

Zugänge, Barrieren und Potentiale für die internationale Mobilität von Wissenschaftlerinnen

Länderbericht Großbritannien

Country dossier United Kingdom

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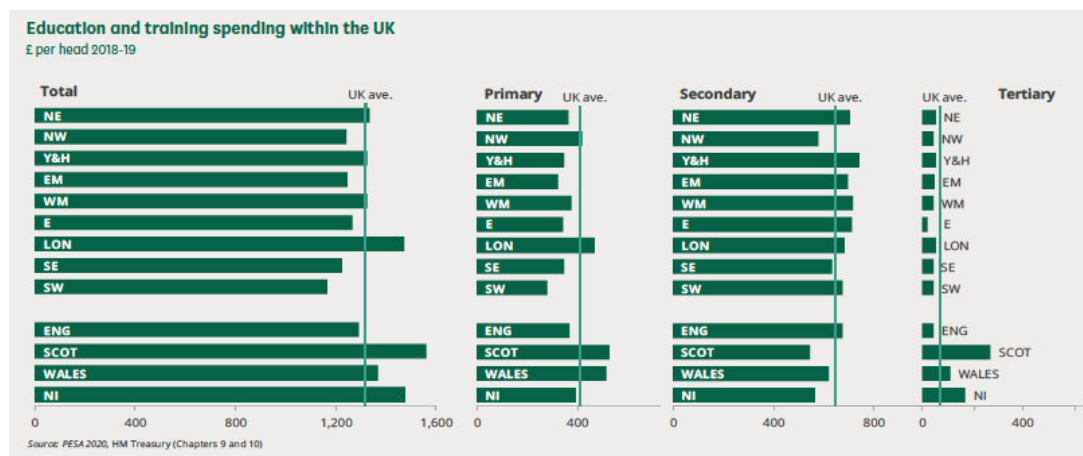
1 Overview

The latest population count for the United Kingdom was 67.9 million in 2020 (UNFPA, 2020). The population demographic in the UK is changing towards a more mature and ageing population with over 25% (18.7 million) aged over 65. While English is mostly spoken across the UK, there are other native official languages: Welsh in Wales, Gaelic and Scots in Scotland, Irish and Ulster Scots in Northern Ireland, and Cornish in Cornwall, England.

The UK is a multicultural country. According to the 2011 Census, 3.4% of people in England and Wales (7.5 million people) were born outside the UK, 1.2% of the population was born in India (694,000 people), 1.0% in Poland (579,000 people), and 0.9% in Pakistan (482,000 people) (GOV.UK, 2018).

In the year 2018/2019, the total education and training expenditure was £1,318 per head for the UK as a whole. It was highest in Scotland, at £1,558, and well above average in London and Northern Ireland. The South West had the lowest level, at £1,165 per head. In tertiary education, relative gaps were largest from £272 per head in Scotland to around £40 in some English regions and as low as £19 per head in the East of England (Bolton, 2020).

Figure 1: Education and Training Spending within the UK



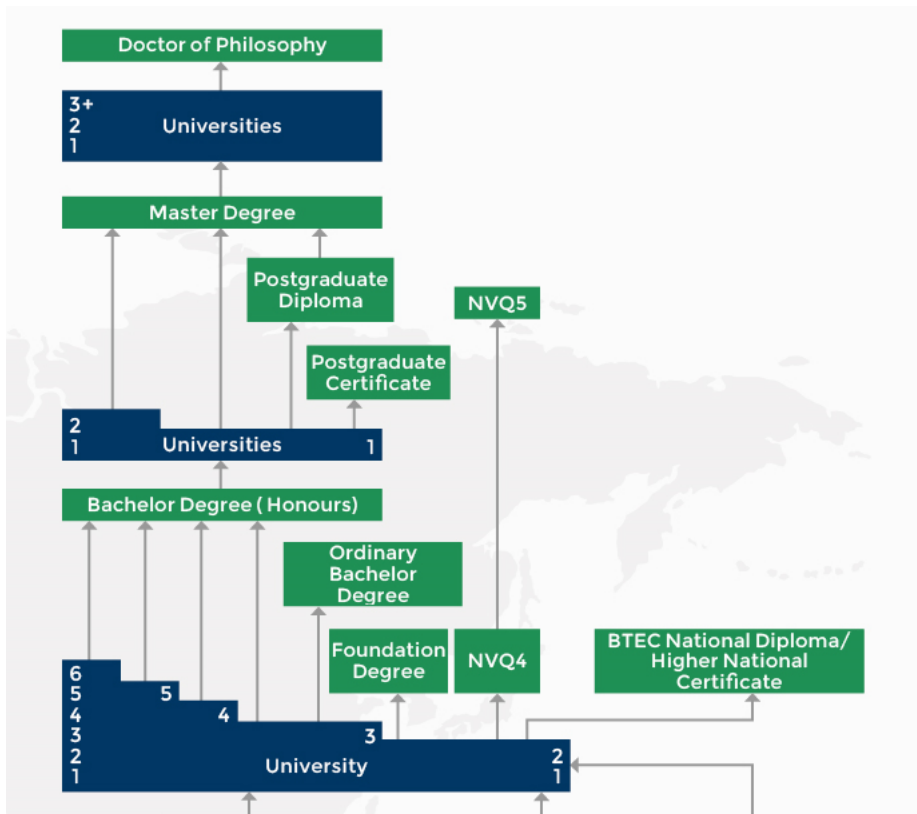
Source: Bolton (2020)

1.1 Higher education

The UK higher education system is massified and stratified, with a high tuition fees system (approximately £9,200 per annum for undergraduate courses). There are over 150 higher education institutions, and the UK's elite universities – e.g. Oxford, Cambridge, Imperial College, and University College, London – regularly feature in the Top Ten Global Universities rankings.

There are four major categories of degrees available for postsecondary students: foundation, bachelor's, master's, and doctoral degrees.

Figure 2: Types of Degrees in Higher Education



Source: World Education News and Reviews (WENR, 2020)

The UK has different types of universities. The Russell Group was established in 1994 and comprises 24 world-class, research-intensive universities. Another group includes Post-1992 universities, new or modern universities that were former polytechnics granted university status through the Further and Higher Education Act 1992. A group of smaller research-intensive universities used to be known as the *1994 Group*. It dissolved in 2013. The vast majority of universities in the UK are government-financed, with only five private British universities (the charitable University of Buckingham and Regent's University London, and the profit-making University of Law, BPP University and Arden University).

In 2014, only 28% of expenditure on higher educational institutions came from public funding (the OECD average was 70%), while 48% of funding for tertiary education came from household expenditure, which is more than double the OECD average of 22% (OECD, 2017). Students in the UK often opt for a mix of loans, grants and scholarships in payment of tuition fees (ibid).

The UK has a mass higher education system. In the academic year 2018–19, there were 2,383,970 students enrolled in UK higher education institutions – an increase of almost 1% compared to 2017–18. The breakdown by mode of study (full- vs part-time) reveals an increase (up 2.6% overall) in numbers of full-time student numbers across all home nations (England, Northern Ireland, Scotland, and Wales) between 2016–17 and 2017–18. As for part-time numbers, a decrease (down 4.1% overall) was recorded over the same period. In total, student numbers have increased in England (up 1.1%) and Scotland (up 2.1%), but have decreased in Wales (down 0.1%), and Northern Ireland (down 0.2%) (UUK, 2019).

Table 1: HE student enrolments by sex and level of study for the academic year 2019/20

Level of Study	Total	Women	% of Women
Postgraduate			
Doctorate research	101,350	49,655	49%
Other postgraduate research	9,325	4,885	52%
Total postgraduate research	110,675	54,540	49%
Masters taught	411,500	234,730	57%
Postgraduate Certificate in Education	25,890	18,020	70%
Other postgraduate taught	94,845	65,845	69%
Total postgraduate taught	532,235	318,595	60%
Total postgraduate	642,915	373,135	58%
Undergraduate			
First degree	1,734,775	971,145	56%
Foundation degree	31,520	20,985	67%
HNC/HND	20,985	9,000	43%
Professional Graduate Certificate in Education	1,000	695	70%
Other undergraduates	101,185	65,855	65%
Total other undergraduates	154,695	96,535	62%
Total undergraduate	1,889,475	1,067,680	57%
Total	2,532,385	1,440,815	57%

Source: HESA, 2020

In terms of overall participation in tertiary education, women outnumber men.

Table 2: Gross enrolment in tertiary education

TERTIARY EDUCATION	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Gross enrolment ratio (%)										
Total	58.9	59.1	59.4	57	56.6	56.5	58.4	60	61.4	...
Female	67.5	67.5	67.9	65.1	64.5	64.7	67.2	69.4	71.1	...
Male	50.5	51	51.2	49.3	48.9	48.6	50	51	52	...

Source: UNESCO, 2020

The 2010 Equality Act in the UK (<http://www.legislation.gov.uk/ukpga/2010>), protects sex, sexual orientation, race and ethnicity, religion/belief, disability, age, gender reassignment, marriage and civil partnership, and pregnancy and maternity, making it an offence to discriminate on these grounds. However, social class is not a protected characteristic but continues to be a major factor in UK higher education opportunity structures. Despite decades of policy interventions to encourage more people from working-class backgrounds to enter higher education as students, the socio-economics and geo-demographics of the global academy remain a site of class privilege and a vehicle for social differentiation (Morley, 2020).

Half of the universities in England have fewer than 5% white students from lower socio-economic backgrounds (Atherton & Mazhari, 2019). Hence, widening participation in higher education has been a dominant UK policy discourse. In 2020, around 23.3% of UK 18-year-olds from low participation neighbourhoods were accepted to study for a full-time undergraduate degree compared to 14.0% in 2011. In the same academic year, an increase in the entry rate from 13.2% in 2011 to 20.3% in 2020 was recorded among state school students in England who, while aged 15, were in receipt of free school meals (UCAS, 2020). This may be due to the fact that enrolment of the most socio-economically advantaged social classes has reached the 'saturation point' (Boliver, 2011). It can also be attributed to efforts by higher education institutions to incorporate and implement policies of widening participation (WiP).

To understand the extent of WiP policies' effectiveness, we need to look at other social characteristics, including gender, age, disability, and ethnicity. The demographics of the student population in the UK shows a young population with the highest proportion of students (972,280) at the age of 20 and under (HESA, 2020). The undergraduate student population in the UK is predominantly white. However, among the black and minority ethnic (BME) proportion in higher education, access has increased in recent years. Students from UK Asian ethnic backgrounds come in second place with 209,705 followed by 137,185 students from black ethnic backgrounds. The Office for Students report (2018) shows that while the number of UK-domiciled BME students starting first degrees increased by 34% between 2010–11 and 2015–16, disparities remain at the granular level. The data suggest that BME students of Chinese background are in the top categories of entry-level students, while students from African-Caribbean backgrounds are in the lower categories.

Table 3: HE student enrolments by personal characteristic and percentage for academic years 2015/16 to 2019/20

Category	2015/16	2016/17	2017/18	2018/19	2019/20
Sex					
Women	56%	57%	57%	57%	57%
Men	44%	43%	43%	43%	43%
Other	0%	0%	0%	0%	0%
Not known					
Age group					
20 and under	40%	41%	41%	40%	40%
21-24 years	27%	27%	28%	28%	29%
25-29 years	11%	11%	11%	11%	11%
30 years and over	21%	21%	20%	20%	20%
Age unknown					
Disability status					
Known disability	11%	12%	13%	14%	15%
No known disability	89%	88%	87%	86%	85%
Religious belief					
No religion				50%	49%
Buddhist				1%	1%
Christian				33%	32%
Hindu				2%	3%
Jewish				0%	0%
Muslim				9%	10%
Sikh				1%	1%
Spiritual				1%	1%
Any other religion or belief				2%	2%
Not known					
Ethnicity					
White	77%	77%	76%	75%	74%
Black	7%	8%	8%	8%	8%
Asian	10%	11%	11%	11%	12%
Mixed	4%	4%	4%	4%	4%
Other	1%	2%	2%	2%	2%
Not known					
Total UK domiciled students	100%	100%	100%	100%	100%
Total	100%	100%	100%	100%	100%

Source: HESA, 2020

The data on choice of discipline reveal some interesting insights into the gender composition of higher education in the UK. In the academic year 2018/2019, the largest proportion of women students chose subjects allied to medicine. This was followed by choices such as business administration, arts and design, and education. Perhaps one example of the largest gender gap in terms of study choice is in engineering and technology, with only 31,580 women students enrolled in 2018/2019 compared to 133,515 men students (HESA, 2020).

Table 4: Study/Degree choices by gender for academic years 2019/20

Subject	Women	Men	Other	Total	Women's share
01 Medicine and dentistry	42,610	27,605	150	70,370	61%
02 Subjects allied to medicine	233,810	61,435	275	295,520	79%
03 Biological and sport sciences	55,460	57,460	125	113,045	49%
04 Psychology	96,650	22,175	250	119,080	81%
05 Veterinary sciences	8,695	1,945	10	10,645	82%
06 Agriculture, food and related studies	10,730	5,995	15	16,740	64%
07 Physical sciences	28,515	41,870	90	70,475	40%
08 General and others in sciences	3,380	3,060	5	6,445	52%
09 Mathematical sciences	17,400	29,320	70	46,790	37%
10 Engineering and technology	34,210	138,945	130	173,285	20%
11 Computing	26,285	105,485	210	131,985	20%
12 Geographical and environmental studies (natural sciences)	12,715	10,325	20	23,060	55%
13 Architecture, building and planning	22,665	36,875	30	59,570	38%
Total science CAH level 1	593,125	542,500	1,385	1,137,010	52%
12 Geographical and environmental studies (social sciences)	7,045	4,910	10	11,965	59%
14 Humanities and liberal arts (non-specific)	6,545	2,755	10	9,310	70%
15 Social sciences	173,015	87,150	320	260,490	66%
16 Law	78,695	43,955	105	122,755	64%
17 Business and management	199,395	213,240	180	412,815	48%
18 Communications and media	28,610	17,800	95	46,505	62%
19 Language and area studies	72,430	29,155	395	101,975	71%
20 Historical, philosophical and religious studies	43,705	36,770	240	80,715	54%
21 Creative arts and design	118,535	67,600	890	187,025	63%
22 Education and teaching	100,160	29,535	200	129,900	77%
23 Combined and general studies	19,550	12,340	30	31,920	61%
Total non-science CAH level 1	847,690	545,210	2,475	1,395,375	61%
Total	1,440,815	1,087,710	3,865	2,532,385	57%

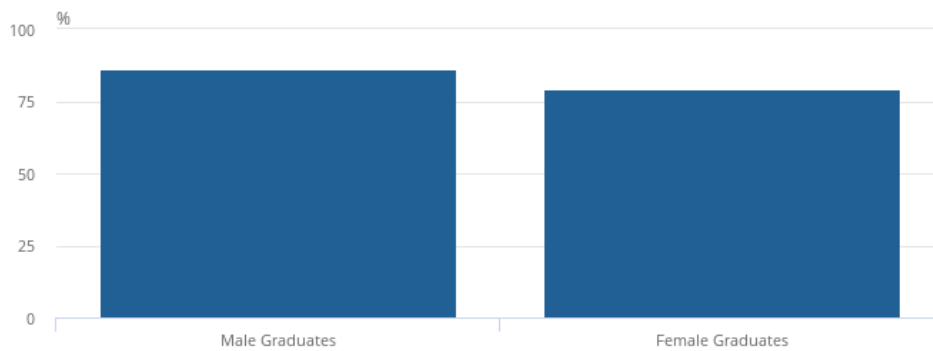
Source: HESA, 2020

In relation to ethnicity, subjects with particularly low levels of BME students included veterinary sciences at 4.8%, and agriculture at 5.5%, while the highest proportions of BME students were found in medicine and dentistry at 34.1%, law at 33.4% and business and administrative studies at 31.3% (UUK, 2016). It is believed that the inflow of international students may fill this gap. For instance, according to the UUK (2017b), popular subjects for non-UK students are engineering at 32.5%; business and administration at 37.6%, and social studies at 19.3%. The proportion of non-UK postgraduate researchers enrolled in engineering and technology was 61%.

The challenges facing students from BME backgrounds include retention, progress, and transition to postgraduate studies and employability. For example, retention rates among all ethnic groups (except among students from Chinese and Indian ethnic backgrounds) are lower compared with their white peers. The non-continuation rates among students from African- Caribbean backgrounds remain at the highest among all groups. Other data support this finding. For instance, a University and College Union (UCU) report (Arday, 2017) shows that while BME undergraduate students in the UK are progressing in their studies, they are more likely than their white counterparts to transition to taught Master's courses but less likely to go on to research or other postgraduate research courses.

The increased demand for postgraduate studies across the EU and the UK is partly based on the assumption that a longer duration of education correlates with better prospects of employability after graduation. Recent reports show that in the UK, the graduate unemployment rate was 2.6%, compared to 5.0% for non-graduates, while the high-skill employment rate was 53.6 percentage points higher for postgraduates than non-graduates (UUK, 2019). The Higher Education Statistics Agency (HESA) report (2018) for the academic year 2017/18 shows that students with postgraduate degrees (taught and research) are more likely to secure fixed-term employment and earning of £30K per annum. According to the report, doctoral graduates are 11% more likely to be in full-time employment than those with just undergraduate degrees and are 5% more likely to be in full-time employment than taught masters graduates. In terms of the type of employment, 40% of doctoral graduates are recorded to be significantly more likely to be in fixed-term employment than any other kind of graduate. Furthermore, 87% of doctoral graduates were earning £30k+, compared to 43% of taught masters graduates, and 23% of those with an undergraduate degree.

Figure 3: Employment rate for men and women graduates



Source: The Office for National Statistics (ONS), 2017

Recent data on graduate salaries in the UK suggest that that type of university also plays a role in graduate earning scales. The Office for National Statistics (ONS, 2017) data show that graduates from the top UK universities (The Russell Group) were earning more than graduates from other UK universities. This corresponds to observations made earlier by Boden and Nedeva (2010) on how the employability discourse has created and reinforced at least two tiers of universities.

The UK left the EU on 31 January 2021. The full extent of the impact on higher education is as yet unknown, but some key areas include research funding, e.g. the UK paid around £10 billion into the EU budget or about 11–12%, UK universities were estimated to be winning around 15% of research grants from EU sources, and particularly Horizon 2020 EU funding. From September 2021, the UK will replace ERASMUS with a new Turing Scheme, named after the brilliant British mathematician Alan Turing. The £100 million programmes are intended to send 35,000 UK students to universities, colleges and schools around the world (Paul, 2021). EU students have lost home status concerning fees and will be re-classified as international students, with a much higher fee rate. UK universities are losing the benefits of academic staff from EU countries. In 2020, 17% of academic staff and 6% of professional services staff at UK universities were from EU countries.

The UK higher education system has also been severely disrupted by the global COVID-19 pandemic in 2020 and 2021 (courses transferred online, campuses closed, research fieldwork delayed, extensive stress for students and staff, and international students unable to travel in/out of the country). Prior to this, the system was disrupted in 2019–2020 by extensive industrial action organised by the University and College Union (UCU, 2021a) around ‘Four Fights’ (pay, precarious contracts, the gender pay gap, and increasing workloads). The pandemic has exacerbated the problem with precarious employment contracts, as many short-term academic contracts were terminated as a consequence of pandemic disruption and financial challenges.

1.2 Research

According to the Office for National Statistics (ONS), in 2018, research and development (R&D) expenditure increased by 6.6% (£2.3 billion) to reach £37.1 billion. This was larger than

the 4.8% increase in 2017 and the largest annual rise since 2013. Total R&D expenditure in the UK in 2018 represented 1.71% of gross domestic product (GDP); this was up from 1.67% in 2017, but it remained below the EU (EU-28) provisional estimate of 2.12%. Funding of UK R&D from overseas increased by 1.4% to £5.1 billion in 2018 compared with 2017, but this was 8.4% lower than the peak in 2014 of £5.5 billion. The UK spent £558 per head of population on R&D in 2018; this was up from £527 in 2017.

Table 5: GERD as a percentage of GDP

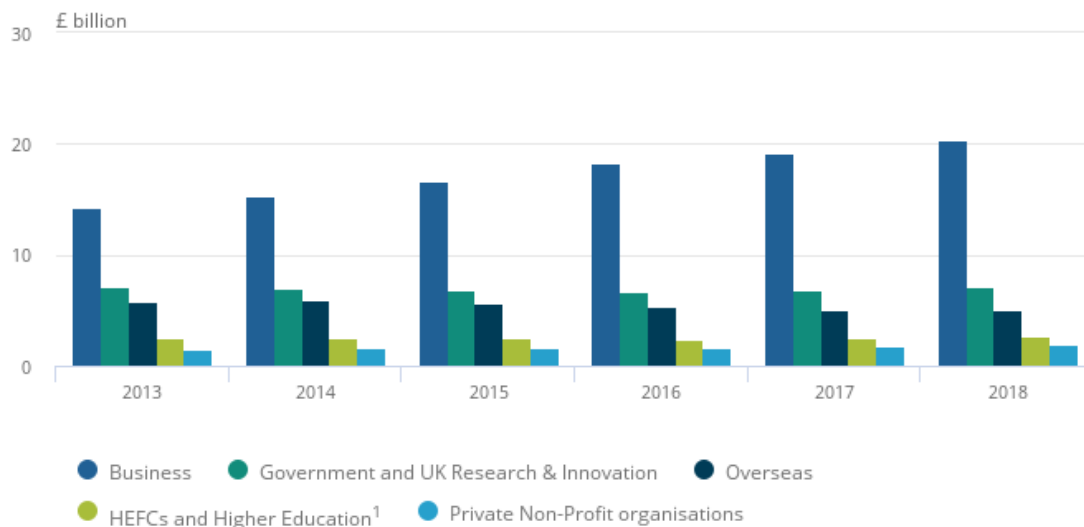
2012	2013	2014	2015	2016	2017	2018
1.59382	1.63938	1.65915	1.66818	1.68211	1.69829	1.72412

Source: UNESCO, 2019

In 2018, all sectors' funding of UK R&D increased, except higher education, according to the Office of National Statistics (2020). In 2018, the largest funder of research and development (R&D) performed in the UK was the business enterprise sector, which funded £20.3 billion (55%) of total UK-performed R&D. This was an increase of 8.4% from £18.7 billion in 2017.

Figure 4: GERD by sector

Composition of UK gross domestic expenditure on research and development by funding sector in constant prices, 2013 to 2018



Source: Office for National Statistics (ONS, 2018)

The UK has a productive and vibrant research culture. In 2018, the UK published 212,876 publications, an 11% increase on the 191,626 produced in 2014. This was the third-highest number of publications among comparator countries, behind China (606,219), and the US (686,263). In 2018, the US produced 22%, China 19%, and the UK 7% of the world's publications. Over the past five years, the UK has maintained its 7% share of all global publications despite the significant increase in output from China. The UK also had the highest field-weighted citation impact (FWCI) in the G7 and higher than all other comparator countries.

The three countries with the largest shares of the world's most highly-cited publications are the US (37%), China (20%), and the UK (14%) (GOV.UK, 2019).

In 2018, the UK had 2% of its publications among the most highly-cited in the world. This was double China's share (1%), over two thirds higher than both the EU's and OECD's 1.2% shares, and a quarter higher than Germany's 1.6%. Since 2010, the UK has had a larger proportion of its research among the most widely cited in the world than any other comparator. Since 2016, the UK has seen over half its publications result from international collaboration each year. In 2018, 55% of UK publications were the result of international collaboration. This makes the UK the second most internationally collaborative country in the G7, second to France (56%) and significantly higher than the OECD average (31%) (GOV.UK, 2019).

Table 6: Percentage of women researchers by type of employment

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Researchers in full-time equivalents (FTE)										
Per million inhabitants	4,076.55	4,043.27	3,926.12	3,969.86	4,119.45	4,227.62	4,319.50	4,357.93	4,341.15	4,603.31
% female	...	...	...	...	...	...	...	...	...	...
Researchers in headcounts (HC)										
Per million inhabitants	6,135.57	6,220.55	6,700.98	6,855.98	7,181.60	7,477.20	7,545.58	7,707.33	...	...
% female	37.90	38.30	37.70	37.80	38.10	37.40	38.60	38.70	...	...

Source: UNESCO Institute for Statistics (UIS, 2020)

Table 7: Researchers by sector of employment

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Researchers by sector of employment in full-time equivalents (%)										
Business enterprise	33.01	32.77	35.42	35.30	36.78	36.96	37.18	38.12	37.92	40.63
Government	3.40	3.36	3.01	3.02	2.85	2.81	2.48	2.44	2.34	2.27
Higher education	61.69	62.33	59.93	60.02	59.19	59.24	58.87	57.98	58.22	55.65
Private non-profit	1.90	1.54	1.63	1.66	1.17	1	1.47	1.46	1.51	1.45
Not specified	...	...	...	...	...	...	...	...	...	...
Researchers by sector of employment in headcounts (%)										
Business enterprise	22.39	22.84	25.32	25.66	26.50	27.37	27.45	27.76	...	...
Government	2.55	2.46	2.01	1.98	1.87	1.81	1.69	1.62	...	...
Higher education	73.74	73.65	71.58	71.26	70.79	70.06	69.83	69.60	...	...
Private non-profit	1.32	1.05	1.10	1.11	0.84	0.76	1.03	1.02	...	...
Not specified	...	...	...	...	...	...	...	...	...	...

Source: UIS (2020)

Table 8: Women researchers as a percentage of total researchers (HC) by sector

	2012	2013	2014	2015	2016
Business enterprise	19.40193	20.68046	20.26024	21.11923	21.09563
Government	35.62614	36.92908	35.73763	37.80241	38.08889
Higher education	<u>44.49246</u>	44.63227	<u>44.0795</u>	<u>45.32674</u>	<u>45.51551</u>
Private non-profit	<u>40.48106</u>	39.58664	<u>44.48476</u>	48.66394	<u>50.47948</u>

Source: UIS, 2020

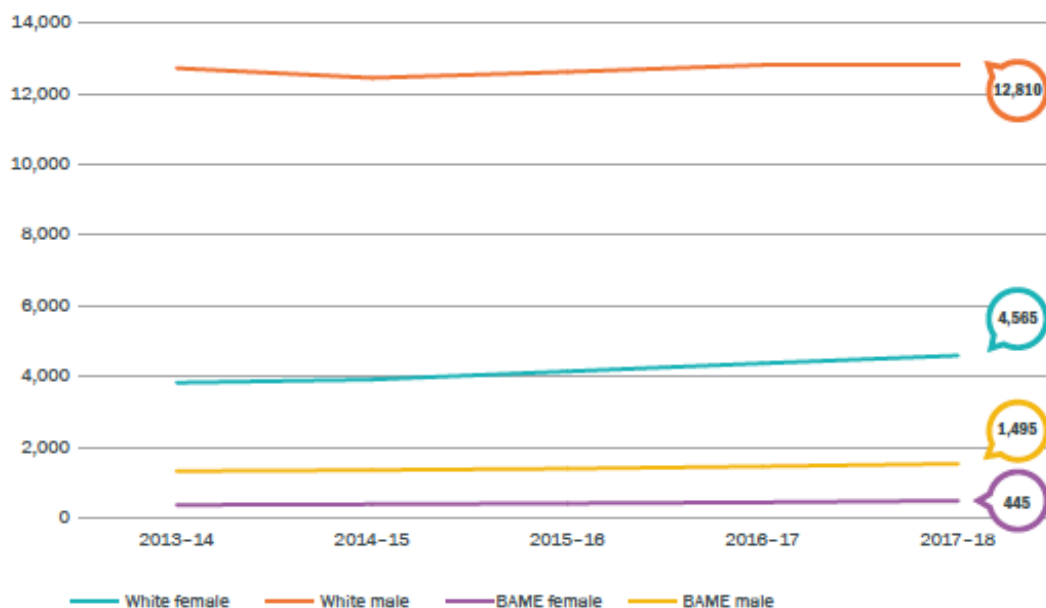
2 Women's academic careers

Higher education participation in the UK has been characterised by feminisation, with women students now outnumbering men students at the undergraduate level (OECD, 2017). Out of the total student population, women students in the academic year 2018/2019 counted 1,362,365 as compared to 1,019,045 men students (HESA, 2020). Over the academic year 2018/2019, the total number of students enrolled at the postgraduate taught level was 472,915 (of which a total of 287,880 were women). The total number of students enrolled at the postgraduate research level was 112,815 (of which a total of 55,020 were women) (HESA, 2020). Despite increasing female participation in UK higher education, the UK occupies only the 21st position out of 153 in the World Economic Forum's 2020 *Global Gender Gap Report*.

In *Feminism and Men* (van der Gaag 2014), the author contended that gender was salient in terms of performance and completion rates. For example, boys' attitudes to education and notions/constructions of masculinity can play a role in boys' (dis)continuation at school, and lack of interest in higher education (Jackson & Sundaram, 2020). Other scholars have suggested that because of ongoing gender discrimination, men can more easily enter the labour market than women without higher education qualifications (Elias & Purcell, 2004).

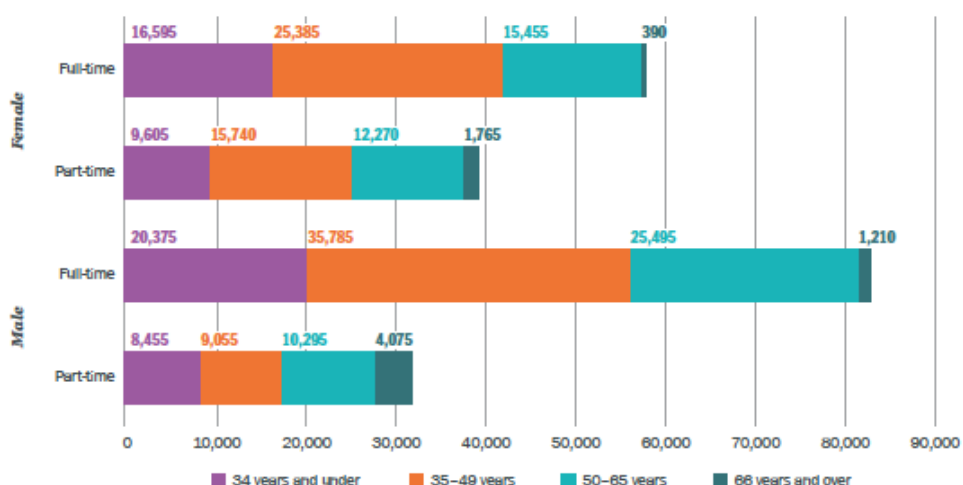
Despite a six-fold increase in the number of women entering higher education as students over the past 40 years (Leathwood & Read, 2008), notable gender gaps remain evident in terms of type of employment, field of research, level of employment, pay structure, and higher education leadership (Morley, 2014). In the UK, in 2017–18, 45.9% of academic staff were women, of which one third (33.6%) were working part-time, and 26.0% of the total were aged 34 years and under (UUK, 2019). In 2015, more than 4,500 professors were women; by 2020, the number of women professors had risen to 6,300 – from 23% to 28% of these senior posts (Coughlin, 2020). Ethnicity continues to be a major factor in academic career development. As of 2019–20, only 1% of university professors in the UK were Black, compared to 7% of professors who were Asian and 89% white (Coughlin, 2020).

Figure 5: Academic Professorial Staff by Sex and Ethnicity, 2013–14 to 2017–18



Source: UUK, 2019

Figure 6: Academic Staff by Sex, Mode of Employment and Age, 2017–18



Source: UUK, 2019

According to data obtained from HESA (2021), 10% of the total number of academic staff (22,810) were employed on a contract level described as a professor¹. The share of women professors was 28 % – signalling an increase of 1% since the count obtained in the academic year 2013/2014. Academic staff employed on other senior academic contracts comprised 39% women in 2019/20. This has gradually increased from 33% in 2013/14.

¹ It should be noted that this is likely to be an undercount of all professors because many will fall into more senior levels, i.e. Heads of Department (<https://www.hesa.ac.uk> last accessed 01 June 2021)

Table 9: Academic staff (excluding atypical) by employment conditions

	Total	Women	Share %
Function/Academic Year 2019/20			
Source of basic salary			
Wholly general financed by the HE provider	174,265	81,450	47%
Other sources of finance	49,260	22,850	46%
Academic employment function			
Teaching only	72,540	38,185	53%
Teaching and research	98,085	41,080	42%
Research only	51,510	24,385	47%
Neither teaching nor research	1,390	650	47%
Contract level			
Professor	22,810	6,345	28%
Other senior academic	6,115	2,390	39%
Other contract levels	194,600	95,570	49%
Terms of employment			
Open-ended/permanent	148,945	67,690	45%
Fixed-term contract	74,580	36,615	49%
Total	223,525	104,305	47%

Source: HESA, 2021

Casualisation is a major problem in UK higher education. Data reported in 2020 indicate that one third of all academics working in academia are employed on fixed-term contracts. This figure rises to almost half for teaching-only academics (49%) and over two thirds (67%) for research-only staff. Despite the negative press and widespread trade union campaigning, 30% of all higher education institutions still use zero-hours contracts for employing academic staff (UCU, 2020). The UCU (2016) reported that prestigious universities (The Russell Group) had the highest rates of insecure contracts, at an average of 58.5%.

British universities reported a higher median gender pay gap, 13.7% on average, than the national average of 9.1% in 2018, with more than nine out of 10 British universities paying their average male employee more than they paid their average female employee (Guibourg, 2019). The pay gap can be explained by vertical segregation; e.g., in 2017-2018, around two thirds (66.3%) of academic professorial staff were white males (UUK, 2019). Black, Asian and minority ethnic (BAME) staff in professorial roles accounted for only 10.0% of the total in 2017–18. BAME women still make up the lowest proportion of academic professional staff and professional staff (UUK, 2019).

Table 10: The unadjusted gender pay gap

	< 25 years	25 - 34	35 - 44	45 - 54	55 - 64	65 years +
Belgium ⁽¹⁾⁽⁶⁾	-2.8	0.5	5.2	6.9	15.3	·
Bulgaria	5.9	13.0	19.2	16.8	5.2	1.0
Czechia	10.4	13.6	25.0	22.8	13.9	17.1
Denmark	5.3	11.2	15.7	17.8	16.5	10.3
Spain ⁽¹⁾	8.3	7.7	11.7	16.0	20.3	52.7
France ⁽¹⁾	-3.6	8.6	13.0	19.1	21.4	29.2
Croatia	7.6	7.7	12.8	13.9	7.4	10.3
Cyprus	8.7	-0.1	9.9	22.5	23.8	52.1
Latvia ⁽¹⁾	13.5	16.5	16.9	12.8	9.9	11.2
Lithuania	12.3	13.7	19.1	11.4	10.8	13.1
Hungary	7.6	9.0	16.4	12.1	4.4	10.3
Malta ⁽⁴⁾	2.6	11.0	10.9	9.9	6.9	6.4
Netherlands	2.5	1.5	8.7	19.4	20.4	14.3
Poland	10.5	11.8	14.0	8.2	-0.4	7.9
Portugal	12.3	9.8	14.5	18.0	23.3	39.5
Romania ⁽²⁾	-1.1	1.1	6.7	4.8	2.8	17.5
Slovenia	8.0	9.1	10.2	12.6	8.2	-10.5
Slovakia	11.7	14.4	24.1	21.5	17.8	17.8
Finland ⁽¹⁾	3.6	10.4	17.0	19.5	21.0	20.8
Sweden	5.5	7.6	12.7	16.2	15.1	11.1
United Kingdom ⁽¹⁾⁽⁵⁾	3.9	13.0	18.0	27.3	26.8	24.8
Iceland	-0.5	6.7	16.4	21.2	20.4	16.4
Norway	1.5	7.2	13.6	17.4	20.1	20.3

Source: Eurostat, 2020

Another dimension to the pay gap is ageism in higher education. The unadjusted gender pay gap in the UK remains at the highest rate (26.8%) among the group aged 55–64 (Eurostat, 2020) This is another signifier to illustrate how, for women in higher education, ageism, classism, and sexism intersect to impede their progress in academia (Morley & Lund, 2020).

The issue of women in higher education leadership continues to be a challenge for gender equality (Aiston & Fo, 2020; Burkinshaw, 2015; Manfredi, 2017; Morley & Crossouard, 2016). On average, women are generally not being recognised, developed, selected and promoted into senior leadership posts in most countries. According to the 2018 WomenCount report, in UK higher education, despite the fact that women make up 55% of the total staff population, women comprised 29% of Vice-Chancellors and 37% of senior leadership teams in 2018 (Jarboe, 2018). To address both the gender and ethnicity gaps, the Equality Challenge Unit (now part of Advance HE) established the Athena Swan Charter in 2005 (<https://www.advance-he.ac.uk/equality-charters/athena-swan-charter>). The aim is to encourage and recognise the commitment to advancing the careers of women in science, technology, engineering, maths and medicine (STEMM) in higher education and research. It is a national charter mark that recognises the advancement of gender equality in higher education, encompassing representation, progression and success for all. Universities and subject areas apply for and, if successful, are awarded bronze, silver or gold charter marks. In May 2015, the charter was expanded to recognise work undertaken in the arts, humanities, social sciences, business and law (AHSSBL), in professional and support roles, and for trans staff and students. The charter now recognises work undertaken to address gender equality more broadly, rather than just barriers to progression that affect women (see <https://www.advance-he.ac.uk/equality-charters/athena-swan-charter>).

The Centre for Higher Education and Equity Research's (CHEER) research on women and higher education leadership (Morley, 2013) led to the establishment of the Aurora Training Programme. The Leadership Foundation for Higher Education (LFHE), now part of Advance HE, established the Aurora Training Programme for women; it is now a core part of the LFHE/Advance HE open programme. Since its launch in 2013, more than 7,000 women from nearly 200 different institutions across the UK and Ireland have participated in Aurora,

benefitting individuals and gender equality in institutions (see <https://www.advance-he.ac.uk/programmes-events/aurora>). Aurora encourages women in the UK to influence their institutions, develop leadership skills and take up leadership positions through education, mentoring, practical tools and online resources. Prior to this initiative, there were no targeted women-only training programmes that directly addressed issues of women's under-representation in leadership positions at UK HEIs.

Aurora seeks to support women and their institutions to fulfil their leadership potential through thought-provoking activities, collaborative problem-solving activities, and motivating stories supported by inspirational women role models. Participation embeds strong networks of early-career women across the sector to share best practice, insights and experiences. Led by a team of four leading experts, participants explore four key areas associated with leadership success: Identity, Impact and Voice; Power and Politics; Core Leadership Skills; Adaptive Leadership Skills. Interest has been shown to date in a version of Aurora in Australia, Canada, Pakistan and Taiwan.

3 Internationalisation

The UK remains a net importer with low rates of outward mobile students. The *Gone International Report* (UUK, 2019) shows that mobile graduates from the 2016–17 graduating cohort from Northern Irish institutions were the most mobile (13.2%), followed by students from Scottish (11.6%), Welsh (9.7%) and English (7.2%) institutions. The report also shows that socio-economic status is a factor in graduates' outward mobility: 9.5% of students from more advantaged socio-economic backgrounds were mobile, compared to 5.6% of students from less advantaged backgrounds. Ethnicities add another dimension to the equation, with the mobility rate for white students recorded at 8.3%, which was higher than that of Asian students (5.5%) and Black students (5.1%).

In terms of choice of outbound destination, Europe was the most popular, with a share of 50.8% of mobility activities, followed by North America with 18.5% and 12.3% in Asia. In terms of duration, the majority (63.7%) were for long-term mobilities of 14 weeks or more, compared to 15.2% for medium-term mobilities (5–13 weeks), and 21.0% for short-term mobilities of less than four weeks. Thanks to the ERASMUS programme, which accounted for almost half (49.2%) of all mobility activities, graduates in the UK had the chance to internationalise their studies. BREXIT means that this mobility programme will no longer be available to UK students.

The UK remains the second most favoured study destination globally after the USA. Despite increasing concerns about the lack of integration between international and home students (, the number of international students coming to the UK continues to grow. According to the OECD (2017), in 2014, the UK, at 15%, was the second most popular OECD country for international students studying for Master's or doctoral degrees, behind the United States at 26% and ahead of Germany at 10% (UUK, 2017a). The UK's colonial past means that it is a destination of choice for many students from former colonised and Anglophone countries. The UUK (2017a) estimated that 14% of undergraduate students and 38% of postgraduate

students at UK higher education institutions were from outside the UK. The share of non-EU students enrolled in postgraduate research was recorded at 29.8%, with the female share reported at 52% (HESA, 2017).

4 Study limitations

Disruption and Uncertainties about Future Mobility

As discussed above, the COVID-19 pandemic has had a major impact on the UK higher education system. At the time of writing the first draft of this report (January 2021), the UK entered its third total lockdown, with universities delivering most lectures online. The impact of the lockdown on student enrolment, drop out and progress to postgraduate studies remains to be seen. In June, 2021, the sector was dogged by yet more industrial action in response to staff redundancies that management justified by the pandemic (UCU, 2021b).

5 Key findings

- Women have succeeded in entering higher education as students in the past 40 years in high numbers. However, they are still under-represented in research and leadership positions. At least two major initiatives have attempted to address this problem, e.g. the Athena Swan Programme and the Aurora Training Programme.
- The UK is an intensely multi-cultural country, with major divisions according to race and ethnicity, as well as social class and gender inequalities. Gender in higher education needs to be intersected with other structures of inequality.
- Higher education in the UK is massified and stratified, with elite universities continuing to reproduce elite opportunity structures, inclusions and exclusions.
- BREXIT will have a major impact on higher education in the UK, e.g. exclusion from ERASMUS, and reduced opportunities for inbound and outbound mobility, employment, and EU research collaboration and funding.
- The UK's research culture is one of the most vibrant and productive cultures globally. However, women are under-represented as research leaders, i.e. the professoriate.
- Higher education employment in the UK has become increasingly characterised by precarity, which is gendered (Leathwood and Read, 2018). There has been substantial industrial action over the past three years, and morale is quite low.

6 Recommendations

- A programme could be created for knowledge exchange between Germany and the UK on the Athena Swan and Aurora Programmes, and the equivalent German interventions for gender equality in higher education.
- A research programme could be created between the UK and Germany to examine how to intersect gender with other structures of inequality in women's academic careers.

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