UKRI

UK Research and Innovation

Detailed ethnicity analysis of funding applicants and awardees
2015–16 to 2019–20

Executive summary

UKRI is updating its detailed ethnicity analysis of funding applicants and awardees to include results for the 2019-20 financial year. This report describes trends over the five-year period from 2015-16 to 2019-20. It is an update of our previous detailed ethnicity analysis published in December 2020, which contains results for the five-year period 2014-15 to 2018-19.

This report also follows on from the release of diversity data for the 2019-20 financial year published in March 2021. That release included analysis broken down by two ethnic groups: ethnic minorities and white. Here, results are presented for more detailed ethnic categories. This is the last time that ethnicity analysis will be published in these two stages. For the next financial year, detailed ethnicity analysis will be incorporated into the main diversity data release.

In this publication, data on the number and proportion of applicants and awardees is shared, alongside award rates[1].

- Results are presented for detailed ethnicities to highlight the variation within the ethnic minority groups.
- Results are presented by:
  - ethnicities (Asian-Bangladeshi, Black-African, Mixed-Other etc.)
  - ethnic groups (Asian, Black, Mixed[2]).
- In this publication, we present results for UKRI for three application roles (Principal Investigator (PI), Co-Investigator (CI) and Fellow) and for studentship starts.
- Results are presented for the five-year period from 2015-16 to 2019-20. Cumulative totals for this period and data for the full time series (2014-15 to 2019-20) are available in the accompanying data downloads.
- For the first time data is also provided for individual research councils by ethnic group. Numbers become small at this level of disaggregation so figures at the research council level are only available for broad ethnic groups and have been aggregated over five financial years (2015-16 to 2019-20).

Key findings

- Figures for 2019-20 within the ethnic minority groups are broadly consistent with previous financial years and year-on-year changes are small.
- In all five financial years the largest proportion of ethnic minority applicants and awardees was for the CI role, followed by Fellows and then PIs.

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1 Award rates are not discussed in the narrative due to small numbers of awardees from ethnic groups comprising ethnic minorities, which limits the validity of comparisons amongst groups. The results are presented in the MS Excel spreadsheets. Discussion of differences in award rates between aggregated ethnic minority and white applicants can be found in our previous publication https://www.ukri.org/wp-content/uploads/2021/03/UKRI-300321-DiversityResultsForUKRIFundingData2014-20.pdf.

2 See Table 1 for a complete mapping of ethnicities to ethnic groups.

- As in previous years, across the ethnic minority groups applicants from the Asian ethnic group form the largest share, followed by applicants from the Mixed and then the Black ethnic group.

- There is further variation within each ethnic group. For example, applicants from Chinese and Indian ethnicities form the largest share amongst the Asian ethnic group whilst the smallest ethnicities are Pakistanis and Bangladeshis. For the Black ethnic group, applicants of African ethnicity form the largest share as PIs and CIs and applicants of Black-Other and Caribbean ethnicities form the smallest share as PIs and CIs.

- The proportion of PI awardees reporting they are from an ethnic minority increased in 2019-20 by 3 percentage points (pp) to 12%; however, it continues to remain below the Higher Education Statistics Agency (HESA) academic staff share of ethnic minorities which is used as a benchmark for the figures. For more information on the HESA data and why it is used as a benchmark, see the data sources section of this report.

- Over the five-year period from 2015-16 to 2019-20, the proportion of CI and Fellow awardees reporting they are from an ethnic minority has increased by 5pp to 18% and by 6pp to 17% respectively.

- The proportion of awardees for some ethnic groups and ethnicities exceeds the benchmark populations used, whereas the converse is true for others. For example, the share of PI awardees from the Black ethnic group and the Bangladeshi ethnicity are below their labour market and HESA academic staff shares. In contrast, the share of PI awardees and researchers from the Chinese ethnicity is greater than their labour market share and in line with the HESA academic staff share.

- For studentship starts, we continue to not hold ethnicity information for almost 30% of awardees. As a result, our understanding of the ethnic composition of studentship starts is partial. Ethnic minority students form 10% of the awardees who disclosed their ethnicity in 2019-20. Students from the Asian ethnic group are the largest ethnic minority group followed by the Mixed and then the Black ethnic group.

- Variation is seen for all role types and studentship starts across the research councils. For some research councils the number of applications and awardees from ethnic minority groups are very small, in particular for PIs and Fellows. This limits our ability to make valid comparisons between groups. Large differences in proportions or award rates do not necessarily translate to large differences in the numbers at council level.

These figures should not be interpreted as a causal relationship between ethnicity and application and award rates as other factors that affect these things (such as career stage and geographic location) are not controlled for in this analysis. Additional exploration is also needed to understand the barriers faced by researchers from certain ethnic groups when applying for research funding.
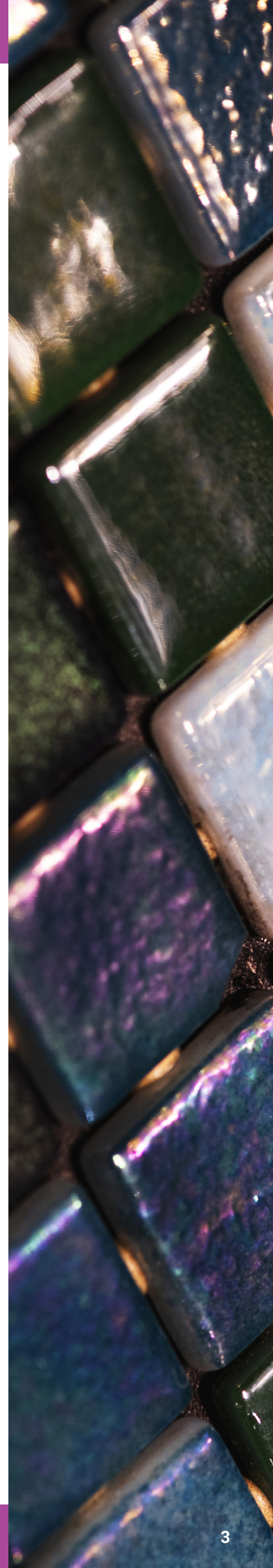
Introduction

This report and the accompanying data allow us to understand the patterns of funding applications and awards of ethnic minority groups for financial years 2015-16 to 2019-20.

We are providing our results in MS Excel files for three application roles (PI, CI and Fellow[3]) and studentship starts. We present the following results by ethnic group and ethnicity:

- number and proportion of applicants
- number and proportion of awardees
- award rates[4].

Only the number and proportion of awardees is provided for studentships as diversity data for studentships is collected in a different way to data for research grants and fellowships. See the data sources section for more detail.

Data presented in the main ethnic group and detailed ethnicity data tables is aggregated for the seven research councils[5]. Previously, data for individual research councils by ethnic group has not been published as the numbers become too small when disaggregated by ethnicity. For the first time data has been aggregated for individual research councils over the five-year period (2015-16 to 2019-20) and this is provided in a separate data download. This enables some exploration of differences for the ethnic minority groups at the research council level. Note that differences in the demand and nature of funding mean that award rates should not be compared across councils. Instead, variation in differences in award rates by ethnic group for each council would be more insightful for cross-council comparison.

In this report, we also provide comparisons with the HESA academic staff population and the labour market (employed) population. These populations act as a benchmark for the figures and help to understand whether applicants, awardees and students reflect the underlying population of students and staff within higher education[6].

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3 Results for detailed ethnicities (such as Asian-Bangladeshi and Black-African) are not presented for Fellowship applicants and awardees as the numbers become small at this level of disaggregation.

4 Award rates are not discussed in the narrative due to small numbers of awardees from ethnic groups comprising ethnic minorities, which limits the validity of comparisons amongst groups. The results are presented in the MS Excel spreadsheets. Discussion of differences in award rates between aggregated ethnic minority and white applicants can be found in our previous publication https://www.ukri.org/wp-content/uploads/2021/03/UKRI-300321-DiversityResultsForUKRIFundingData2014-20.pdf

5 Two of UKRI's constituent bodies – Research England and Innovate UK – predominantly fund organisations (universities and businesses, respectively) rather than individuals, which is why they are excluded from our analysis. Diversity data for universities is collected, analysed and published by HESA. See: Higher Education Staff Statistics: UK, 2019/20|HESA. Our approach going forward is to strengthen and align data collection across all UKRI bodies.

6 Labour market share refers to people in employment (aged 16 to 64). Academic staff share refers to those in both teaching and research contracts. See the data sources section for further details.

In summary, data tables included alongside the narrative are:

- UKRI applications and awards for the ethnic groups including full time series data (2014-15 to 2019-20) for individual financial years and a five-year cumulative total (2015-16 to 2019-20)

- UKRI applications and awards for detailed ethnicities including full time series data (2014-15 to 2019-20) for individual financial years and a five-year cumulative total (2015-16 to 2019-20)

- applications and awards for the ethnic groups and individual research councils aggregated over five financial years (2015-16 to 2019-20)

- estimates of UK academic staff and postgraduate research (PGR) populations for each research council based on HESA data (2018-19 academic year[7]).

This release is an update on the previous detailed ethnicity publication, where differences in applications and awards for detailed ethnic categories and aggregate ethnic groups were published for financial years 2014-15 to 2018-19. It also follows on from the release of data for other diversity characteristics for the 2019-20 financial year published in March 2021. That release contained results for the two ethnic groups: ethnic minorities and white. Moving forward, UKRI will combine these two diversity publications into one so that detailed ethnicity is analysed in the same report as other diversity characteristics.

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7 HESA benchmarks for the research councils refer to the 2018-19 academic year as this is the most recent year available.

Ethnicity categories

- Research grant and fellowship applicants are presented with the Office for National Statistics (ONS) harmonised list of ethnicity options in their individual Joint electronic submission (Je-S) accounts.

- In the March 2021 publication of data for other diversity characteristics, ethnicity data was released for two ethnic groups: ethnic minorities and white. As described in the Introduction, UKRI is moving away from using this binary categorisation as it conceals variation within and between ethnic minority groups.

- Here, results are presented for:
    - detailed ethnicities selected in Je-S
    - aggregated ethnic groups (Asian, Black and Mixed) as described in Table 1.

- Applicants have the option to not disclose their ethnicity in Je-S. These applicants and awardees are categorised as 'Not Disclosed'. Applicants who have not provided their details at all are categorised as 'Unknown'. Note that we do not have information on 6-10% of applicants and awardees for research grants and fellowships for the financial year 2019-20.

- For studentships, we do not have ethnicity information (either Unknown or Not Disclosed) for 29% of studentship starts in the financial year 2019-20[8].

Table 1: Ethnicity categories

	Ethnic group	Ethnicities (Options in Je-S)
Ethnic minority	Asian	Bangladeshi
		Chinese
		Indian
		Pakistani
		Any other Asian background
	Black	African
		Caribbean
		Any other Black/African/Caribbean background
	Mixed	White and Asian
		White and Black African
		White and Black Caribbean
		Any other Mixed/Multiple ethnic background
	White	British
		Irish
		Any other White background

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8 Demographic information for studentships is collected through the studentship functionality in Je-S, where awarding research organisations input information on studentship recipients.

Key findings

This section discusses key findings for the five-year period (2015-16 to 2019-20). Data for the full time series (2014-15 to 2019-20) can be explored further in the accompanying MS Excel downloads.

Research grants and fellowships

1. According to the 2019/20 HESA[9] staff data, 15% of academic staff are from ethnic minorities. This is close to the proportion of working age people from ethnic minorities in employment according to Annual Population Survey labour market data (13% in 2019)[10].

2. As shown in Figure 1, the proportion of awardees from ethnic minorities has increased for all three roles over the five-year period from 2015-16 to 2019-20, with the largest increase for Fellows (+6pp). It is too early to tell whether changes in 2019-20 compared with 2018-19 represent changes to these trends or whether these changes are simply year-on-year variation. Additional data collected over future financial years will help to understand changing trends over time.

■ In 2019-20, 18% of CI awardees reported that they are from an ethnic minority. This represents a small decrease (1pp) on 2018-19. From 2017-18 onwards, the share of ethnic minority CI awardees exceeds the ethnic minority share of academic staff and the employed population. In 2019-20 this difference was 3pp for academic staff and 5pp for the employed population.

■ At 17%, the proportion of Fellow awardees who reported they are from an ethnic minority exceeded the HESA share of ethnic minority academic staff in 2019-20 by 2pp. There was a small decrease in the proportion of ethnic minority Fellow awardees (1pp) in 2019-20 compared with 2018-19.

Figure 1: Proportion of ethnic minority awardees by role and year (2015-16 to 2019-20)
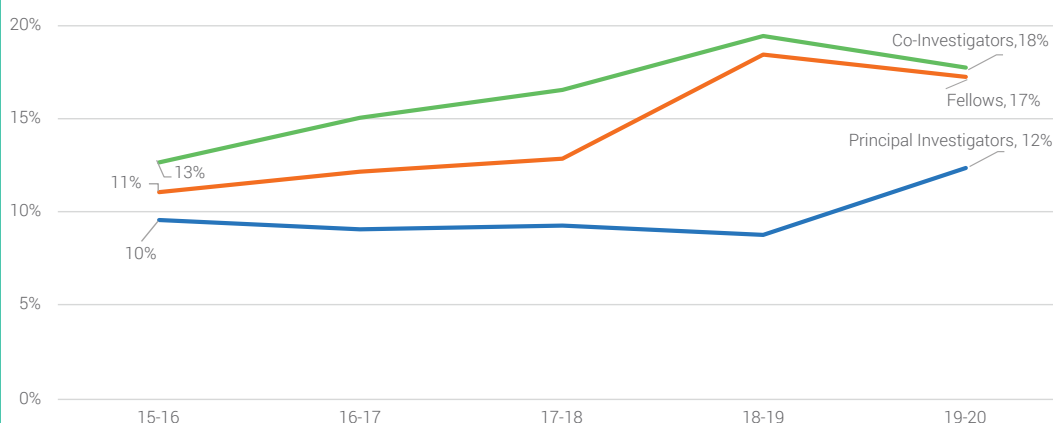
Source: Je-S

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9   Further details can be found here: https://www.hesa.ac.uk/data-and-analysis. Note that the HESA staff data is based on the 2019/20 academic year.

10 Labour market data: https://www.ethnicity-facts-figures.service.gov.uk/work-pay-and-benefits/employment/employment/latest#by-ethnicity. Note that the labour market data is based on the 2019 Annual Population Survey and only covers England, Wales and Scotland.

■ The proportion of PI awardees reporting they are from an ethnic minority has increased by 2pp over the five-year period. However, at 12% in 2019-20 this continues to be below the academic staff share and the employed population's share of ethnic minorities by 3pp and 1pp respectively.

3. Within the ethnic minority groups, the Asian ethnic group forms the largest share (three-fifths or more) of applicants and awardees for all three roles. For PIs and Fellows, the Asian ethnic group was followed by the Mixed ethnic group first and then the Black ethnic group. However, for CIs the Asian ethnic group was followed by the Black ethnic group first and then the Mixed ethnic group. Figure 2 compares the share of awards for the Black, Asian and Mixed ethnic groups in 2019-20 for each role with the HESA academic staff and employed populations.

■ The share of PI awardees from the Asian and Mixed ethnic groups is above the employed population share by 2pp. However, the share of PI awardees from the Black ethnic group is below the employed population share by 2pp.

■ For CI awardees, the share of all three ethnic minority groups is higher than or equal to both the academic staff and employed population share.

Figure 2: Awardee share for ethnic minority groups compared with academic staff and employed populations, 2019-20
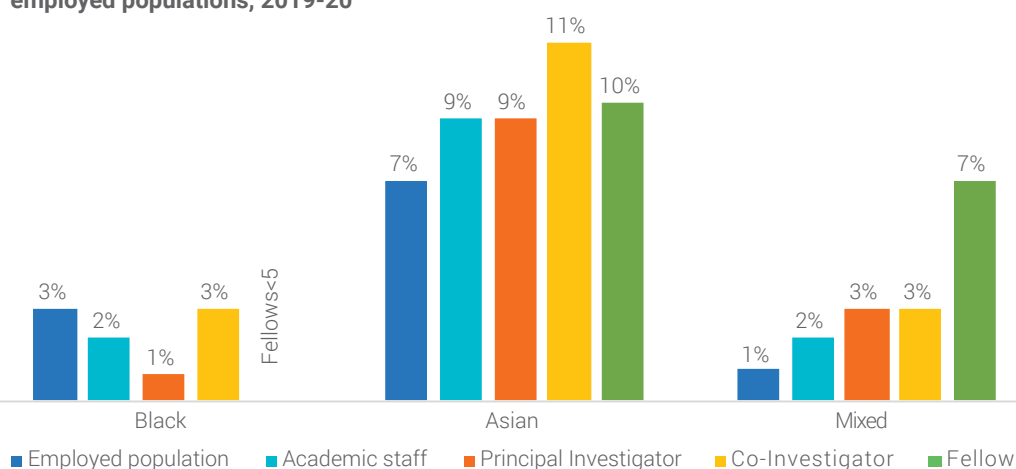
Sources: Annual Population Survey, 2019; 2019/2020 HESA staff data; Je-S

Notes:

1. 'Fellows<5' indicates where there were between one and four awardees. Percentages for counts between one and four are not shown.

2. Percentage shares for PIs, CIs and Fellows reflect the 2019-20 financial year whilst figures for the employed population and academic staff reflect the 2019 calendar year and 2019/20 academic year respectively. Caution must therefore be used when drawing comparisons.

3. Mixed refers to Mixed ethnic group.

4. Approximately 75 Fellow awardees reported they are from an ethnic minority group in 2019-20. This proportion has increased from 11% in 2015-16 to 17% in 2019-20.

■ Around 40 Fellow awardees reported they are from the Asian ethnic group and around 30 from the Mixed ethnic group in 2019-20.

- The share of Fellow awardees reporting they are from Asian and Mixed ethnic groups is higher than the corresponding share of academic staff in 2019-20 (Figure 2).

- Fewer than five Fellow awardees reported they are from the Black ethnic group each year.

5. Within each ethnic group, we find similar patterns for all three roles in the period between 2015-16 and 2019-20.

- Amongst the Asian ethnic group, Chinese and Indian ethnicities collectively form approximately 70% of Asian ethnic minority applicants and awardees, followed by those from Asian-Other, Pakistani and Bangladeshi ethnicities. The share of PI awardees from the Bangladeshi ethnicity is below the employed population share whereas the Pakistani ethnicity share is in line with the academic staff and employed population (Figure 3).

- Within the Black ethnic group, the Black-African ethnicity has the largest share of both applications and awards in PI and CI roles. Black-Other and Black-Caribbean follow the Black-African ethnicity and have the smallest shares of applications and awards for PIs and CIs. The Black ethnic group awardee share is below the academic staff and employed population.

- Within the Mixed ethnic group, the Mixed-Other ethnicity has the largest share of awards in all roles, followed by those from the Mixed-White and Asian ethnicity.

- These patterns are consistent over the last five years.

Figure 3: Prinicipal Investigator (PI) awardee share for ethnic minority groups compared with academic staff and employed populations, 2019-20
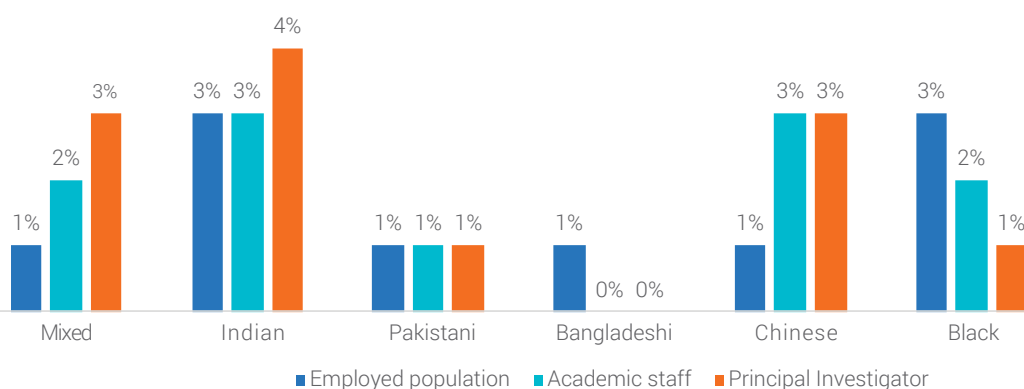

Sources: Office for National Statistics (Oct-Dec 2020); 2019/2020 HESA staff data; Je-S

Notes:

1. Figures are shown for the aggregated Mixed and Black ethnic groups as further disaggregation of the employed population by ethnicity for these groups is not available.

2. There are approximately five PIs from the Bangladeshi ethnicity. Due to rounding, the proportion of PIs for this group appears as 0%.

3. Percentage shares for PIs reflect the 2019-20 financial year whilst figures for the employed population and academic staff reflect Oct-Dec 2020 and the 2019/20 academic year respectively. Caution must therefore be used when drawing comparisons.

4. Mixed refers to Mixed ethnic group

6. During the five-year period from 2015-16 to 2019-20 the percentage of CI applicants reporting they are from an ethnic minority increased from 13% to 23% (Figure 4). This 10pp increase is the largest amongst all three roles. The relative proportion from each ethnic minority group has stayed constant, with applicants and awardees from the Asian ethnic group continuing to form approximately two thirds of ethnic minority applicants and awardees.

Figure 4: Percentage of Co-Investigator applications for the ethnic minority groups by year (2015-16 to 2019-20)
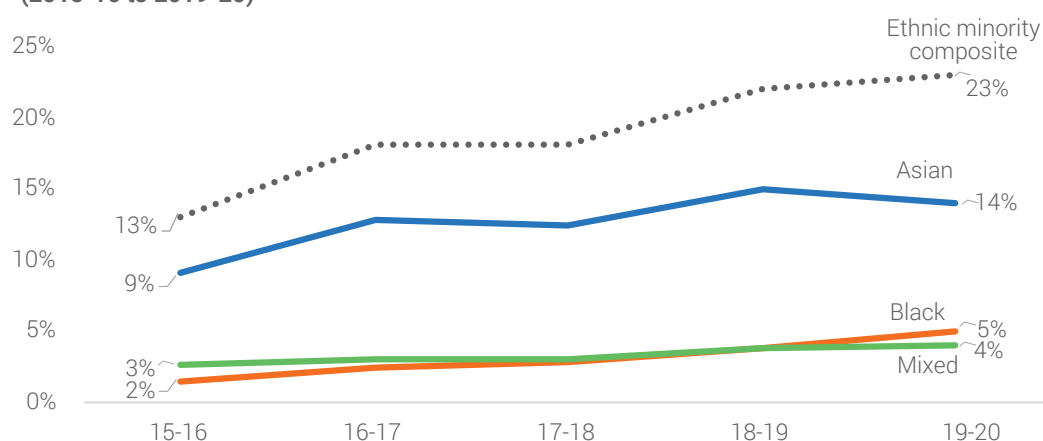
Source: Je-S

Notes:

1. Mixed refers to Mixed ethnic group.

2. The ethnic minority composite is the sum of the Asian, Black and Mixed ethnic groups. See Table 1 for more detail.

Studentship starts funded by UKRI

7. For doctoral studentship starts in 2019-20, 10% of students reported they are from an ethnic minority. The HESA estimate of the proportion of ethnic minority students in postgraduate research (PGR)[11] in the UK is 18% in 2019/20[12]. The proportion of studentship recipients reporting they are from an ethnic minority has increased by 3pp in the five-year period. Note that we continue to not hold ethnicity information for almost 30% of studentship starts in all years, meaning our understanding of ethnicity of studentships is partial.

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11 Postgraduate (research) includes doctorates (incorporating New Route PhDs), masters degrees and postgraduate diplomas or certificates studied primarily through research. As a result, the diversity data for PGR population is not fully comparable to studentship starts.

12 The ethnic minority composite for HESA PGR is the sum of the following ethnicities: Asian, Black, Mixed and Other.

8. Trends for studentship starts in 2019-20 are very similar to 2018-19. Of the students reporting they are from an ethnic minority group, approximately half reported they are from the Asian ethnic group, followed by the Mixed and Black ethnic groups respectively. As shown in Figure 5, the Asian ethnic group forms the largest share of both ethnic minority studentship starts and PGR students. The proportion of PGR students from Mixed and Black ethnic groups are both 4% in 2019-20 compared with 3% of studentship starts for the Mixed ethnic group and 1% for the Black ethnic group. As above, note that estimates for studentship starts are likely to be affected by the missing data on students' ethnicity.

9. Patterns within the Asian, Mixed and Black ethnic groups for studentship starts are relatively consistent over the five-year period.

- Students from Chinese and Indian ethnicities form around 60% of all studentship starts within the Asian ethnic group.

- Within the Black ethnic group, the most frequently reported ethnicity for studentship starts each year was Black-African. In 2019-20, approximately 60% of studentship starts within the Black ethnic group reported they are from the Black-African ethnicity.

- Within the Mixed ethnic group, the most frequently reported ethnicity for studentship starts each year was Mixed-Other. In 2019-20, 59% of studentship starts within the Mixed ethnic group reported they are from a Mixed-Other ethnicity.

Figure 5: Studentship starts by ethnic minority group compared with the postgraduate research population (2019-20).
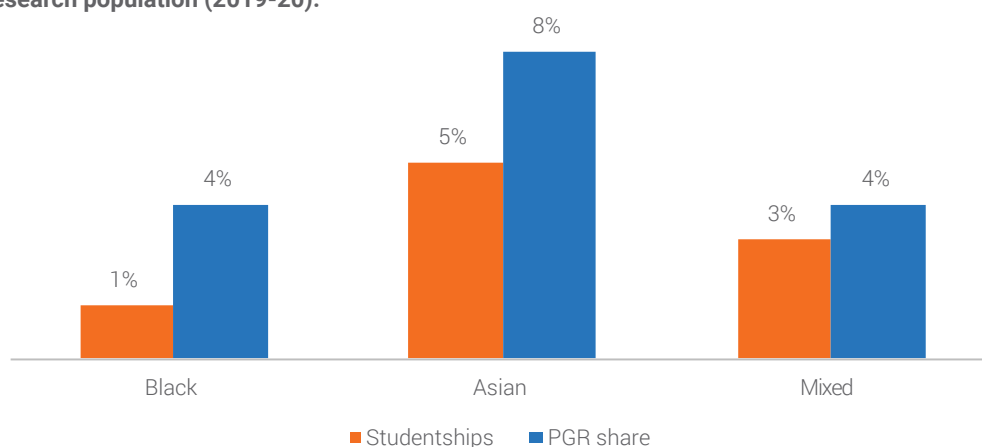
Source: Je-S, 2019/20 HESA student data

Notes:

1. We do not have ethnicity data for approximately 30% of all studentship awardees, meaning our understanding of the ethnicity of studentships is partial.

2. It is important to note that there are differences between the HESA PGR population and those who are eligible for UKRI-funded doctoral studentships. For example, the HESA PGR population only includes UK-domiciled students. The HESA PGR population also reflects the 2019/20 academic year whereas UKRI studentship start data reflects the 2019-20 financial year. Caution must therefore be used when making comparisons.

3. Mixed refers to Mixed ethnic group.

Limitations

1. Whilst our data describes the patterns of funding applications and awards amongst ethnicities, it cannot be used to explain the variations. Further research, including qualitative or survey-based enquiries, is needed to understand the factors driving these trends.

2. The relatively high proportion of 'Not Disclosed' and 'Unknown' for studentship recipients hinders our ability to gain a complete understanding of the diversity profile of studentship starts. As described earlier, studentship diversity information is collected differently from that for applicants for research grants and fellowships. Diversity information for studentships is provided by the awarding research organisation using the Je-S studentship detail functionality.

3. Caution must be used when making comparisons with HESA academic staff, PGR and employed populations. Different time periods, geographic coverage and inclusion criteria mean the populations are not directly comparable with who UKRI funds. Figures are provided as an approximate benchmark to help with interpreting the data.

Data sources

1. Funding data for research grants and fellowships is gathered through returns by individuals to their Je-S accounts, which the research community use to apply for UKRI funding. The Je-S accounts hold personal information including ethnicity.

2. Studentship data for student starts by year is provided by research organisations through the Je-S studentship detail functionality.

3. HESA data is used to understand the diversity profile of the academic and student community in the UK's higher education system. The links for HESA staff and student data we used as benchmarks in this analysis and for Figures 2, 3 and 5 is provided here:

    a. HE student enrolments by personal characteristics (Figure 5, option of 'level of study': postgraduate (research), academic year: 2019/20)

    b. HE academic staff by ethnicity and academic employment function (Table 4, option of 'academic employment function': both teaching and research, academic year: 2019/20).

Note that HESA staff and student data refers to academic years and that HESA student data on ethnicity is for UK-domiciled students only.

4. Labour market data for Figure 2 is from:

https://www.ethnicity-facts-figures.service.gov.uk/work-pay-and-benefits/employment/employment/latest#by-ethnicity

Share by ethnicity is based on percentage of 16 to 64-year-olds who were employed in 2019. These figures cover England, Wales and Scotland only and not the whole of the UK.

5. Labour market data for Figure 3 is from:

https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/datasets/labourmarketstatusbyethnicgroupa09

Share by ethnicity is based on 'labour market status: employment by ethnicity: people (not seasonally adjusted)' aged 16-64 (Oct-Dec 2020).

Technical notes and additional information

1. Numbers and proportions for groups with one to four members are suppressed. Numbers greater than five are rounded to the nearest multiple of five. Counts of zero are not suppressed. Proportions are based on unrounded numbers.

2. There may be small differences in the percentages shown compared with previous publications due to changes in the rounding methodology.

3. Awards under the cross-UKRI Future Leaders Fellowship scheme are included in this report within the totals.

4. Note that certain grants are excluded from this analysis: for example, institute grants and grants with 100% award rates are not included. Research grants and fellowships with two or more PIs or Fellows are also not included in the diversity analysis. See the report published here for further details: (https://www.ukri.org/wp-content/uploads/2021/03/UKRI-300321-DiversityResultsForUKRIFundingData2014-20.pdf)

5. The dataset contains instances of applicants applying multiple times.

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