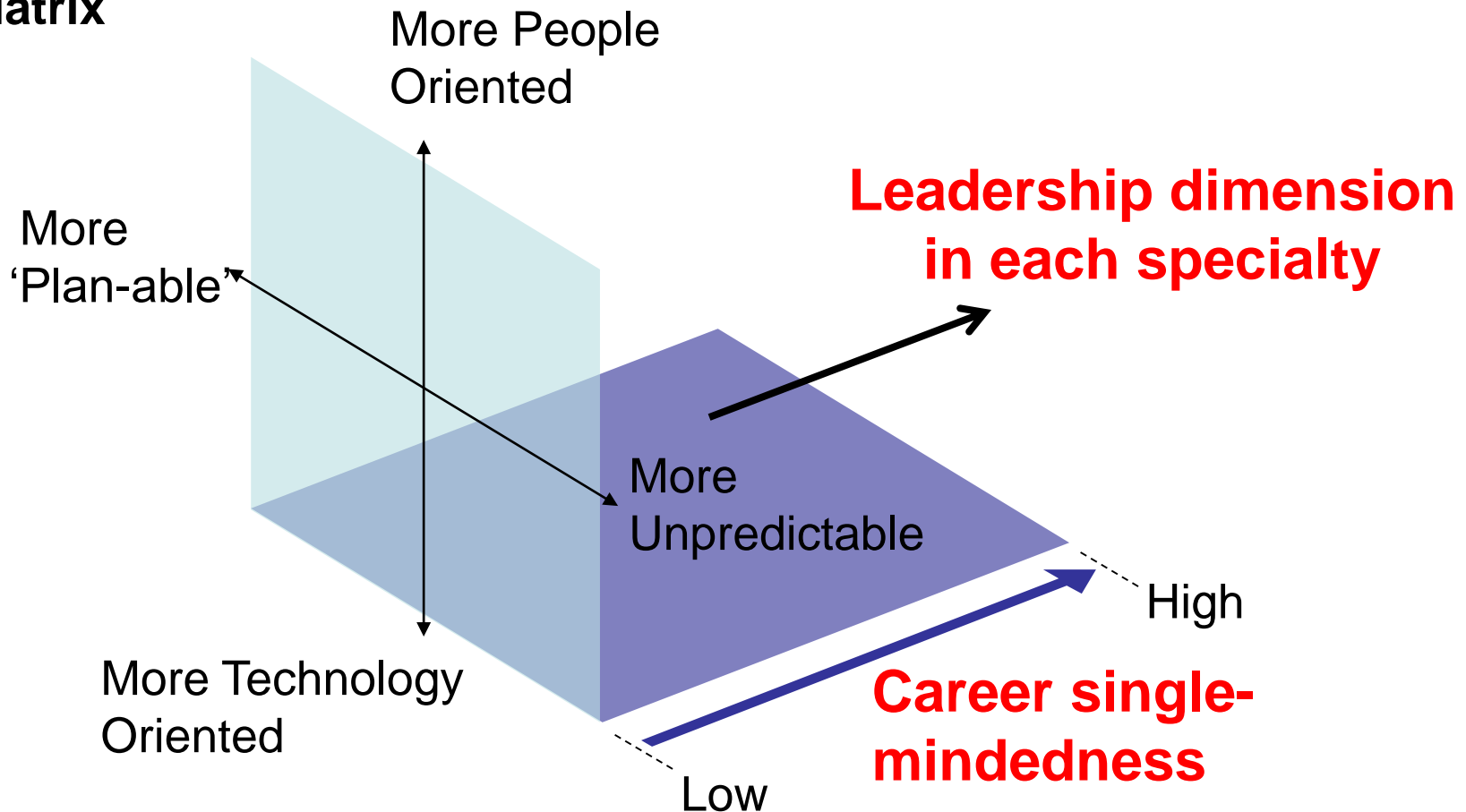


- Clinical challenges
- Time commitment

Prominent leadership roles need investment in the 'extras'

Specialty Matrix

Paul Coombes 2009



Prominent Medical Leadership

- requires **investing time “over and above”** duties, to sustain & develop profession, a ‘stewardship contribution’
- requiring ‘trade-offs’, resilience, and competition
- and the “top 200 leadership positions” will naturally go to those who pursue their career goals with a **high degree of single-mindedness.**
- **Women choosing this route need encouragement and support – role models, mentors, sponsors.**
- Self-confidence, risk-taking, aspiration – all essential.

Career and personal progression

Becoming :

- a doctor
- Professor of Rheumatology
- head of a world-class centre for scleroderma
- Medical Director of hospital

- President, Royal College of Physicians, 2002-06
- Chair, Academy of Medical Royal Colleges, 2006-09
- National Director, Health & Work
- Adviser to Government on H&W
- Principal, Newnham College

Needing to :

- build self-confidence
- take risks
- abandon perfection
- find courage
- seek sponsors

- build networks
- realise aspiration
- use failure to grow
- develop resilience

- use leadership and power wisely.

What is emerging as needed

- **In the beginning :**
 - in the home : stop stereotyping
 - in school : build resilience, self-confidence
encourage study of STEMM subjects
- **At University :**
 - encourage aspiration and risk-taking, downplay perfection
 - learn from failure
 - develop Life Skills
- **At work :**
 - ensure workplaces give women equal opportunity
 - personal and organisation's values aligned
 - mentors, sponsors, role models