

# Breaking Through the Glass Ceiling: A Look at Gender and Race in the Higher Education Hierarchy

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## Article

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# Abstract

**Objectives and Design:** A retrospective study examining progress towards diversity at the intersection of gender and ethnicity amongst senior higher education academics and managers in England and Wales. The study aimed to assess any evidence of competing diversity agendas and the impact of diversity initiatives on female racial minorities.

**Data Sources:** Employment records of senior higher education staff were used to assess trends in race and gender. Data on the receipt of Athena SWAN or Race Equality Charter awards by higher education institutions were also collected.

**Study Selection:** The study included higher education institutions in England and Wales, analysing employment records of senior academics and managers for the academic years 2012/2013 to 2018/2019.

**Data Extraction and Preparation:** Employment records were used to extract information on the race and gender of senior staff. Mixed-effects modelling was employed to analyse the relationship between receiving diversity awards (Athena SWAN Silver or Race Equality Charter Bronze) and female racial differences.

**Results:** Ethnic minority females experienced increasing representation in senior staff positions over the study period. However, disparities were observed, with Black females showing fewer signs of advancement. Institutions that received Athena SWAN Silver or Race Equality Charter Bronze awards demonstrated increasing gender and racial diversity, with no evidence of competing diversity effects.

**Conclusion:** The study found evidence of progress in advancing gender and ethnic diversity in senior academic and leadership positions in higher education in England and Wales. Despite this, certain racial groups, such as Black females, faced greater challenges in advancement. The positive impact of diversity initiatives was observed, with no evidence of conflicting diversity agendas. Further research is recommended to investigate structural factors affecting ethnic minorities in higher education, as well as potential effects of the COVID-19 pandemic on the diversity agenda.

## Strengths and limitations of this study

- This is the first quantitative study retrospectively analysing employment records and diversity awards data from five-year data (2012/2013 to 2018/2019) collected from the Higher Education Statistics Agency (HESA) over an extended period, providing a comprehensive view of trends in race and gender representation.
- The study included a wide range of higher education institutions in England and Wales, increasing the generalizability of the results.
- The reliance on employment records may have introduced potential inaccuracies in the data, as self-reported race and gender information may not always be complete or consistent.
- The study focused on the relationship between receiving diversity awards and female racial differences but did not directly examine the implementation and effectiveness of specific diversity initiatives at the institutional level.
- The study period ended in the 2018/2019 academic year, and therefore did not capture the potential effects of the COVID-19 pandemic on the diversity agenda in higher education institutions.

## Introduction

The higher education (HE) sector has long grappled with issues of gender and racial inequality. Despite an increasingly diverse student population, barriers have been identified that may limit women academics from attaining senior positions within the sector, a phenomenon known as the 'glass ceiling' effect (Oberholzer, 2021). Such barriers have also been examined for racial minorities (Jackson & O'Callaghan, 2009). Furthermore, it has been suggested that female racial minorities in the workplace may experience a 'double whammy' of gender and racial barriers (Berdahl & Moore, 2006).

Recent literature highlights the underrepresentation of women, particularly within the professoriate and senior leadership positions (HESA, 2023; Shepherd, 2017; Jarboe, 2019; Meho, 2021). Published figures from the Higher Education Statistics Authority (HESA, 2023) show that while female UK students outnumber male students, within the professoriate only 29.6% were female in 2021/2022. Reasons for this imbalance include differences in gender roles, cultural norms, professional choices, and structural issues within the employment environment (Manfredi, et al, 2019). Despite initiatives like the Athena SWAN Charter aiming to promote gender equality in universities (Xiao et al., 2020), concerns remain about competing diversity agendas between gender and race/ethnicity (Bhopal, 2023; Kalpazidou et al., 2020). Consequently, there have been calls to re-imagine gender diversity initiatives to consider the complex dynamics between gender and race as a 'double marginalisation' (Stockfelt, 2018). Although the Athena SWAN Charter has widened its emphasis in recent years to accommodate issues of racial diversity, attempts to understand and disentangle such dynamics remain at an early stage.

In terms of racial diversity in HE, underrepresentation persists for Black and Asian staff members (ONS, 2022). Regarding racial diversity in HE, Black and Asian staff made up just 1% and 4% of the 'managers, directors and senior officials' in 2021/2022, respectively, while 88% identified as White. The Asian (or Asian British, Asian Welsh) proportion of the general population in England and Wales, according to the recently released census, was at 9.3% in 2021, up from 7.5% in 2011. Meanwhile, the Black (or Black British, Black Welsh, Caribbean, African) proportion of the general population was 4%, up from 3.3% in 2011, suggesting the possibility of considerable underrepresentation in academia (ONS, 2022). The proportion of ethnic minorities in the professoriate was also considerably lower than the proportion among the wider staff and student body (Coughlan, 2021). Possible explanations include the significant attainment gap between White students and Black, Asian, and minority ethnic students (HESA, 2020), and the leaky pipeline phenomenon (Ovseiko et al., 2020).

One explanation for a possibly leaky pipeline is the significant attainment gap between White students and Black, Asian, and minority ethnic students, with White students more likely to receive a first or upper-second-class degree (Universities UK, 2019). Within staff ranks, ethnic minority academics were found to be more likely to move overseas (Bhopal et al., 2016), and a University College Union analysis found a significant pay gap between White and Black academics, with Black academics earning 14% less than their White counterparts (UCU, 2019). In 2019, there were reportedly just 25 Black female professors in the UK of the more than 20,000 professors (Adams, 2020). This is despite the increasingly diverse general and student population. Over a quarter of UK domiciled students are ethnic minorities, and increasing annually (HESA, 2023).

In recent years, Athena SWAN has been updated to encompass a broader diversity agenda, and in 2016, the Equality Challenge Unit (now Advance HE), launched the Race Equality Charter (REC), which applies many of the principles of the Athena SWAN Charter to tackling the issue of racial inequality. As of February 2023, 141 institutions were members of the Athena SWAN Charter, holding 124 institutional awards. Meanwhile, there were 99 Race Equality Charter members, with 38 awards between them. To date, despite the efforts of Advance HE, a discrepancy remains in the number of Charter holders and the integration of these initiatives within institutions, and evidence regarding diversity at the intersection of race and gender in HE has been lacking, including the challenges that may face ethnic minority women (Bhopal & Henderson, 2021; Henderson & Bhopal, 2022; Oloyede et al., 2021).

This study aims to address this gap by examining temporal changes in the representation of ethnic minority females in senior HE positions and assessing the impact of initiatives like Athena SWAN and the Race Equality Charter on promoting female ethnic diversity. By investigating these questions, this study contributes to the understanding of diversity dynamics in HE and provides insights into the effectiveness of existing diversity initiatives.

## Methods

### Data source

The dataset for this study, comprising higher education (HE) staff records from 2012/2013 to 2018/2019 in the UK, was obtained through a custom data request from the Higher Education Statistics Agency (HESA). Data were requested for senior staff using two categories of contract levels: (1) managerial leaders (contract levels A–E2) and (2) academic leaders (contract level F1). Managerial leaders, as defined by HESA, include the Head of the Institution: Vice-Chancellor/Principal/equivalent (A0), Deputy Vice-Chancellor/Pro Vice-Chancellor/Chief Operating Officer/Registrar/Secretary (B0), Head/Director of major academic area (C1), Director of the major function/group of functions (C2), Head of a distinct area of academic responsibility centre size (D1–D3), Head of a subset of an academic area/director of a small centre (E1), and Senior function head (E2); Academic leaders (F1) refer to professors that do not have line management responsibilities (HESA, 2018). The dataset provided by HESA includes Ethnicity, which was self-selected by the staff and is used interchangeably with race in this study. For data protection purposes, the data were rounded to the nearest 5.

Data on Athena SWAN and Race Equality Charter award holders were collected from Advance HE. Athena SWAN supports gender equality in HE at Gold, Silver, Bronze levels: Bronze awards are given to institutions that have an assessment of gender equality and a four-year action plan; Silver awards honour the measurable success of the action plan implementation; and Gold awards recognise the highest achievement in promoting gender equality (Kalpazidou et al., 2020). Some institutions are members of the Charter but do not have awards. REC awards recognize the HE institutions advancing Black, Asian, and Minority Ethnic staff representation according to their accomplishments and receiving a REC Bronze reflects the start of the process to promote racial equality (Advance HE, 2023). Data on Athena SWAN and Race Equality Charter (REC) award holders were collected from Advance HE, with the study using award data updated in February 2023 (Advance HE, 2023; Advance HE, 2023). The analysis included 169 institutions, with 78 institutions holding Athena Bronze, 26 institutions holding Athena Silver, and 38 institutions holding REC Bronze.

## Measures

We collected data on the gender and racial demographics of each HE institution at the senior staff contract levels previously outlined. The outcomes were the percentages of racial minorities (RM) altogether, including Black, Asian, Mixed, and Other races, and the specific racial groups, Black, Asian, Mixed, and Other races females, defined as the number of female staff for the designated contract levels for each institution, year, and race divided by the number of staff in each institution and year. Staff selecting their ethnicity as Unknown/Not Applicable were excluded from the racial minorities (RM) grouping.

The independent variables are Athena SWAN and REC award status. Since no institutions held the Gold award, the study examined four categories of Athena SWAN award: non-Charter members, Charter members, Bronze, and Silver. Similarly, to date, no Silver or Gold REC has been awarded. Therefore, REC awards were studied at the level of non-Charter members, Charter members, and Bronze.

## Statistical analysis

To assess the female racial diversity of senior staff in HE, the study followed a three-step process. First, it compared the trends of percentages by gender and racial minorities. Second, it examined the female racial percentages from 2012/2013 to 2018/2019 descriptively. Lastly, the association between Athena SWAN or REC awards and female percentages of Black, Asian, Mixed, Other races, and the combination of all four (RM) was assessed using mixed-effects modelling.

The models were specified as:

$$FemalePercentage_{ij} = \beta_0 + \beta_1 Athena_j + \beta_2 Year_{ij} + u_{0j} + u_{1j} Year_{ij} + \epsilon_{ij}$$

1

$$FemalePercentage_{ij} = \beta_0 + \beta_1 REC_j + \beta_2 Year_{ij} + u_{0j} + u_{1j} Year_{ij} + \epsilon_{ij}$$

2

$$FemalePercentage_{ij} = \beta_0 + \beta_1 Athena_j + \beta_2 REC_j + \beta_3 Year_{ij} + u_{0j} + u_{1j} Year_{ij} + \epsilon_{ij}$$

3

where the dependent variable is the female percentage calculated using the number of females in each race divided by the total number of senior staff for year  $i$  and institution  $j$ ;  $Athena_j$  is a four-level categorical variable indicating the Athena SWAN award status for institution  $j$  and the reference group is non-Charter members;  $REC_j$  indicates the REC award status for institution  $j$  and the reference group is non-Charter members;  $Year_{ij}$  is a categorical variable representing year 2012/2013 to 2018/2019 for each institution  $j$ ;  $u_{0j}$  is the random-intercept term at the institution  $j$  level to allow for the variation in different institutions;  $u_{1j} Year_{ij}$  is the random-slope term at the institution  $j$  and year  $i$  level accounting for the effect of years on outcomes across different institutions; and  $\epsilon_{ij}$  is the error term.

We examined five models for each of the following three analyses in the study: (1) examining the association between Athena SWAN awards and female percentages of RM, Black, Asian, Mixed, and Other races; (2) examining the association between REC awards and female percentages of RM, Black, Asian, Mixed, and Other races; and (3) examining the association between both awards and female percentages of RM, Black, Asian, Mixed, and Other races. Additionally, we repeated the above three analyses for two contract levels to identify any differences in the effects between managerial leaders and academic leaders. All analyses were conducted in Stata BE 17.0.

## Results

### Descriptive statistics

From 2012/2013 to 2018/2019, the percentage of female senior staff in higher education (HE) increased from 26.3–30.8% (Fig. 1). The overall percentage of racial minority senior female staff rose by 1.9%, with the most significant increase observed in the Asian sub-group (1.4%).

[INSERT FIGURE 1 HERE]

Table 1 shows that the Mixed and Other racial sub-groups experienced consistent growth during the period from 2012/2013 to 2018/2019. In contrast, the trend for Black senior female staff was less consistent. Over the period, the proportion of Asian females doubled, contributing to a similar increase for racial minorities as a whole. However, in 2018/2019, only 0.05% (15) of all senior staff were Black females, and the overall proportion of racial minority females was just 1.6% (475).

Table 1  
Trends of Racial Differences in Females From 2012/2013 to 2018/2019

Year	Total Staff	All RM Female	Black Female	Asian Female	Mixed Female	Other Female
2012/2013	26720	190 (0.7%)	0 (0.0%)	160 (0.6%)	20 (0.1%)	10 (0.0%)
2013/2014	29000	265 (0.9%)	20 (0.1%)	190 (0.7%)	30 (0.1%)	25 (0.1%)
2014/2015	28695	275 (1.0%)	15 (0.1%)	190 (0.7%)	30 (0.1%)	40 (0.1%)
2015/2016	29185	310 (1.1%)	5 (0.0%)	235 (0.8%)	35 (0.1%)	35 (0.1%)
2016/2017	29685	340 (1.1%)	10 (0.0%)	250 (0.8%)	45 (0.2%)	35 (0.1%)
2017/2018	30235	425 (1.4%)	15 (0.0%)	305 (1.0%)	60 (0.2%)	45 (0.1%)
2018/2019	30635	475 (1.6%)	15 (0.0%)	360 (1.2%)	55 (0.2%)	45 (0.1%)

[INSERT Table 1 HERE]

Considering the separate contract levels for managerial and academic leaders (Appendix eTable 1), Asian managerial leaders' percentage more than doubled, from 0.4–1.0%, contributing to the overall percentage of racial minority managerial leaders rising from 0.4–1.3%. However, managerial leaders of Black, Mixed, and Other races showed no clear trend. The proportion of racial minorities was higher among professors than among managers, despite the overall trend for females being greater among managers.

## Mixed effects modelling

Table 2 reveals that Athena SWAN Silver awards were significantly associated with increased percentages of racial minority (RM) ( $\beta = 0.75$ , 95% CI [0.15, 1.35]) and Other ( $\beta = 0.41$ , 95% CI [0.11, 0.71]) race senior female staff compared to non-Charter members. Bronze award holders also showed a positive association for all races, although not significant. Concerning the REC awards (Table 3), REC Bronze recipients were significantly associated with increased percentages of racial minority senior female staff overall ( $\beta = 0.65$ , 95% CI [0.16, 1.14]) compared to non-Charter members.

Table 2  
Mixed Effects Modelling on Athena SWAN Awards

	Model 1 RM Female %	Model 2 Black Female %	Model 3 Asian Female %	Model 4 Mixed Female %	Model 5 Other Female %
<b>Athena SWAN Award</b>					
Non-Charter Member	ref				
Charter Member	-0.17 (-1.02, 0.68)	0.27 (-0.20, 0.75)	-0.39 (-1.44, 0.67)	0.00 (-0.54, 0.54)	0.00 (-0.45, 0.46)
Bronze	0.28 (-0.21, 0.77)	0.08 (-0.22, 0.37)	0.13 (-0.45, 0.71)	0.11 (-0.24, 0.46)	0.04 (-0.22, 0.30)
Silver	<b>0.75 (0.15, 1.35)</b>	0.05 (-0.29, 0.39)	0.46 (-0.21, 1.14)	0.07 (-0.33, 0.47)	<b>0.41 (0.11, 0.71)</b>
<b>Year</b>					
2012/2013	ref				
2013/2014	0.11 (-0.14, 0.35)	0.11 (-0.08, 0.31)	0.01 (-0.25, 0.27)	0.03 (-0.08, 0.14)	0.07 (-0.07, 0.21)
2014/2015	0.16 (-0.09, 0.42)	0.19 (-0.01, 0.39)	-0.02 (-0.29, 0.26)	0.03 (-0.09, 0.15)	<b>0.16 (0.02, 0.30)</b>
2015/2016	<b>0.39 (0.11, 0.66)</b>	0.08 (-0.13, 0.29)	<b>0.29 (0.01, 0.58)</b>	0.02 (-0.11, 0.15)	<b>0.18 (0.03, 0.32)</b>
2016/2017	<b>0.35 (0.06, 0.64)</b>	0.10 (-0.12, 0.31)	0.23 (-0.07, 0.54)	0.03 (-0.12, 0.17)	0.14 (-0.02, 0.29)
2017/2018	<b>0.65 (0.33, 0.97)</b>	0.08 (-0.14, 0.31)	<b>0.53 (0.21, 0.86)</b>	0.09 (-0.07, 0.25)	<b>0.17 (0.01, 0.34)</b>
2018/2019	<b>0.91 (0.56, 1.26)</b>	0.19 (-0.06, 0.44)	<b>0.81 (0.46, 1.16)</b>	0.06 (-0.11, 0.24)	0.15 (-0.02, 0.32)

Table 3  
Mixed Effects Modelling on REC Awards

	Model 1 RM Female %	Model 2 Black Female %	Model 3 Asian Female %	Model 4 Mixed Female %	Model 5 Other Female %
<b>REC Award</b>					
Non-Charter Member	ref				
Charter Member	0.44 (-0.00, 0.89)	0.16 (-0.10, 0.42)	0.29 (-0.21, 0.80)	0.11 (-0.19, 0.41)	0.16 (-0.07, 0.39)
Bronze	<b>0.65 (0.16, 1.14)</b>	-0.01 (-0.29, 0.27)	0.50 (-0.03, 1.04)	0.09 (-0.23, 0.41)	0.13 (-0.13, 0.39)
<b>Year</b>					
2012/2013	ref				
2013/2014	0.11 (-0.14, 0.35)	0.11 (-0.08, 0.31)	0.01 (-0.25, 0.27)	0.03 (-0.08, 0.14)	0.07 (-0.07, 0.21)
2014/2015	0.17 (-0.09, 0.42)	0.19 (-0.01, 0.38)	-0.01 (-0.28, 0.26)	0.03 (-0.09, 0.15)	<b>0.17 (0.03, 0.31)</b>
2015/2016	<b>0.38 (0.11, 0.66)</b>	0.08 (-0.13, 0.29)	<b>0.29 (0.01, 0.58)</b>	0.02 (-0.11, 0.15)	<b>0.18 (0.03, 0.33)</b>
2016/2017	<b>0.35 (0.05, 0.64)</b>	0.10 (-0.12, 0.31)	0.24 (-0.06, 0.54)	0.03 (-0.12, 0.17)	0.14 (-0.01, 0.29)
2017/2018	<b>0.65 (0.33, 0.97)</b>	0.09 (-0.14, 0.31)	<b>0.53 (0.21, 0.86)</b>	0.09 (-0.07, 0.25)	<b>0.18 (0.01, 0.34)</b>
2018/2019	<b>0.91 (0.56, 1.26)</b>	0.19 (-0.05, 0.44)	<b>0.81 (0.46, 1.16)</b>	0.06 (-0.11, 0.24)	0.14 (-0.03, 0.31)

[INSERT Table 2 AND Table 3 HERE]

After including both awards in the model (Table 4), Athena SWAN Silver and REC Bronze awards were not significantly associated with the percentages of overall racial minority female staff. Institutions with Athena SWAN Silver awards were associated with an increase in Other race female percentages ( $\beta = 0.44$ , 95% CI [0.08, 0.80]) compared to non-Charter members. No significant association between Athena SWAN or REC awards and female percentages were observed for Black, Asian, and Mixed races in Tables 2–4.

Table 4  
Mixed Effects Modelling on Athena SWAN and REC Awards

	Model 1 RM Female %	Model 2 Black Female %	Model 3 Asian Female %	Model 4 Mixed Female %	Model 5 Other Female %
<b>Athena SWAN Award</b>					
Non-Charter Member	ref				
Charter Member	-0.31 (-1.17, 0.55)	0.22 (-0.25, 0.70)	-0.48 (-1.54, 0.57)	-0.04 (-0.59, 0.52)	-0.02 (-0.48, 0.44)
Bronze	0.09 (-0.44, 0.62)	0.08 (-0.24, 0.39)	-0.02 (-0.63, 0.60)	0.06 (-0.33, 0.46)	0.05 (-0.23, 0.33)
Silver	0.47 (-0.19, 1.13)	0.08 (-0.29, 0.44)	0.25 (-0.49, 0.98)	0.01 (-0.46, 0.48)	<b>0.44 (0.08, 0.80)</b>
<b>REC Award</b>					
Non-Charter Member	ref				
Charter Member	0.37 (-0.10, 0.84)	0.13 (-0.14, 0.40)	0.26 (-0.27, 0.79)	0.10 (-0.23, 0.43)	0.06 (-0.17, 0.30)
Bronze	0.48 (-0.07, 1.02)	-0.04 (-0.34, 0.27)	0.41 (-0.17, 1.00)	0.07 (-0.31, 0.46)	-0.07 (-0.35, 0.22)
<b>Year</b>					
2012/2013	ref				
2013/2014	0.11 (-0.14, 0.35)	0.11 (-0.08, 0.31)	0.01 (-0.25, 0.27)	0.03 (-0.08, 0.14)	0.07 (-0.07, 0.21)
2014/2015	0.17 (-0.09, 0.43)	0.19 (-0.01, 0.38)	-0.01 (-0.29, 0.26)	0.03 (-0.10, 0.15)	<b>0.16 (0.02, 0.30)</b>
2015/2016	<b>0.39 (0.12, 0.66)</b>	0.08 (-0.14, 0.29)	<b>0.30 (0.01, 0.58)</b>	0.02 (-0.11, 0.15)	<b>0.18 (0.03, 0.33)</b>
2016/2017	<b>0.36 (0.06, 0.65)</b>	0.09 (-0.12, 0.31)	0.24 (-0.06, 0.54)	0.03 (-0.12, 0.17)	0.14 (-0.01, 0.29)
2017/2018	<b>0.66 (0.34, 0.98)</b>	0.08 (-0.15, 0.31)	<b>0.54 (0.21, 0.86)</b>	0.09 (-0.07, 0.25)	<b>0.18 (0.01, 0.34)</b>
2018/2019	<b>0.92 (0.57, 1.27)</b>	0.19 (-0.06, 0.43)	<b>0.82 (0.46, 1.17)</b>	0.06 (-0.11, 0.24)	0.15 (-0.02, 0.32)

[INSERT Table 4 HERE]

When examining contract levels separately, the association between Athena SWAN Silver and female racial minorities overall was not significant for each staff level (Appendix eTable 2 and eTable 4). In contrast, for academic leaders, REC membership ( $\beta = 0.52$ , 95% CI [0.07, 0.97]) and REC Bronze awards ( $\beta = 0.60$ , 95% CI [0.12, 1.09]) were associated with increased percentages of racial minority females overall compared to non-REC members (Appendix eTable 3). After adding Athena SWAN awards to the model (Appendix eTable 4), these positive associations between REC awards and RM female percentages remained significant (REC membership:  $\beta = 0.50$ , 95% CI [0.03, 0.96]; REC Bronze:  $\beta = 0.53$ , 95% CI [0.01, 1.05]). No association was found in eTables 2–4 for Black, Asian, Mixed, and Other races, respectively.

## Discussion

The findings of this study contribute to the expanding body of research on diversity in higher education. Results indicate that although gender and ethnic diversity within higher education institutions have gained attention in recent years, progress in diversity, particularly at the intersection of gender and race, has been inconsistent. While there was an overall increase in the percentage of females and a year-on-year increase in the percentage of ethnic minority females, certain racial subgroups, such as Black females, did not demonstrate consistent progress and appear underrepresented compared to the wider population. Furthermore, the relatively lower percentage of Black females in managerial positions compared to professoriate positions, which contrasts with the general female trend, may suggest that while the glass ceiling for female leaders is being broken, progress from academic roles into leadership roles for some female ethnic minorities may be lagging behind.

The study found no evidence of competing diversity agendas and showed that higher awards in Athena SWAN or Race Equality Charter programs may have a modest positive impact on improving the representation of female racial minorities. Athena SWAN Silver and REC Bronze awards were associated with an increase in percentages of racial minority women in senior higher education ranks, although this association was not significant when including both awards in the models. For academic leaders, institutions that were REC members or received a REC Bronze award were associated with higher percentages of female racial minorities compared to non-REC members. Among

racial minority sub-groups, Athena SWAN Silver had a positive association with the percentages of Other race female staff compared to non-Charter members.

These findings may alleviate concerns that focusing on gender diversity could hinder racial diversity (Bhopal & Henderson, 2022), but it is evident that more work is needed to address barriers faced by certain underrepresented groups, such as Black females. The lack of progress in increasing Black female representation in senior ranks is potentially concerning, especially considering the increasing diversity of the general and student populations (HESA, 2023; HESA, 2020). Future research should further investigate reasons for this underrepresentation.

Several limitations of this study should be considered when interpreting the results. First, the study only includes data from a seven-year period, which may not capture longer-term trends in diversity in leadership positions. There are some concerns that the COVID-19 pandemic may have hampered the sectoral advancements made by women (Stadnyk & Black, 2020). The decision by the National Institute for Health Research (NIHR) to remove the prerequisite that institutions seeking funding have a Silver Athena SWAN award was also noteworthy, with the administrators citing an effort to reduce administrative burden (Ovseiko et al., 2020). As educational institutions have resumed conventional teaching and research practices, it is clear that up-to-date work is needed to understand and address gender and racial inequalities in the HE sector. A longer time frame and the period since the COVID-19 pandemic would provide a more comprehensive understanding of the impact of diversity initiatives on representation in leadership positions. Additionally, the study only examined two types of diversity initiatives (Athena SWAN and REC awards) and did not consider other potential factors that could impact representation in leadership positions, such as organizational culture or prior award status. Furthermore, the study does not address the situation facing male ethnic minorities or attempt to determine what levels of representation would constitute proportionate representation for each racial group. Future research could examine the characteristics of institutions to identify barriers affecting the advancement of certain minorities, such as the Black community, in higher education.

## Conclusion

Tackling gender and racial inequalities in the higher education (HE) sector requires implementing a range of measures that could lead to significant public health implications for medical journal readers. One approach involves enhancing diversity in the hiring process through targeted recruitment efforts and blind review processes, which remove personal information from job applications (Ovseiko et al., 2020). Additionally, universities can create a more inclusive and flexible work environment by offering improved work-life balance and family-friendly policies (Manfredi et al., 2019).

Another strategy to promote diversity in the HE sector is investing in mentorship and support programs for underrepresented groups. This can include providing access to networking opportunities, professional development resources, and career guidance (Ovseiko et al., 2020). Universities can also cultivate a more inclusive culture by promoting and celebrating diversity and ensuring diverse voices are heard (Ovseiko et al., 2017).

It is crucial to acknowledge that addressing gender and racial inequalities in the HE sector is a complex and ongoing process, necessitating consistent efforts from institutions and individuals to create meaningful and lasting change. The focus should not be on adding superficial administrative burdens but rather on fostering an institutional mindset to remove structural barriers to equality and diversity. By collaborating in pursuing diversity and inclusion, it is possible to create a more equal and inclusive higher education sector that benefits everyone.

## Declarations

**Competing interests:** The authors declare no competing interests.

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**Role of the Funder/Sponsor** The sponsor had no role in the design and conduct of the study; collection, management, analysis, and interpretation of the data; preparation, review, or approval of the manuscript; and decision to submit the manuscript for publication.

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### Competing Interests

The authors declare no competing interests.

**Informed Consent:** This study contained data supplied by an official statistics agency and involved no personal or identifiable information.

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## Figures

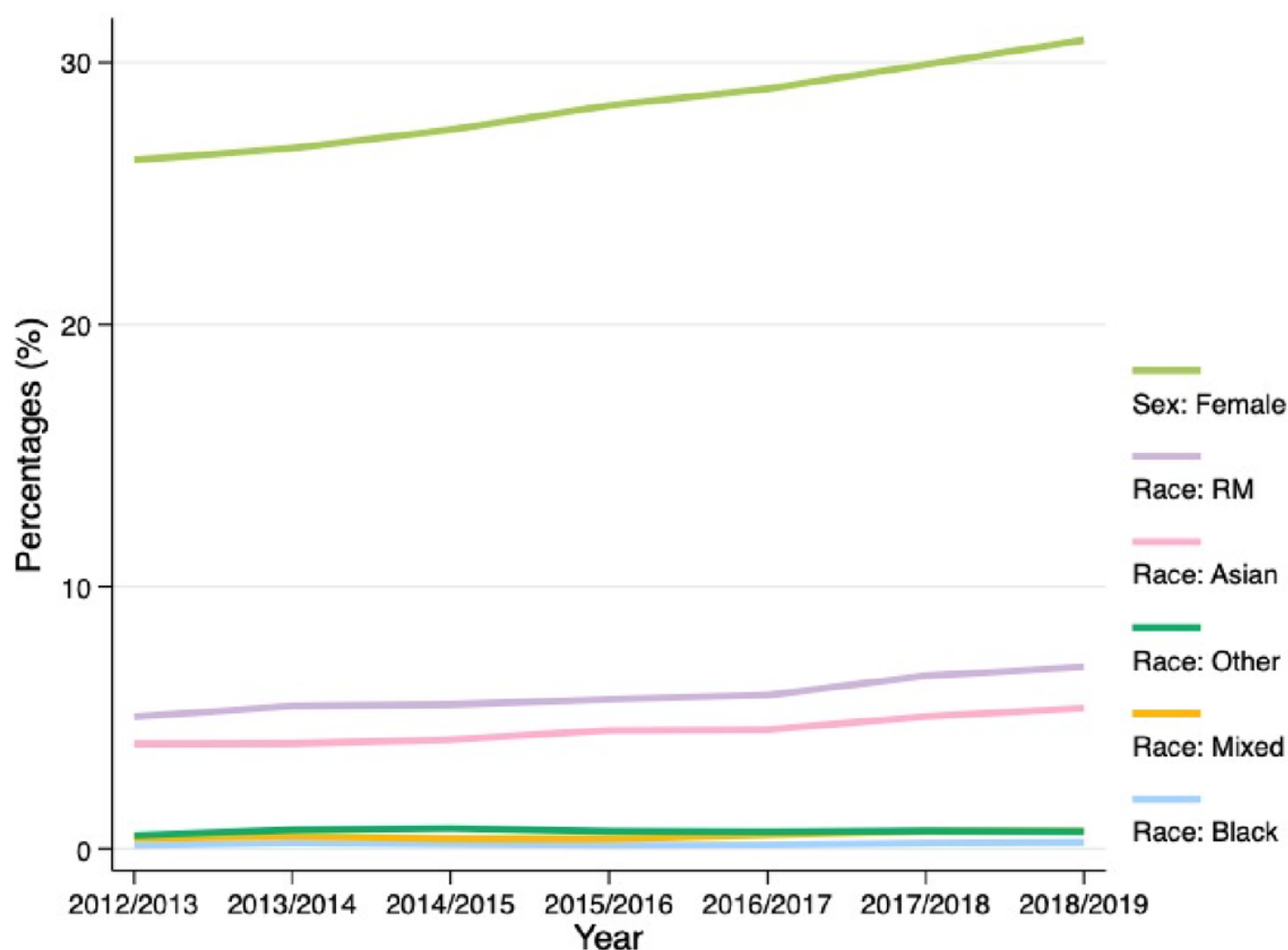


Figure 1

## Supplementary Files

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