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## Women in the profession

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Women in the Profession: An Update on the Gendered Composition of the Discipline and Political Science Departments in the UK

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# Women in the Profession: An Update on the Gendered Composition of the Discipline and Political Science Departments in the UK 

This article updates and broadens research undertaken eight years ago on the status of women in UK political science'. As Bates et al. then argued (2012: 139-40), research on women in the discipline is important, not only because of issues of equality, justice and self-reflection within the discipline, but also because of the privileged role political scientists play in the creation and flow of knowledge about gender inequality and women's underrepresentation in positions of power, as well as other important political issues more generally.

Drawing on a dataset of 2553 political scientists, the proportion and seniority of female political scientists at both a disciplinary and unit level are analysed. To take into account initiatives launched and research undertaken since 2011 concerning gender equality in the social sciences, the academy and society more broadly, this article extends this focus on numbers and seniority by also analysing the possible impact of broader contextual factors on the presence and status of women in political science. The analysis shows that improvements made since 2011 at a disciplinary level have been incremental rather than transformative, that the rate of improvement has not increased, and that much of the improvement can be seen to be due to a cohort effect. The analysis also shows that there is evidence that contextual factors are associated with differences in the presence of female political scientists and the size of the 'gender seniority gap' at a unit level but not always in the way that might be expected. These results, then, raise issues about what strategies are best employed to improve the status of women in political science as quickly as possible.

The article has five further sections. First, we discuss literature and initiatives related to the status of women in political science and the academy more generally before going on to discuss our data collection and methods in the second section. We then outline and discuss our results in the third and fourth sections before concluding.

## The Status of Women in the Profession: Literature and Initiatives

At the time of conducting the previous 2011 survey of women in the profession, there was an emerging literature on the underrepresentation of women in political science, drawing on research and surveys focusing on the UK (Akhtar et al., 2005; Childs and Krook, 2006) and the US (APSA, 2005; Henehan and Sarkees, 2009; Monroe and Chiu, 2010). While there had been improvements in the number of female students studying political science and a slow increase in the number of women in the profession, men still dominated in terms of overall numbers and their proportional presence increased at each level of seniority. Moreover, while there were comparable numbers of women and men at the teaching and research fellow level, men significantly outnumbered women at the more senior levels (Bates et al, 2012: 141-42). This supports the idea of a leaking pipeline in which an increasing number of qualified women are entering the profession but gender inequalities in pay and progression persist with a lack of representation of women in senior positions (Monroe and Chiu, 2010). In explaining this seniority gap, existing literature identified barriers faced by women associated with masculine cultures and inhospitable institutional climates, a lack of role models and sufficient mentoring support for career development, and career constraints experienced by women in managing competing work and family responsibilities (APSA, 2005; Henehan and Sarkees, 2009). The intention of our survey was to stimulate debate within the discipline and to encourage further research on direct and indirect forms of discrimination and gendered inequalities within the profession, sharing concerns raised by the literature that more decisive action would be needed to more adequately address continued gender gaps in pay and progression.

Since our survey, there has been a significant growth in the literature examining the gendered nature of political science across a variety of regional contexts, including the UK (Allen and Savigny, 2016; Awesti et al., 2016; Briggs and Harrison, 2015; Savigny, 2014; Williams et al., 2015), the US (Monroe et al., 2014; McLaughlin Mitchell and Hesli, 2013; McLaughlin Mitchell et al., 2013; Mitchell and Martin, 2018), Europe (Abels and Woods, 2015; Ballen et al., 2018; Bates and Savigny, 2015a; Elizondo, 2015; Kantola, 2015), Australia and New Zealand (Johnson, 2014; Sawer and Curtin, 2016), and Latin America (Rocha Carpiuc, 2016). Despite formal equality policies and measures designed to address structural inequalities, this research highlights the continued barriers women face within political science departments as well as wider practices within academia that can serve to disadvantage women. Women can face cultural barriers such as exclusion from 'male' support networks, the devaluing of their research and the marginalisation of their contributions (Allen and Savigny, 2016; Atchison, 2018; Kantola, 2008; Savigny, 2014). There is an academic culture that tends to prioritise and overvalue publication in high-ranking journals rather than other forms of research collaboration and tasks relating to the management of the department and the pastoral care of students. As lecturers, women are more likely to have disproportionate responsibility for teaching, module and programme management, curriculum design, and student pastoral care, which can limit their time for research and disadvantage their career development (Briggs and Harrison, 2015). While one might expect this to impact on women's confidence and their likelihood in asking for promotion, research has challenged the assumption that the leaky pipeline can be explained because 'women don't ask'. Drawing on a 2009 APSA survey, this US-based research (McLaughlin Mitchell and Hesli, 2013) found that women are more likely to bargain for resources such as salary, research support, travel funds and course release time, although they are also more likely to feel they are not adequately compensated with respect to their salary. The same study found that women are more likely than their male peers to be asked and to provide less-prestigious, timeconsuming service roles, which negatively impacts on research time and publications.

In the UK context, the neoliberalisation and marketisation of higher education has intensified the use of metrics and performance indicators relating to publication rankings, funding targets, citation indexes and student feedback, leading to higher workloads, longer working hours and increases in occupational stress and mental health issues among those working in universities (Taberner, 2018). Research has shown that many of these measures have a gendered dimension and therefore might serve to exacerbate gendered inequalities. For example, content analysis of student evaluations found that women are judged on different criteria to men, often on appearance, personality and perceptions of competence, and that women are rated more poorly then men, even on identical online courses (Mitchell and Martin, 2018). Gender bias in student evaluations is significant given that they are increasingly used as part of appraisal and promotion processes. In terms of publishing, women tend to be underrepresented in high-ranking political science journals, particularly as singleauthors (Atchison, 2018; Breuning and Sanders, 2007; Williams et al., 2015), to have lower rates of publication (Hesli and Lee, 2011), and are less likely to be cited (Maliniak et al., 2013; McLaughlin Mitchell et al., 2013). Explanations for this include that women's research is devalued in comparison to men's research, course syllabi and textbooks tend to be dominated by male scholars, and informal male networks might help to increase the visibility of male research. For example, women's research is underrepresented in edited volumes authored by men and male authors are less likely than female authors to cite work by women (McLaughlin Mitchell et al., 2013). Publication rates and citations are increasingly used as evidence of performance and impact of research, therefore gender bias may negatively impact the perceived quality and impact of women's research.

As formal equality legislation has not been enough to tackle these continued gender inequalities in political science and academia more broadly, a growing number of measures have been
implemented to mitigate some of these issues. In 2015 the Athena Swan Charter was expanded to include arts, humanities, social sciences, business and law and there are currently 160 Athena Swan members holding 766 awards between them. The principles of the Charter include a commitment to addressing unequal gender representation, in particular the loss of women across the career pipeline and the absence of women from senior roles, as well as tackling the gender pay gap and removing the obstacles faced by women for career development and progression (www.ecu.ac.uk). In applying for bronze, silver or gold awards, institutions or departments must demonstrate a commitment to these principles, providing an assessment of gender equality in the department or institution using quantitative and qualitative data and producing an action plan to build on achievements and respond to identified challenges. There have been examples of policy innovation, such as the provision of a period of research leave or a reduced teaching load for a given period of time for parents returning from parental leave. This can help academics to re-establish their research and reduce the 'baby penalty' that can adversely affect (mainly) women's career development (Bates and Savigny, 2015b: 133-34). There is also evidence that generous maternity pay and in-house childcare provision can increase the share of female professors, particularly at research-intensive institutions, and can help to reduce the salary gap (Troeger, 2018). In April 2017, regulations on gender pay gap reporting came into force in accordance with the Equality Act 2010, which sought to consolidate anti-discrimination legislation. All private, voluntary and public sector employers with 250 or more employees are required to report data on the gender pay gap, with the first reports for private and voluntary organisations due by April 2018 and for public bodies by March 2018. 124 of 133 higher education organisations in England reported their figures by the deadline, with an average gender pay gap of 18.4 per cent (BBC, 2018).

While there have been some positive developments, there are also concerns about continued and potential new barriers that women may face, particularly with the transformation of higher education in the UK (Bates and Savigny, 2015b: 132). Increased precarity and the casualisation of the workforce may prolong the early career period, burdening junior academics, and women in particular, with a disproportionate allocation of teaching and administrative roles and marginalising casualised staff in teaching-intensive roles (Thwaites and Pressland, 2017; Lopes and Dewan, 2014). There is a lack of research on how this specifically impacts on Black and Ethnic Minority (BAME) women, who are significantly underrepresented in the profession, are more likely to experience higher workloads and a lack of support in terms of career development, and are less likely to be employed on a permanent contract (Lopes and Dewan, 2014: 30; although see Begum \& Saini, 2019 and Emejulu, 2019). The changing higher education environment may create certain opportunities for women with, for example, the increased emphasis on the quality of teaching under the Teaching Excellence Framework and the inclusion of impact case studies in the Research Excellent Framework, both areas where female academics tend to have particular strengths (Briggs and Harrison 2015: 110-12). Increased valuing of these activities may serve to benefit women in terms of career development and progression, or it may simply lead to women becoming overburdened if these areas are not sufficiently resourced. We might expect that, given the higher profile of gender issues and the more concerted effort towards addressing gender inequalities, our survey would identify differences in the gender seniority gap among those universities that have put in place active policies, such as those associated with the Athena Swan Charter, and those that have not. However, it may depend on how these measures have intersected with the other challenges and pressures associated with the changing nature of UK higher education.

## Data Collection and Methods

To replicate the survey from 2011 and to take into account the more recent research, initiatives and policies described above, data was sought not only about political scientists and the academic units which housed them, but also broader contextual data related to the presence and status of women in the academy. The data was initially collected from university websites in July 2018 and then updated during February and March 2019 to correct for data collection errors that became apparent during initial analyses. Using a list of UUK members as a starting point, a search was undertaken within each institution for a political science and/or international relations department and/or degree programme. If this search was successful, then a unit (or units) from that institution was included in our dataset. The only exception to this rule was if an institution had a political science programme but seemingly did not have any political scientists teaching on it. Institutions such as these, where the politics teaching was mainly carried out by political historians, were thus excluded from our dataset.

For each included unit, the name and whether it was a multidisciplinary unit was recorded ${ }^{\mathrm{ii}}$. For each academic listed ${ }^{\text {iii }}$ within a unit, the name, gender ${ }^{\text {iv }}$, job title ${ }^{\text {v }}$, and discipline ${ }^{\text {vi }}$ was recorded, as well as whether they were Head of Unit ${ }^{\text {vii }}$. The job title was then re-coded into one of four job groups, as set out in Table 1. Academics excluded from the analysis were those who were on hourly-paid contracts (e.g. Graduate Teaching Assistants), visiting, associate or honorary members, and emeritus staff. Academic staff who were solely based at overseas, satellite institutions were also excluded. Some universities do not appear to list their staff by department (e.g. De Montfort, Hertfordshire, Leeds Trinity, Northampton, and London South Bank) and so it was not possible to collect data about political scientists working at these institutions.

## TABLE 1 HERE

Additional contextual information about the unit and/or the institution was also collected during the same timeframes. Information about Athena SWAN membership and awards was collected from the Equality Challenge Unit website ${ }^{\text {viii. Information about the gender pay gap was collected from the UK }}$ Government Equalities Office's gender pay gap service website ${ }^{\text {ix }}$. Information about mission group membership was collected from the relevant mission group websites ${ }^{x}$. Information about vicechancellors (or equivalent) was collected from institutional websites with the exception of information about vice-chancellor pay which was taken from the 2018 Time Higher Education V-C Pay Survey ${ }^{\text {xi }}$. Information about governance bodies and date of foundation was collected from institutional websites ${ }^{\text {xii }}$.

In addition to the descriptive statistical analysis outlined below, linear regression analyses are also undertaken to explore the influence of the broader contextual factors outlined above on the proportion of female political scientists within a unit and the gender seniority gap among female and male political scientists within a unit.

Our main outcomes (dependent variables) are: (i) the proportion of female political scientists in the unit; and (ii) the gender seniority gap in the unit. Our aim is to examine how the proportion of female political scientists and the size of the gender seniority gap varies between units with different characteristics (the independent variables as listed in Table 2).

## TABLE 2 HERE

When the outcome is a continuous variable, and the independent variables are also of this kind, then multiple linear regression is the simplest available statistical technique that may be used ${ }^{\text {xiii }}$. Linear regression seeks to form a model of the dependent variable with one or more independent
variables. So, denoting each unit as $i$, it can be written that (i) the proportion of female political scientists in the unit and (ii) the gender seniority gap of female and male political scientists within the unit may be modelled as a function of a small number of variables relating to that unit and the institution in which it is found (as detailed in Table 2). See the below equation:

$$
\operatorname{Prop}\left(\text { WOMEN }_{i}=\text { Constant }+ \text { b1.MillionPlus }{ }_{i}+\text { b2.VC-is-female }{ }_{i}+\ldots+\text { error term }_{i}\right.
$$

This model's parameters - the constant term and the b-values, the coefficients - may be estimated in different ways, but most commonly, as here, the method of ordinary least squares (OLS) is used. A number of statistical summaries of the model and its different elements are of interest. For each independent variable, a t-test examines if the effect of that variable is statistically significantly different from zero; the R-squared shows how much of the variation in the dependent variable is statistically identified by the variation in the right-hand side of the equation, the sum of the independent variables multiplied by their coefficients. Standard statistical textbooks (e.g. Gelman and Hill, 2006) provide further details of the kinds of assumptions needed for models of this kind.

## Results

Of the 2553 political scientists included in our dataset, 916 are female. This percentage of 35.9 per cent compares with 30.8 per cent in 2011, a rise of 5.1 percentage points. As can be seen from Figure 1, the proportion of female political scientists is lower than that of the proportion of female politics students at undergraduate, postgraduate taught and postgraduate research levels. The proportion of female politics students at both the undergraduate and postgraduate taught level has remained relatively consistent over the past four academic years for which data is available at between 47 and 50 per cent. The proportion of female politics students at the postgraduate research level has been consistently around 40 per cent over the same period.

## FIGURE 1 HERE

Table 3 shows the proportion of female and male political scientists within each job group $(\mathrm{n}=2535)^{\mathrm{xiv}}$. As can be seen, female political scientists are overrepresented in the two most junior job groups and underrepresented in the two most senior. Moreover, as the seniority of the job group increases, the proportion of female political scientists decreases. This situation is reversed when we turn to male political scientists: they are overrepresented in the most senior job groups and their proportion increases as the seniority of the job group increases.

## TABLE 3 HERE

Figure 2 shows the proportion within each job group for female political scientists and for male political scientists respectively. The most prevalent job group category for female political scientists is Lecturer, followed by, in order, Senior Lecturer/Reader, Teaching/Research Fellow, and Professor; the most prevalent job category for male political scientists is similarly Lecturer but then followed by, in order, Senior Lecturer/Reader, Professor, and Teaching/Research Fellow. Overall, the average seniority of female political scientists is 2.29 , whereas the average seniority of male political scientists is $2.60^{\mathrm{xv}}$. This means that, for UK Political Science as a discipline, the gender seniority gap, calculated by subtracting the average seniority of male political scientists from the average seniority of female political scientists, is -0.31 . ${ }^{\text {vvi }}$

## FIGURE 2 HERE

The only job group category for which a direct comparison can be made between 2011 and 2019 is 'Professor'. In 2011, 15 per cent of professors were female; in 2019, 24 per cent are female. In 2011, 12 per cent of female political scientists and 29 per cent of male political scientists were professors;
in 2019, 14 per cent of female political scientists and 24 per cent of male political scientists are professors.

Unlike in the 2012 article, we have decided not to produce league tables of female presence ${ }^{\text {xvii }}$. Instead, we have produced two tables (see Tables $4 \& 5$ ) within which results are listed alphabetically and a scatter plot (see Figure 3) to provide an overview of the picture at the unit-level and to allow staff working in individual units to understand their comparative position.

Table 4 shows the proportion of female political scientists for each of the academic units in our dataset. The highest percentage of female political scientists within a unit is 67 per cent and the lowest percentage is 0 per cent ${ }^{\text {xviii }}$. For units containing more than 10 political scientists, the highest percentage of female political scientists is 64 per cent and the lowest is 15 per cent. Six units ( 7 per cent) have more female than male political scientists, three (3 per cent) are balanced, and 77 ( 90 per cent) have more male than female political scientists. 40 units ( 47 per cent) have a higher proportion of female political scientists than the discipline as a whole; 46 ( 53 per cent) have a lower proportion. Of those institutions and/or units for which a direct comparison can be made between 2011 and 2019, the proportion of female political scientists increased in 43 ( 60 per cent) of them, remained the same in three ( 4 per cent), and decreased in 26 ( 36 per cent) (see Figure 3 ). There was a weak correlation between the proportions of female political scientists within a unit in 2011 and 2019 ( $\mathrm{r}=.308, \mathrm{n}=72, \mathrm{p}=.009$ ).

## TABLE 4 \& FIGURE 3 HERE

Table 5 provides details of the gender seniority gap for each of the academic units included in our dataset. The average seniority of female political scientists is higher than the average seniority of male political scientists in 18 academic units ( 22 per cent); the same in 5 units ( 6 per cent); and lower in 59 units ( 72 per cent). The largest gender seniority gap in favour of women in an academic unit is 1.00; the largest gender seniority gap favouring men in an academic unit is $-1.29^{\text {xix }}$.

## TABLE 5 HERE

Taking the two measures of female presence together, as can be seen in Figure 4 and the red shaded area, there are no units within which female academics make up the majority of political scientists and are, on average, more senior than their male counterparts. There is only one unit within which there is no gender seniority gap and an equal number of female and male political scientists and only one unit within which there is no gender seniority gap and a majority of female political scientists. As can be seen from units located in the blue shaded area, the majority of units ( 63 per cent) both have a majority of male political scientists and a negative gender seniority gap (meaning that female political scientists in that unit are less senior than their male counterparts). However, despite these findings, there is no evidence of a correlation between the proportion of female political scientists within a unit and the size of the gender seniority gap ( $r=.085, n=86, p=.446$ ).

## FIGURE 4 HERE

Of the 77 units where the Head of Unit is stated, 23 ( 30 per cent) have female Heads. The seniority of the average female Head of Unit is 3.50 , whereas the seniority of the average male Head of Unit is $3.69^{\times x}$ (see Table 6). As can be seen from Figure 5, female Heads of Unit are split evenly between those who are Senior Lecturers/Readers and those who are Professors; male Heads of Unit are nearly three times more likes to be Professors than Senior Lecturers/Readers.

TABLE 6 \& FIGURE 5 HERE

Table 7 and 8 show the results of the linear regression analysis for the proportion of female political scientists per unit and the unit-level gender seniority gap respectively. The analysis shows that there is at least some evidence that: (i) membership of the Million+ mission group is associated with an increase in the proportion of female political scientists within a unit; and that (ii) the proportion of female members on both the executive board and council, having a female VC, and being at an institution which is either a non-member or only a member of Athena SWAN (as opposed to holding a bronze or silver award) is associated with a decrease in the proportion of female political scientists within a unit ${ }^{\text {xxi }}$. Some of these latter findings are counterintuitive. There is no evidence that any of the other variables listed in Table 2 predicts the proportion of female political scientists within a unit.

With regard to explaining the unit-level gender seniority gap, the regression analysis provides at least some evidence that having a female Head of Unit is associated with increased seniority of female political scientists in comparison to their male counterparts. There is also at least some evidence that the proportion of female members on the institution's executive board and being a member of the Russell Group is associated with lower seniority of female political scientists relative to their male counterparts. There is no evidence that any of the other variables listed in Table 2 predicts the unit-level gender seniority gap.

## TABLES 7-8 HERE

## Discussion

The proportion of female academics in the discipline both overall and within each job group has clearly increased since 2011. There has been a five percentage point rise in the proportion of female academics within the discipline and the gap between the proportion of female postgraduate students and the proportion of female academics has fallen from approximately eight percentage points to four. Moreover, the proportion of professors who are female has risen from 15 per cent to 24 per cent and, although a direct comparison between the other groups cannot be made, the data suggests that the spread of male political scientists across the different job groups is changing, albeit slowly, to look more like the spread of female political scientists across the groups (which does not appear to have altered significantly between 2011 and 2019). Mirroring the results for 2011, there does not appear to be any leakage for female academics between postgraduate research and finding an academic job. Moreover, the pooling effect evident in 2011, where female academics appeared to find it more difficult than their male counterparts to obtain a permanent position and tended to be located in teaching or research fellowships, appears to have diminished in 2019. While female academics are still overrepresented in the most junior job categories, there are now proportionally as many female lecturers (or equivalent) as there are female postgraduate researchers. This suggests that the barrier is not now mainly between fixed-term and permanent positions but between early career and more senior positions.

While these improvements in the position of female academics in the discipline are to be welcomed, the improvements are best characterised as incremental in nature rather than qualitative. To put it simply, there is no evidence of transformational change in the position of female academics within UK political science since 2011 in terms of both numbers and seniority. In terms of the former, Figure 6 suggests that there has been no upturn in the trend line for the proportion of female academics within the discipline since 2011. In terms of seniority, as in 2011, the presence of female academics within each of the job groups decreases as the seniority of the job increases, while male academics in political science remain more likely to be professors than teaching or research fellows. Moreover, while some barriers for female academics appear to have diminished, such as those
related to obtaining a permanent position discussed above, it also appears that a large proportion of the improvements seen are simply down to a cohort effect as more female academics come into the system and then work their way through it (albeit probably more slowly than their male counterparts).

## FIGURE 6 HERE

With respect to Heads of Unit, it may be that there are factors in play not captured by our data such as age, length of service and whether the position is permanent or for a fixed-term, that are more important than gender in explaining the seniority of the incumbent. However, the evidence collected does suggest that female academics may be being asked to undertake the same role as their male counterparts but for less reward in terms of status (and the pay packet that goes with a more senior status).

The results from the regression analyses are quite difficult to interpret. On the one hand, there are intuitively plausible findings; for example, institutions who are members of the Million+ mission group are associated with a higher proportion of female political scientists and institutions which do not hold an institutional-level Athena SWAN award are associated with a lower proportion of female political scientists (although there is no available evidence to suggest that the level of award - i.e. bronze or silver - has any impact on the proportion of female political scientists within an institution). Similarly, with regard to the gender seniority gap, it makes (at least some) intuitive sense that having a female Head of Unit is associated with a lower gender seniority gap (both in terms of association, although no issues with collinearity were reported, and in terms of culture) and that membership of the Russell Group university mission group is associated with a higher gender seniority gap. These findings are supported by research concerning the (de)valuation of research undertaken by women (Benschop and Brouns, 2003; Kantola, 2008; McLaughlin Mitchell et al., 2013), the impact of teaching and administration loads on female academics both in terms of research outputs and career progression (Allen and Savigny, 2016; Atchison, 2018; McLaughlin Mitchell and Hesli, 2013), and the impact of (gendered) workplace cultures (Bird, 2011; Savigny 2014).

Other results were more surprising and more difficult - and maybe, at present, impossible - to interpret. The impact on the proportion of female political scientists within a unit of a female VC and the proportion of female members on the executive board and council were not in the direction that would be expected by many. Similarly, the counter-intuitive impact of the proportion of female members on the executive board on the gender seniority gap is not easy to understand. This may indicate that increasing the number of women in positions of power may not alone be sufficient for addressing institutional bias and changing masculinised cultures. As Mershon and Walsh (2015) argue, not all women advocate change and those who do may face barriers without a wider change in institutional norms. Furthermore, the fact that there is no evidence to suggest that departmentallevel Athena SWAN awards make a difference to the proportion of female political scientists or the gender seniority gap within a unit is perhaps surprising and maybe depressing, even with the recognition that Athena SWAN is not just concerned with these issues.

It is also important to note how much the regression analyses do not explain (the adjusted r-squared measures are .366 and .176 for the proportion of female political scientists and the gender seniority gap respectively). Thus, while we have uncovered some broader contextual factors that appear to be important in understanding the status of women in political science, there is a lot that we do not yet know. For example, it may be that institutional policies and informal practices concerning parental leave, promotion and opportunities for departmental expansion and career progression (Troeger,

2018; Epifanio and Troeger, 2019), the interplay of intersectional factors (Begum \& Saini, 2019; Emejulu, 2019), and/or (in)formal mentoring and networking initiatives (APSA, 2005; Henehan and Sarkees, 2009; Allen and Savigny, 2016; Atchison, 2018; Kantola, 2008; Savigny, 2014) play an important role in explaining the numerical presence and seniority of female academics within the discipline and which have not been captured, or cannot be captured, in the research design employed here.

## Conclusion

In 2011 it was calculated that it would not be until the late 2030s that the proportion of female political scientists caught up with the proportion of female politics undergraduate students. Since then, the proportion of female undergraduates has risen from around 45 per cent to around 50 per cent. At the current rate of progress, it would not be until 2041 that there was a 50:50 split between female and male political scientists. This suggests that, while the added attention to the status of women in the profession and the various initiatives that have been launched in the recent past may be important at the institutional and/or unit level, they have not (yet) had much impact on the discipline as a whole. What then, apart from waiting for cohort effects to work themselves fully through the system, can be done?

None of our suggestions below are novel, nor are they revolutionary. Rather, on the basis of our results, we point towards those existing initiatives and policies which we believe will bear the most fruit and away from those which we believe are least likely to be successful in increasing the rate of improving the status of women in the discipline ${ }^{x x i i}$.

With regard to the numerical presence of female academics within political science and reaching a gender-balanced discipline, we suggest a key priority should be attempting to eradicate the gap between, on the one hand, the proportion of female undergraduate and taught postgraduate students, which are now both around 50 per cent, and, on the other hand, the proportion of female research postgraduate students, which is around ten percentage points lower. Unless this issue is addressed, at some point, the current cohort effect will dissipate and it will be difficult, if not impossible, to raise female presence beyond approximately 40 per cent. Furthermore, in relation to those institutions which do not have an institutional-level Athena SWAN award, internal and external pressure should be brought to bear on management to take this issue (more) seriously.

Another key priority with regard to numerical presence must be to address issues arising at the intersections and, perhaps particularly, the (non-)presence of BAME academics both male and, particularly, female. In response to the fact that there are only 25 black female professors in the whole of UK Higher Education, Nicola Rollock (2019) has provided 21 recommendations to address this gap. These include: dedicated initiatives such as financial stability and career support for early career black female academics; greater transparency in salaries and pay; establishing a culture of zero tolerance to bullying; and constructive feedback. Bhopal and Pitkin (2018) have also recommended that the Race Equality Charter should be tied to UKRI funding, mirroring initiatives elsewhere, such as those within Ireland, which seek to tie funding to the proportion of women in senior ranks within universities (Harford 2018).

With regard to closing the seniority gap between female and male political scientists, our first suggestion is that university management should consider whether they treat female and male candidate for Heads of Unit differently and whether current female Heads of Unit are deserving of a promotion in the very near future. There should also be more female Heads of Unit. This could be achieved by introducing a policy which ensures that the Head of Unit within an institution alternates
between a female and male incumbent - or by introducing a job share arrangement. Beyond current best practice concerning (the lack of) all-male panels and keynote speakers at conferences, attention should also be paid to: (i) spreading and institutionalising the practice of journal editors and grantmaking bodies collecting and publicising data on submission and acceptance rates for different groups of academics; (ii) ensuring institutions are not only signed up to but put into practice the San Francisco Declaration on Research Assessment (https://sfdora.org/) so that journal rankings and impact factors, which often have a gendered dimension, do not play an improper role in recruitment and promotion processes; and (iii) working at an institutional level to ensure that academic work beyond research is sufficiently recognised within the promotions process, as well as the impact of career breaks, parental leave and/or part-time work. More radically perhaps, there lies the possibility of introducing 'female-only professorships', as has again been the case in Ireland (O'Brien 2018), or tying research funding directly to the appointment of female professors, as has (successfully) been the case in the Netherlands ${ }^{\text {xxiii }}$. Female-only shortlists, particularly within the UK Labour Party, have been one of the key drivers in raising the proportion of female MPs in the UK House of Commons (Nugent and Krook 2015). Covering the same period as our two pieces of research, the proportion of female Labour MPs rose from $31 \%$ - so directly comparable with the proportion of female political scientists in the UK in 2011 - to $45 \%$ (with the proportion of all female MPs rising from $22 \%$ to $32 \%$ ) (Browning 2019, Cracknell et al. 2011). With the requisite political will and institutional support, a similar step-change in the proportion of female political scientists at the most senior levels could be seen, although care would need to be taken that this initiative did not draw attention away from the (relative) absence of other minority groups at senior levels and within the academy more generally, a danger to which Bhopal (2018) highlights with regard to Athena SWAN.

In the current Brexit-dominated political environment, prospects may be gloomier than they would otherwise have been. As Colette Fagan and Jill Rubery (2018) note, while European employment policy certainly contains gaps and contradictions, the EU has nonetheless been significant in steering a recalcitrant UK towards gender reforms. This has particularly been the case in relation to maternity rights and childcare, both of which have been linked to the career opportunities and seniority of women in academia (Troeger, 2018). If women's advocacy groups within the UK lose access to their allies within European institutions, we may see progress stall or even backslide (Guerrina and Masselot, 2018: 327), particularly if we do not witness a UK government of a different stripe to recent times. There is, then, a real threat that Brexit could worsen the exclusionary patterns identified in this article, unless feminists and their allies are able to institutionalise practices and initiatives that are successful in addressing the underrepresentation and comparative lack of seniority of women in political science and academia more broadly.

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Table 1: Job Titles included within Job Groups

| Job Group | Examples of Job Titles included in Group | Weighting |
| :--- | :--- | :---: |
| Teaching/Research Fellow (or Equivalent) | Oxbridge College Lecturer <br> Research Assistant/Fellow <br> (Senior) Teaching Fellow | 1 |
| Lecturer (or Equivalent) | Assistant Professor <br> Lecturer <br> Senior Lecturer in Post-1992 Institution <br> Senior Research Fellow | 2 |
| Senior Lecturer/Reader (or Equivalent) | Associate Professor <br> Principal Lecturer <br> Reader <br> Senior Lecturer in Pre-1992 Institution | 3 |
| Professor | Professor <br> Professorial Fellow | 4 |

Table 2: List of Independent Variables included in Linear Regression Analyses

## Name of Variable

Departmental-Level Athena SWAN Bronze Award
Difference between the Mean Hourly Rate Pay for Men and Women within an Institution (2018) Female VC
Gender of Head of Unit

- Female
- Male
- Not Known

Institutional-Level Award Status of Athena SWAN

- Non-Member
- Member
- Bronze
- Silver

Mission Group Member

- Million+
- Russell Group
- University Alliance

Multidisciplinary Unit
Pre- or Post-1992 Institution
Proportion of Female Members of Council or Equivalent
Proportion of Female Members of the Executive Board or Equivalent
Proportion of Women in the Top Quartile of the Highest Paid within an Institution (2018)
Total Number of Staff within a Unit
VC Pay including pension during the academic year 2016-2017

Table 3: Number \& Percentages of Female \& Male Political Scientists within each Job Group

| Gender | TF/RF | Lecturer | SL/Reader | Prof. | Total |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Female | $213(44 \%)$ | $340(41 \%)$ | $234(34 \%)$ | $123(24 \%)$ | $910(36 \%)$ |
| Male | $272(56 \%)$ | $497(59 \%)$ | $461(66 \%)$ | $395(76 \%)$ | $1625(64 \%)$ |
| Total | $485(100 \%)$ | $837(100 \%)$ | $695(100 \%)$ | $518(100 \%)$ | $2535(100 \%)$ |

Table 4: Proportion of Female Political Scientists \& IR Scholars by Academic Unit in 2019

| Institution | Number of Staff | \% Female 2019 | \% Female 2011 | Percentage Point Difference |
| :---: | :---: | :---: | :---: | :---: |
| Aberystwyth University | 28 | 46 | 33 | 13 |
| Anglia Ruskin University | 4 | 25 |  |  |
| Aston University | 29 | 48 | 38 | 10 |
| Birkbeck | 27 | 22 | 38 | -16 |
| Brunel University London | 13 | 23 | 18 | 5 |
| Canterbury Christ Church University | 8 | 25 | 22 | 3 |
| Cardiff University | 44 | 34 | 6 | 28 |
| City, University of London | 28 | 39 |  |  |
| Coventry University | 7 | 14 | 29 | -15 |
| Durham University | 50 | 44 | 23 | 21 |
| Goldsmiths | 25 | 28 | 44 | -16 |
| Keele University | 22 | 32 | 29 | 3 |
| KCL (European \& Int. Studies) | 38 | 39 |  |  |
| KCL (Pol. Economy) | 64 | 25 |  |  |
| KCL (War Studies) | 102 | 34 |  |  |
| Kingston University | 13 | 38 | 29 | 9 |
| Lancaster University | 17 | 24 | 33 | -9 |
| Leeds Beckett University | 11 | 45 |  |  |
| Liverpool Hope University | 5 | 20 | 29 | -9 |
| London Metropolitan University | 8 | 13 | 14 | -2 |
| LSE (Government) | 63 | 32 | 21 | 11 |
| LSE (IR) | 46 | 37 | 23 | 14 |
| Loughborough University | 18 | 33 | 25 | 8 |
| Manchester Metropolitan University | 11 | 64 | 31 | 33 |
| Middlesex University | 4 | 50 | 60 | -10 |
| Newcastle University | 43 | 35 | 30 | 5 |
| Northumbria University | 9 | 44 | 38 | 6 |
| Nottingham Trent University | 16 | 31 | 44 | -13 |
| Open University | 12 | 33 | 39 | -6 |
| Oxford Brookes University | 21 | 43 | 50 | -7 |
| Queen Mary | 48 | 33 | 38 | -5 |
| Queen's University Belfast | 31 | 23 | 31 | -8 |
| Royal Holloway | 34 | 38 | 32 | 6 |
| Sheffield Hallam University | 15 | 40 | 50 | -10 |
| SOAS | 55 | 51 | 53 | -2 |
| Swansea University | 26 | 15 | 22 | -7 |
| Ulster University | 7 | 29 | 33 | -4 |
| University College London | 78 | 45 | 50 | -5 |
| University of Aberdeen | 19 | 37 | 27 | 10 |
| University of Bath | 45 | 36 | 25 | 11 |
| University of Birmingham (INLOGOV) | 12 | 50 |  |  |
| University of Birmingham (POLSIS) | 55 | 31 | 32 | -1 |
| University of Bradford | 12 | 33 | 35 | -2 |
| University of Bristol | 53 | 42 | 38 | 4 |
| University of Buckingham | 9 | 22 |  |  |
| University of Cambridge | 65 | 40 | 33 | 7 |
| University of Central Lancashire | 2 | 0 | 0 | 0 |
| University of Chester | 3 | 67 |  |  |
| University of Chichester | 1 | 0 |  |  |
| University of Dundee | 8 | 25 | 13 | 12 |
| University of East Anglia | 28 | 36 | 22 | 14 |
| University of East London | 7 | 57 |  |  |


| University of Edinburgh | 58 | 45 | 38 | 7 |
| :---: | :---: | :---: | :---: | :---: |
| University of Essex | 55 | 38 | 26 | 12 |
| University of Exeter | 82 | 45 | 31 | 14 |
| University of Glasgow | 36 | 39 | 35 | 4 |
| University of Greenwich | 2 | 50 | 33 | 17 |
| University of Huddersfield | 9 | 33 | 14 | 19 |
| University of Hull | 20 | 20 | 23 | -3 |
| University of Kent | 38 | 29 | 33 | -4 |
| University of Leeds | 54 | 35 | 30 | 5 |
| University of Leicester | 28 | 36 | 35 | 1 |
| University of Lincoln | 17 | 18 | 60 | -42 |
| University of Liverpool | 23 | 30 | 22 | 8 |
| University of Manchester | 63 | 43 | 35 | 8 |
| University of Nottingham | 52 | 37 | 37 | 0 |
| University of Oxford | 126 | 31 | 32 | -1 |
| University of Portsmouth | 13 | 62 | 20 | 42 |
| University of Reading | 30 | 27 | 25 | 2 |
| University of Salford | 9 | 22 | 37 | -15 |
| University of Sheffield | 58 | 31 | 20 | 11 |
| University of Southampton | 23 | 26 | 45 | -19 |
| University of St Andrews | 52 | 33 | 30 | 3 |
| University of Stirling | 13 | 38 | 13 | 25 |
| University of Strathclyde | 21 | 24 | 38 | -14 |
| University of Surrey | 13 | 38 | 38 | 0 |
| University of Sussex (IR) | 38 | 53 | 28 | 25 |
| University of Sussex (Politics) | 18 | 39 | 19 | 20 |
| University of the West of England | 14 | 21 | 17 | 4 |
| University of Warwick | 84 | 36 | 23 | 13 |
| University of Westminster | 25 | 40 | 27 | 13 |
| University of Winchester | 8 | 25 |  |  |
| University of Wolverhampton | 8 | 25 | 11 | 14 |
| University of Worcester | 3 | 0 |  |  |
| University of York | 57 | 44 | 29 | 15 |
| York St John University | 4 | 0 |  |  |

Table 5: Gender Seniority Gap for Political Scientists \& IR Scholars by Academic Unit in 2019

| Institution | Seniority of Average Female | Number of Female Staff | Seniority of Average Male | Number of Male Staff | Gender <br> Seniority Gap |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Aberystwyth University | 2.38 | 13 | 2.73 | 15 | -0.35 |
| Anglia Ruskin University | 2.00 | 1 | 1.67 | 3 | 0.33 |
| Aston University | 2.36 | 14 | 2.53 | 15 | -0.18 |
| Birkbeck | 3.17 | 6 | 2.43 | 21 | 0.74 |
| Brunel University London | 2.00 | 3 | 3.11 | 10 | -1.11 |
| Canterbury Christ Church University | 2.00 | 2 | 2.67 | 6 | -0.67 |
| Cardiff University | 2.40 | 15 | 3.00 | 29 | -0.60 |
| City, University of London | 2.27 | 11 | 2.71 | 17 | -0.43 |
| Coventry University | 2.00 | 1 | 2.00 | 6 | 0.00 |
| Durham University | 2.18 | 22 | 2.36 | 28 | -0.18 |
| Goldsmiths | 2.71 | 7 | 2.65 | 18 | 0.07 |
| Keele University | 2.29 | 7 | 2.93 | 15 | -0.65 |
| KCL (European \& Int. Studies) | 2.27 | 15 | 2.48 | 23 | -0.21 |
| KCL (Political Economy) | 2.44 | 16 | 2.63 | 48 | -0.19 |
| KCL (War Studies) | 1.86 | 35 | 2.42 | 67 | -0.56 |
| Kingston University | 2.60 | 5 | 2.38 | 8 | 0.23 |
| Lancaster University | 2.50 | 4 | 2.92 | 13 | -0.42 |
| Leeds Beckett University | 2.33 | 5 | 2.50 | 6 | -0.17 |
| Liverpool Hope University | 2.00 | 1 | 2.00 | 4 | 0.00 |
| London Metropolitan University | 3.00 | 1 | 2.71 | 7 | 0.29 |
| LSE (Government) | 2.60 | 20 | 2.86 | 43 | -0.26 |
| LSE (IR) | 2.18 | 17 | 2.83 | 29 | -0.65 |
| Loughborough University | 2.83 | 6 | 2.08 | 12 | 0.75 |
| Manchester Metropolitan University | 2.00 | 7 | 2.25 | 4 | -0.25 |
| Middlesex University | 2.00 | 2 | 2.50 | 2 | -0.50 |
| Newcastle University | 1.93 | 15 | 2.43 | 28 | -0.50 |
| Northumbria University | 2.50 | 4 | 2.40 | 5 | 0.10 |
| Nottingham Trent University | 2.20 | 5 | 2.27 | 11 | -0.07 |
| Open University | 2.00 | 4 | 2.29 | 8 | -0.29 |
| Oxford Brookes University | 2.00 | 9 | 2.75 | 12 | -0.75 |
| Queen Mary | 2.38 | 16 | 2.72 | 32 | -0.34 |
| Queen's University Belfast | 2.86 | 7 | 2.92 | 24 | -0.06 |
| Royal Holloway | 1.85 | 13 | 2.62 | 21 | -0.77 |
| Sheffield Hallam University | 2.00 | 6 | 2.00 | 9 | 0.00 |
| SOAS | 2.11 | 28 | 2.15 | 27 | -0.04 |
| Swansea University | 2.50 | 4 | 2.68 | 22 | -0.18 |
| Ulster University | 2.50 | 2 | 2.20 | 5 | 0.30 |
| University College London | 1.57 | 35 | 2.16 | 43 | -0.59 |
| University of Aberdeen | 2.57 | 7 | 2.50 | 12 | 0.07 |
| University of Bath | 2.31 | 16 | 2.28 | 29 | 0.04 |
| University of Birmingham (INLOGOV) | 2.50 | 6 | 2.83 | 6 | -0.33 |
| University of Birmingham (POLSIS) | 2.47 | 17 | 2.82 | 38 | -0.35 |
| University of Bradford | 2.75 | 4 | 3.00 | 8 | -0.25 |
| University of Bristol | 2.27 | 22 | 2.45 | 31 | -0.18 |
| University of Buckingham | 2.50 | 2 | 3.57 | 7 | -1.07 |
| University of Cambridge | 1.81 | 26 | 2.18 | 39 | -0.37 |
| University of Central Lancashire* | - | 0 | 2.00 | 2 | - |
| University of Chester | 2.00 | 2 | 2.00 | 1 | 0.00 |
| University of Chichester* | - | 0 | 2.00 | 1 | - |
| University of Dundee | 2.00 | 2 | 3.00 | 6 | -1.00 |
| University of East Anglia | 2.10 | 10 | 2.83 | 18 | -0.73 |


| University of East London | 3.25 | 4 | 3.33 | 3 | -0.08 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| University of Edinburgh | 2.58 | 26 | 2.59 | 32 | -0.02 |
| University of Essex | 2.14 | 21 | 2.68 | 34 | -0.53 |
| University of Exeter | 2.41 | 37 | 2.69 | 45 | -0.28 |
| University of Glasgow | 2.57 | 14 | 2.09 | 22 | 0.48 |
| University of Greenwich | 2.00 | 1 | 2.00 | 1 | 0.00 |
| University of Huddersfield | 2.67 | 3 | 2.40 | 6 | 0.27 |
| University of Hull | 2.75 | 4 | 3.13 | 16 | -0.38 |
| University of Kent | 2.55 | 11 | 2.70 | 27 | -0.16 |
| University of Leeds | 2.11 | 19 | 2.91 | 35 | -0.81 |
| University of Leicester | 2.30 | 10 | 2.39 | 18 | -0.09 |
| University of Lincoln | 2.00 | 3 | 1.92 | 14 | 0.08 |
| University of Liverpool | 2.33 | 7 | 2.69 | 16 | -0.35 |
| University of Manchester | 2.78 | 27 | 2.75 | 36 | 0.03 |
| University of Nottingham | 2.63 | 19 | 2.88 | 33 | -0.24 |
| University of Oxford | 2.41 | 39 | 2.34 | 87 | 0.07 |
| University of Portsmouth | 2.38 | 8 | 2.60 | 5 | -0.23 |
| University of Reading | 2.25 | 8 | 2.05 | 22 | 0.20 |
| University of Salford | 2.00 | 2 | 3.29 | 7 | -1.29 |
| University of Sheffield | 2.28 | 18 | 2.85 | 40 | -0.57 |
| University of Southampton | 2.17 | 6 | 3.24 | 17 | -1.07 |
| University of St Andrews | 2.41 | 17 | 2.76 | 35 | -0.35 |
| University of Stirling | 2.40 | 5 | 3.00 | 8 | -0.60 |
| University of Strathclyde | 1.80 | 5 | 2.94 | 16 | -1.14 |
| University of Surrey | 3.00 | 5 | 2.00 | 8 | 1.00 |
| University of Sussex (IR) | 2.60 | 20 | 3.22 | 18 | -0.62 |
| University of Sussex (Politics) | 3.00 | 7 | 2.91 | 11 | 0.09 |
| University of the West of England | 2.33 | 3 | 2.50 | 11 | -0.17 |
| University of Warwick | 2.20 | 30 | 2.85 | 54 | -0.65 |
| University of Westminster | 2.10 | 10 | 2.73 | 15 | -0.63 |
| University of Winchester | 2.00 | 2 | 2.83 | 6 | -0.83 |
| University of Wolverhampton | 2.50 | 2 | 3.00 | 6 | -0.50 |
| University of Worcester* | - | 0 | 2.00 | 3 | - |
| University of York | 2.12 | 25 | 2.25 | 32 | -0.13 |
| York St John University* | - | 0 | 2.00 | 4 | - |

Note: A positive score indicates that the average female political scientist is more senior than the average male political scientist is in that unit. A score of zero indicates that the average female political scientist and the average male political scientist are of equal seniority in that unit. A negative score indicates that the average female political scientist is less senior than the average male political scientist is in that unit.

* denotes units for which a score could not be calculated because of having either no male or no female political scientists within them.

Table 6: Number \& Percentages of Female \& Male Heads of Unit within each Job Group

| Gender | TF/RF | Lecturer | SL/Reader | Prof. | Total |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Female | 0 | $0(0 \%)$ | $10(48 \%)$ | $10(23 \%)$ | $20(29 \%)$ |
| Male | 0 | $1(100 \%)$ | $11(52 \%)$ | $34(77 \%)$ | $48(71 \%)$ |
| Total | 0 | $1(100 \%)$ | $21(100 \%)$ | $44(100 \%)$ | $68(100 \%)$ |

Table 7: Results of Linear Regression Analysis for Proportion of Female Political Scientists per Unit

|  | $b$ | SE b | b | $p$ |
| :--- | :---: | :---: | :---: | :---: |
| (Constant) | 62.854 | 9.428 |  | 0.000 |
| Million+ Mission Group Member | 32.141 | 9.112 | 0.542 | 0.001 |
| Female VC | -9.735 | 4.268 | -0.286 | 0.028 |
| Proportion of Female Members on Executive Board | -0.228 | 0.117 | -0.246 | 0.058 |
| Proportion of Female Members on Council | -0.364 | 0.175 | -0.251 | 0.043 |
| Non-Member of Athena SWAN* | -27.675 | 9.132 | -0.467 | 0.004 |
| Member of Athena SWAN but No Award* | -10.098 | 5.494 | -0.215 | 0.073 |

$\mathrm{R}_{\text {adj }}^{2}=.366$; * Reference category $=$ Has Athena SWAN award

Table 8: Results of Linear Regression Analysis for Unit-Level Gender Seniority Gap

|  | $b$ | SE $b$ | B | $p$ |
| :--- | :---: | :---: | :---: | :---: |
| (Constant) | 0.081 | 0.164 |  | 0.623 |
| Russell Group Mission Group Member | -0.191 | 0.112 | -0.233 | 0.096 |
| Female Head of Unit | 0.196 | 0.111 | 0.239 | 0.085 |
| Proportion of Female Members on the Executive Board | -0.010 | 0.003 | -0.379 | 0.008 |
| $\mathrm{R}_{\text {adj }}^{2} .176$ |  |  |  |  |

$\mathrm{R}_{\text {adj }}^{2}=.176$


Figure 1: Proportion of Female Politics Students by Degree Level (source: https://www.hesa.ac.uk/data-and-analysis/students/whos-in-he)


Figure 2: Proportion of Female \& Male Political Scientists by Job Group


Figure 3: Proportion of Female Political Scientists in Comparable Units in 2011 vs in 2019


Figure 4: Scatter Plot of Percentage of Female Political Scientists within a Unit versus Gender Seniority Gap of that Unit


Figure 5: Proportion of Female \& Male Heads of Unit by Job Group


Figure 6: Proportion of Female Academics within UK Political Science (sources: Bennie and Topf, 2003; Topf 2009; Bates et al. 2012)
${ }^{i}$ Political Science is understood here as a broad discipline, encompassing International Relations. Thus, all discussion below of political scientists working in the UK also includes international relations scholars.
${ }^{\text {ii }}$ Units were recorded as multidisciplinary, whatever the size, if presented as unitary on the university website.
iii The unit's website was treated as correct at all times.
iv If the gender of the academic could not be assumed from their name and/or photo, then further internet searches were undertaken to ascertain their gender. Unless explicitly stated (e.g. through a stated preference for using the pronouns they/them/theirs), then it was assumed that the academic would identify as either female or male. This is not a perfect method because some non-binary people still use 'he' or 'she'. However we are confident that the method employed will not skew the sample too much.
${ }^{v}$ Except for Teaching and Research Fellows, we did not record whether a job title was teaching and learning specific or whether it also included research. Therefore, for example, we do not know whether, and what proportion of, the increase in female professors discussed below is due to a (gendered) rise in the number of professors in teaching and learning.
${ }^{\text {vi }}$ Political Science and International Relations was treated as one discipline. All academics working within a single disciplinary unit (e.g. the Department of Politics or the Department of Political Science and International Studies) were recorded as political scientists/IR scholars.
vii The Head of Unit is defined as the person in charge of the academic unit included in our dataset and may not be a political scientist. So, for example, within a hypothetical multidisciplinary School of Social Science, the Head of School is recorded as the Head of Unit rather than the Head of the Politics Division.
viii www.ecu.ac.uk/equality-charters/athena-swan/athena-swan-members/. We recorded five different
categories in our dataset: (i) non-member; (ii) member but no award; (iii) bronze award holder; (iv) silver award holder; and ( v ) gold award holder.
${ }^{i x}$ www.gender-pay-gap.service.gov.uk/
x www.millionplus.ac.uk/who-we-are/members; www.russellgroup.ac.uk/about/our-universities/; www.unialliance.ac.uk/alliance-universities/
xi https://www.timeshighereducation.com/features/times-higher-education-v-c-pay-survey-2018
xii It was hoped to collect data on Senate (or equivalent) membership, as well as on the Executive Board and Council (or equivalent) but there were too many institutions where this information was not publicly available or was obviously out of date (for example, membership was listed for the 2016-17 academic year, etc.).
xiii Strictly speaking the outcome of the proportion of female political scientists is a proportion, which is bounded to be between 0 and 1 (or 0 and 100 as a percentage). The approach known as fractional regression is better-suited to this kind of data (Ramalho et al. 2011), but the results from such models tends to be similar to linear regression when most of the data is somewhat middling rather than extreme, as is the case here.
${ }^{\text {xiv }} 18$ political scientists were excluded from this analysis because it was not possible to ascertain their job title from the university webpages.
${ }^{\text {xv }}$ These averages are produced by, first, giving a weighting to each job group as set out in Table 1. The sum of each weighting multiplied by the number of female or male political scientists in the corresponding job group is then divided by the total number of female or male political scientists to produce an average seniority for both female and male political scientists.
xvi Due to changes in how we categorised job titles as described above, it is not possible to offer an accurate comparison to the seniority of the average female and male political scientist in 2011.
${ }^{\text {xvii }}$ This is because of the damage league tables and metrics are causing to academia and female academics (and academics from other minority groups) in particular (see the discussion above and, for example, Gruber, 2014). We now believe such a unit-level approach is neither politically sound nor strategically helpful in helping to improve the position of women within the discipline. Moreover, the results presented here focus on political scientists and many of the multidisciplinary units have an overall gender balance which is (very) different. It is also the case that, as shown below, the proportion of female academics within a unit appears to be influenced by factors beyond the (immediate) control of those people working within them.
xviii There are four units which do not have any female political scientists. All of these units are multidisciplinary and have a small number of political scientists within them. Overall within these four units, the proportion of female academics is at least 39 per cent. When looking at all academics within all the units contained within the analysis, the spread of the proportion of female academics is from 14 to 63 per cent.
${ }^{\text {xix }}$ It is not possible to calculate a gender seniority gap for those four units which do not have any female political scientists.
${ }^{\mathrm{xx}}$ The job title was listed for only 68 of the 77 Heads of Unit for which data was collected.

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[^0]:    ${ }^{\text {xxi }}$ The regression model used for both the proportion of female political scientists and the gender seniority gap reported no issues with collinearity.
    ${ }^{x x i i}$ For an interesting analysis of the economics discipline with a similar or perhaps worse problem than political science, see Buckles (2019).
    ${ }^{\text {xxii }}$ For details of the scheme in the Netherlands, see https://www.nwo.nl/en/funding/our-funding-instruments/nwo/westerdijk-talent-scheme/westerdijk-talent-scheme.html. For details of its success, see https://www.nwo.nl/en/news-and-events/news/2018/03/the-netherlands-gains-100-female-professors.html.

