Detailed Ethnicity Analysis

EPSRC application and award outcomes for research grants and fellowships.
EPSRC peer review participation.
EPSRC doctoral studentships.
Contents

Aims of our detailed data investigation and community engagement 03
Background information and previous publications 04
Summary of findings: application and awards 05
Summary of findings: peer review participation 06
Guidance, technical notes and data sources 07
EPSRC applications, awards and award rates 10
HESA ethnic minority population proportions 12
Proportions of applicants and awardees by detailed ethnicity categories 13
Ethnic group breakdown Level 1 – all ethnic groups 13
Ethnic group breakdown Level 2 – ethnic minority groups 15
Ethnic group breakdown Level 3 – Disaggregated ethnic category of Asian group 17
Ethnic group breakdown Level 3 – Disaggregated ethnic category of Black group 19
Ethnic group breakdown Level 3 – Disaggregated ethnic category of Mixed group 20
Award rates by detailed ethnicity categories by role and year 22
Doctoral studentship new starts by detailed ethnicity categories 24
Comparisons of EPSRC studentship awardees with EPS PGR population 25
Ethnic group breakdown – all ethnic groups 26
Ethnic group breakdown Level 3 – Disaggregated ethnic category of Asian group 27
Ethnic group breakdown Level 3 – Disaggregated ethnic category of Black group 28
Ethnic group breakdown Level 3 – Disaggregated ethnic category of Mixed group 29
Proportion of applicants, awardees and doctoral studentship new starts by the White ethnic group 30
Applicants and Awardees disaggregated ethnic category of White group 31
Doctoral studentship disaggregated ethnic category of White group 32
Detailed ethnicity analysis on peer review participation 33
EPSRC Peer Review College 34
EPSRC reviewer population 35
EPSRC panel members and panel chairs 36
Conclusions 38
Next steps and our commitment 39
Aims of our detailed data investigation and community engagement

Underrepresentation of researchers from Black, Asian and ethnic minority backgrounds in the engineering and physical sciences (EPS) and, in particular, in our grant and doctoral training portfolio and in our advisory and governance groups, is one of our major equality, diversity and inclusion (EDI) challenges.

We recognise that creating a research and innovation system which fully fosters work environments and approaches that support equality, diversity and inclusion for all will help us attract growing numbers of people from diverse backgrounds into research careers, whilst building on the existing collaborative power of diverse skills and experiences to create new knowledge. This is vital to respond to emerging research and societal challenges to enrich lives and build prosperity.

Our aims

■ To address inequality and under-representation in our funding portfolio.

■ To reduce disadvantage, address the low representation and low award rates for some ethnic groups in seeking funding from UKRI at a Council/discipline level.

■ To enhance our understanding of the challenges facing our researchers from Black, Asian and ethnic minority backgrounds as they progress their research careers.

■ Improve our knowledge on ‘what works’, by gathering insights and experiences of race equality interventions across our partner universities.

■ To take action to ensure the ethnic diversity in our grant portfolio and of those who engage in our peer review, advisory and governance processes is at least representative of the UK engineering and physical sciences academic researcher population and our award rates across different ethnicities show no disparity.
Background information and previous publications

- Applicants are asked for personal information through the Joint electronic submission (Je-S) system.
- For ethnicity, applicants are provided with ONS harmonised options – Level 3 – described in table 1.
- In this report where data is accessible, all the analysis follows a Level 3 breakdown structure of the ‘all ethnic group’ into the disaggregated ethnicities.
- UKRI published diversity data on applications and awards in June 2020 and a detailed breakdown of applications and awards by ethnicity in December 2020. These reports can be found here: https://www.ukri.org/our-work/supporting-healthy-research-and-innovation-culture/equality-diversity-and-inclusion/diversity-data/

In addition, EPSRC has previously published a detailed report on gender diversity in our grant portfolio which can be found here: https://epsrc.ukri.org/funding/edi-at-epsrc/gender-diversity-in-our-large-grant-portfolio/ as well as a report on the diversity of peer review participation which can be found here: https://epsrc.ukri.org/files/funding/edi/epsrc-peer-review-participation-diversity-data-to-2020/

- In EPSRC we have now looked at our applicants and awardees as well as participation in peer review by more detailed disaggregate ethnic groups. This publication provides data on financial years 2014-15 to 2018-19.

### Table 1: Ethnic group categorisation

<table>
<thead>
<tr>
<th>Ethnic group Level 1</th>
<th>Ethnic group Level 2</th>
<th>Ethnic group (Options in Je-S) Level 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnic Minority</td>
<td>Mixed</td>
<td>White and Black Caribbean</td>
</tr>
<tr>
<td></td>
<td></td>
<td>White and Black African</td>
</tr>
<tr>
<td></td>
<td></td>
<td>White and Asian</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Any other Mixed / Multiple ethnic background</td>
</tr>
<tr>
<td>Asian</td>
<td></td>
<td>Indian</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Pakistani</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bangladeshi</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chinese</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Any other Asian background</td>
</tr>
<tr>
<td>Black</td>
<td></td>
<td>African</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Caribbean</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Any other Black/African/Caribbean background</td>
</tr>
<tr>
<td>White</td>
<td>White</td>
<td>British</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Irish</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Any other White background</td>
</tr>
</tbody>
</table>
Summary of findings: applications and awards

We present applications and awards related results for the three application roles (Principal Investigator (PI), Co-Investigator (CI), Fellowship) and doctoral studentships by detailed ethnicity categories. The main findings are:

Applicants and Awardees

- Comparisons with the UK active labour market population and HESA academic population share reveal that the proportion of certain ethnic groups as awardees exceeds their labour market share, whereas the converse is true for others. For example, the share of PIs and researchers from Black, Pakistani and Bangladeshi ethnicity is below their labour and HESA population shares and that of PIs and researchers from Chinese and Mixed ethnicity is greater than their labour market share.

- Within ethnic minorities, applicants from the Asian ethnic groups form the largest share, followed by applicants from Mixed and Black ethnic groups. Further breakdown in ethnic groups shows that applicants from Chinese and Indian ethnicities form the largest ethnic groups amongst the Asian category. For the Mixed ethnic group, the ‘Other’ ethnicity is the largest for both applicants and awardees, followed by White and Asian. Amongst Black ethnic groups, the African ethnicity is the predominant ethnic group. Due to small numbers returned, no other meaningful data was drawn for the Black ethnic groups.

Award rates

- The award rate for PI, CI and Fellowship applicants who identify as White is higher than that of applicants from ethnic minority groups in most reporting years (and accounting for fluctuations from small numbers).

- The award rates for the Asian and Chinese ethnic groups reflect the overall award rate for ethnic minority applicants as they are the predominant groups.

Doctoral studentships

- For recipients of doctoral studentships, we do not have ethnicity information for around 35% of students. As a result, our understanding of the ethnicity composition of studentship starts is partial. Ethnic minority students form 12% of the awardees who disclosed their ethnicity in 2018-19. Students from Asian ethnic groups are the largest group within the ethnic minority group, followed by those from the Mixed and Black ethnic groups.
Summary of findings: peer review participation

We present information on the EPSRC Peer Review College, reviewers, panel membership and panel chairs by detailed ethnicity categories. The main findings are:

- The proportion of ethnic minority researchers within our peer review community has significantly increased but differentially across categories. The proportion of ethnic minority groups including Asian (excluding Chinese), Black, Chinese, Mixed and Other is increasing from 9.6% in 2014-15 to 15.3% in 2019-20, but still remain below the HESA EPS academic population share percentage at 20.6%.

- There is an increase in the proportion of ethnic minority researchers being requested to provide reviews by EPSRC.

- The proportion of ethnic minority panel members has seen a steady increase of 3.5 percentage points over the reporting period to 8.1% in 2018-19.

- For further information please see our published peer review participation diversity data report: https://epsrc.ukri.org/files/funding/edi/epsrc-peer-review-participation-diversity-data-to-2020/
Guidance, technical notes and data sources
Guidance and technical notes

In this report, the proportion of applicants and awardees by ethnicities are presented as stacked bar graphs. How to interpret the stacked bar graphs:

- Each stacked bar graph displays the percentage of the whole of each group. It shows the relative percentage of each ethnic group.
- Groups with counts between 1 and 4 are suppressed and not shown in the graphs, therefore the added bars may not present to a 100% proportion. Counts of 0 are also not shown.
- The numbers in the graph refer to the counts for the group. All counts of 5 or more are rounded to the closest multiple of five.
- The numbers in the bar graphs refer to the number in the relevant categories.

Important things to note:

1. Some groups are very small (total numbers less than 20) and detailed analysis is not appropriate on these groups.
2. We do not have ethnicity information on 6-8% of applicants for research grants and fellowships.

- The 3-Level ethnicity categories presented are consistent with the ONS options – see table 1. We have grouped them into broad and detailed ethnicity categories. Broad ethnicity categories refer to (Level 1) White and Ethnic Minority groups. Ethnic Minority categories are broken down into (Level 2) Asian (excluding Chinese), Chinese, Black, Mixed ethnic groups and Asian, Black and Mixed ethnic groups are further broken down to the (Level 3) disaggregated categories.
- In these data sets the Chinese ethnic category has been separated from the Asian category. This is due to the relative size of the Chinese ethnic population compared to that of the Asian category. This enables the applications, awards and participation in peer review for this group to be examined.
- ’Not disclosed’ refers to when respondents have consciously chosen to not disclose their personal information and selected the ’Not disclosed’ option. ’Unknown’ refers to when individuals have not provided their details and therefore the funding service has no usable information.
- HESA staff data is not available for the Other ethnic group in the ethnic minority category or the White ethnic group. HESA student data is not available for detailed ethnicity categories. HESA Student population estimates can be found here at ethnicity category level 1: https://www.ukri.org/our-work/supporting-healthy-research-and-innovation-culture/equality-diversity-and-inclusion/diversity-data/

- The HESA EPS ethnic minority population proportions have been created using the HESA 2018–19 staff return, Staff full-person equivalent, Staff (excluding atypical), Academic employment function, Teaching & research. Each Research Council has selected the HESA cost centres that most closely reflect their remit, as such there are overlaps and gaps. HESA cost centres are departments originating from the HESA Finance records and have been used for a number of years as a way of coding higher education. For EPSRC, individuals are from the following Cost Centres (2012–13 onwards): ‘General engineering, Chemical engineering’, ‘Mineral, metallurgy & materials engineering’, ‘Civil engineering’, ‘Electrical, electronic & computer engineering’ and ‘Mechanical, aero & production engineering’, ‘Information technology & systems sciences & computer software engineering’, ‘Mathematics’, ‘Chemistry’ and ‘Physics’.
Data sources

- Funding data for research grants and fellowships is gathered through returns by individuals to their Joint electronic Submissions (Je-S) account, which the research community uses to apply for UKRI funding. The Je-S account holds personal information including ethnicity.

- Studentship data for student starts by years is provided by research organisations through the Je-S Studentships Detail Functionality.

- HESA data is used to understand the diversity profile of the academic and student community for each Council. This enables us to compare the diversity data for funding recipients with the diversity profile of the postgraduate research (PGR) population in the UK and that of the academic population who are likely to apply for funding. The links for HESA student data we used as benchmarks in this analysis is provided here:
  - HE student enrolments by personal characteristics (Figure-4, option of 'Level of study': Postgraduate (research)) Note that student ethnicity information is for UK domiciled students only.
  - HE academic staff by ethnicity and academic employment function (Table 4, option of 'Academic employment function: Both teaching and research').

- Labour market data are from the following government and ONS sources:
  - https://www.ethnicity-facts-figures.service.gov.uk/work-pay-and-benefits/employment/employment/latest#by-ethnicity and,
  - https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/datasets/labourmarketstatusbyethnicgroupa09
Proportions of applicants and awardees by detailed ethnic categories
Comparisons of ethnic minority awardees with labour market share and academic population

The UK engineering and physical sciences (EPS) academic research base is very international – one of the most international sectors in the UK. As a result, we compare to HESA populations rather than only to the UK Population (Census 2011) or UK labour force survey (ONS).

Figure 1 below compares the share by ethnicity in 2018-19 for PI, CI and Fellows, alongside the labour market share and HESA academic population, respectively.

- PIs from Black ethnic backgrounds are the most under-represented compared to the labour market and HESA academic populations.
- There is over-representation relative to the labour market and HESA academic population for the proportion of Chinese Fellows.

Figure 2 shows that the:

- Share of PIs from Pakistani, Bangladeshi and Black ethnicities are under-represented.
- Share of PIs from Chinese and Mixed ethnicities is greater than the labour market share but similar to the engineering and physical (EP) sciences HESA staff share.
HESA EPS ethnic minority population proportions

Four tables are shown below for the HESA EPS academic population by ethnicity, breaking down into 3 levels as presented in the Ethnic Group Categorisation section. Table 2 shows Level 1 category, Table 3 shows Level 2 category for Ethnic Minority groups and Tables 4 & 5 show Level 3 category for disaggregated Asian and Black ethnic groups.

Table 2: A breakdown of the HESA EPS academic population by ethnicity

<table>
<thead>
<tr>
<th>HESA EPS 2018–19</th>
<th>Number</th>
<th>% of EPS Academic Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethnic Minority</td>
<td>3,780</td>
<td>20.6%</td>
</tr>
<tr>
<td>White</td>
<td>13,430</td>
<td>73.0%</td>
</tr>
<tr>
<td>Unknown</td>
<td>1,180</td>
<td>6.4%</td>
</tr>
<tr>
<td>Total</td>
<td>18,390</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

Table 3: A breakdown of the Ethnic Minority category by ethnicity

<table>
<thead>
<tr>
<th>HESA EPS 2018–19</th>
<th>Number</th>
<th>% of Ethnic Minority</th>
<th>% of EPS Academic Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian (excluding Chinese)</td>
<td>1,420</td>
<td>37.6%</td>
<td>7.7%</td>
</tr>
<tr>
<td>Black</td>
<td>225</td>
<td>6.0%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Chinese</td>
<td>1,340</td>
<td>35.4%</td>
<td>7.3%</td>
</tr>
<tr>
<td>Mixed</td>
<td>290</td>
<td>7.7%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Other</td>
<td>505</td>
<td>13.4%</td>
<td>2.7%</td>
</tr>
<tr>
<td>Total</td>
<td>3,780</td>
<td>100.0%</td>
<td>20.5%</td>
</tr>
</tbody>
</table>

Table 4: A breakdown of the Asian Ethnic Group by ethnicity

<table>
<thead>
<tr>
<th>HESA EPS 2018–19 Asian Ethnicity</th>
<th>Number</th>
<th>% of Asian Ethnic</th>
<th>% of Ethnic Minority</th>
<th>% of EPS Academic Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangladeshi</td>
<td>80</td>
<td>2.9%</td>
<td>2.1%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Chinese</td>
<td>1,340</td>
<td>48.6%</td>
<td>35.4%</td>
<td>7.3%</td>
</tr>
<tr>
<td>Indian</td>
<td>560</td>
<td>20.3%</td>
<td>14.8%</td>
<td>3.0%</td>
</tr>
<tr>
<td>Pakistani</td>
<td>175</td>
<td>6.3%</td>
<td>4.6%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Other</td>
<td>605</td>
<td>21.9%</td>
<td>16.0%</td>
<td>3.3%</td>
</tr>
<tr>
<td>Total</td>
<td>2,760</td>
<td>100.0%</td>
<td>73.0%</td>
<td>15.0%</td>
</tr>
</tbody>
</table>

Table 5: A breakdown of the Black Ethnic Group by ethnicity

<table>
<thead>
<tr>
<th>HESA EPS 2018–19 Black Ethnicity</th>
<th>Number</th>
<th>% of Black Ethnic</th>
<th>% of Ethnic Minority</th>
<th>% of EPS Academic Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>African</td>
<td>200</td>
<td>88.9%</td>
<td>5.3%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Caribbean</td>
<td>15</td>
<td>6.7%</td>
<td>0.4%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Other</td>
<td>10</td>
<td>4.4%</td>
<td>0.3%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Total</td>
<td>225</td>
<td>100.0%</td>
<td>6.0%</td>
<td>1.3%</td>
</tr>
</tbody>
</table>

Note: the disaggregated breakdown Level 3 is not available in the HESA data for the Mixed and White ethnic groups.
The proportion of applicants from ethnic minority groups is under represented when compared with the engineering and physical sciences (EPS) ethnic minority academic population of 20.6% (HESA, 2019).

- We observe gradual increases in proportion of ethnic minority applicants over the reported time period for PIs, CIs and Fellows. However, these remain lower than the ethnic minority EPS academic population estimates (HESA: 20.6% in 2018-19).

- Fellowship awardees from ethnic minority groups have the most substantial increase from 10% in 2014-15 to 24% in 2018-19, compared with PIs and CIs (note the small numbers for Fellows).

- Across UKRI, there were 60 ethnic minority Fellows awarded in 2018-19, which was the largest number and highest proportion of the total Fellows in the last five years. They are mainly from EPSRC and MRC.

Data on following page >
Figure 3: Proportion and Number of Applicants for Ethnic Minority and White Group by role and year

Figure 4: Proportion and Number of Awardees for Ethnic Minority and White Group by role and year

Note for all the bar charts in this report: groups with counts between 1 and 4 are suppressed and not shown, therefore the added bars may not present to 100% proportions. Counts of 0 are also not shown.
Breaking down the ethnic minority category, the Asian group (including Chinese ethnicity) is the largest group, forming 87% of the total ethnic minority category for both applicants and awardees.

- The proportion of Asian awardees (87%) exceeds the HESA EPS 2018-19 academic population proportion identified with an Asian background (approx. 73% of all ethnic minorities). Around 40% of the awardees from the ethnic minority group are from a Chinese ethnicity.

- In 2018-19, the proportion of CIs from Black ethnic groups (6%) who were awarded grants is consistent with the HESA EPS academic proportion from Black ethnic groups (6% of all ethnic minorities). In 2018-19, the data for PI awardees from Black ethnic groups is suppressed as the number is less than 5.

- In 2018-19, the share of PI awardees in the Mixed ethnic group (14% of all ethnic minorities) is higher than the HESA EPS academic population estimate (at 7.7% of all ethnic minorities).

Data on following page >
Figure 5: Proportion and Number of Applicants for Detailed Ethnic Minority Groups by role and year

Figure 6: Proportion and Number of Awardees for Detailed Ethnic Minority Groups by role and year

Note: The number of fellowship awards to people from ethnic minority groups is less than 5 from 2014-15 to 2017-18 and therefore not presented on these charts.

Note: In this analysis, the Chinese ethnic group is considered as a separate category from the Asian ethnic group because of its large number of applicants and different awardees pattern compared to other ethnic categories in the Asian group.
Amongst the Asian ethnic group, the Chinese and Indian ethnic groups form the largest grouping in all five years.

- The 2019 EPS HESA academic population of Chinese, Indian, Pakistani and Bangladeshi ethnicities are correspondingly 48.6%, 20.3%, 6.3% and 2.9% of the Asian ethnic group.

- Chinese and Indian researchers form the largest proportion of applicants and awardees from the Asian ethnic groups for PIs, CIs and Fellows. Collectively, the two ethnicities form around 80% of all Asian investigator applicants and awardees. These two ethnicities are over-represented compared to their 2019 HESA share in EPS, which is 68.9% of the Asian ethnic group.

- There were 15 Fellowship awardees with Asian ethnicity (all Chinese) in 2018-19, which is the largest in the five reporting years.

- In 2018-19, Pakistani (approx. 4%) and Bangladeshi (approx. 3%) ethnicities form the smallest proportion amongst PI applicants with an Asian ethnicity. The proportion of Pakistani PI applicants is lower than their 2018-19 HESA population estimate (6.3% of the Asian ethnic group) whereas that of Bangladeshi PI’s is comparable to their HESA estimate (2.9% of the Asian ethnic group).

- The proportion of Pakistani and Bangladeshi awardees are under-represented.

Data on following page >
Figure 7: Proportion and Number of Applicants for the Asian Group by role and year

Figure 8: Proportion and Number of Awardees for the Asian Group by role and year
Amongst Black ethnic groups, the Black British – African ethnicity is the predominant ethnic group.

Due to small application and award numbers, no meaningful data can be drawn for other Black ethnic groups.
**EPSRC applicant and awards data**

**Ethnic group breakdown Level 3 – Disaggregated ethnic category of the Mixed group**

Within the Mixed ethnic group, the ‘Other’ ethnicity is the largest for both applicants and awardees.

- More than half of the applicants and awardees in the Mixed ethnic group identified as ‘Other’, which may indicate that the categories are not effective in capturing possible identities.

- Approximately, 38% of PI applicants and awardees from the Mixed ethnic group said that they identified with the ‘White & Asian’ ethnicity.

- The number of Fellows awarded from the ‘Mixed’ ethnic group were less than 5 in the five reporting years.

*Data on following page*
Figure 11: Proportion and Number of Applicants for the Mixed Group by role and year

Figure 12: Proportion and Number of Awardees for the Mixed Group by role and year

Note: Data for detailed categories for the Mixed ethnic group is not available for HESA staff academic population estimates.
Award rates by detailed ethnicity categories
Award rates by detailed ethnicity categories by role and year

Award rates within the ethnic minority group vary.

- The award rates for the Asian and Chinese ethnic groups reflect the overall award rate for ethnic minority applicants as they are the predominant groups.
- The award rate for PI, CI and Fellowship applicants who identify as White is higher than that of applicants from ethnic minority groups in most reporting years (and accounting for fluctuations in award rate due to small number statistics).
- The award rate of Fellows from ethnic minority groups is not presented for most years as the counts of awardees from ethnic minorities are less than 5.

Figure 13: Award rates for Principal Investigator by year

Figure 14: Award rates for Co-Investigator by year

Figure 15: Award rates for Fellowships by year
Doctoral studentship new starts by detailed ethnicity categories
Comparisons of EPSRC studentship awardees with EPS postgraduate research (PGR) population

- The ethnicity of around 35% of EPSRC’s doctoral students are not disclosed or unknown. Where ethnicity is disclosed, around 12% of doctoral students are from ethnic minority groups.

- Amongst ethnic minority recipients of studentships, more than half are from the Asian ethnic (including Chinese) group, followed by students with Mixed ethnicities and then Black ethnicities, which reflects the relative composition of the aggregate ethnic minority postgraduate research (PGR) population (HESA estimate).

- All of the ethnic minority groups are over-represented relative to their PGR population share except Black students, but note that studentship data is affected by high non-disclosure rates.

Notes:
1. PGR population estimates are based on ethnicity information for UK domiciled students alone.
2. We do not have ethnicity information for around 35% of EPSRC studentship recipients (approx. 25% not disclosed and approx. 10% unknown).
Doctoral students who identify themselves as Asian represent the largest share of doctoral student new starts from the ethnic minority group each year. The ethnicity of around 35% of EPSRC's doctoral students are not disclosed or unknown. Where ethnicity is disclosed, 12% of doctoral student new starts are from ethnic minority groups. In 2018-19, HESA data shows that ~9% of PGR from the EPS disciplines identify themselves as from an ethnic minority group.

EPSRC doctoral students from Asian (including Chinese) ethnic groups represent over half of all ethnic minority recipients, followed by students with Mixed and then Black ethnicities. This pattern is also reflected for other UKRI Councils.

Figure 17: Proportion of Awardees for EPSRC Studentship New Starts by year

<table>
<thead>
<tr>
<th>Year</th>
<th>Asian (excluding Chinese)</th>
<th>Chinese</th>
<th>Mixed</th>
<th>Black</th>
<th>White</th>
<th>Other</th>
<th>Not disclosed</th>
<th>Unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td>14-15</td>
<td>115</td>
<td>79</td>
<td>73</td>
<td>35</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15-16</td>
<td>120</td>
<td>60</td>
<td>60</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16-17</td>
<td>170</td>
<td>65</td>
<td>65</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17-18</td>
<td>160</td>
<td>65</td>
<td>65</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-19</td>
<td>170</td>
<td>65</td>
<td>65</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Studentship data are collected in a different way from the data for applicants for research grants and fellowships. Studentship data are provided by research organisations through the Je-S Studentships Detail Functionality.
**Doctoral students from Chinese and Indian ethnic groups account for more than 53% of the Asian ethnic group studentship new starts across the reporting period.**

Within the Asian ethnic group, students from Indian and Chinese ethnicities make up 53% or more of studentship starts. At about 20%, the Other ethnicity is the next largest group.

**Doctoral students with Pakistani and Bangladeshi ethnicities form the smallest groups (ranging from 9% to 18% of the Asian ethnic group over the reporting period).**

---

**Figure 18: Proportion of Asian Awardees for EPSRC Studentship New Starts by year**

- Chinese
- Indian
- Other (Chinese or other, Asian & Asian British)
- Pakistani
- Bangladeshi

<table>
<thead>
<tr>
<th>Year</th>
<th>Chinese</th>
<th>Indian</th>
<th>Other</th>
<th>Pakistani</th>
<th>Bangladeshi</th>
</tr>
</thead>
<tbody>
<tr>
<td>14–15</td>
<td>70</td>
<td>50</td>
<td>35</td>
<td>30</td>
<td>5</td>
</tr>
<tr>
<td>15–16</td>
<td>60</td>
<td>55</td>
<td>45</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>16–17</td>
<td>75</td>
<td>50</td>
<td>55</td>
<td>25</td>
<td>10</td>
</tr>
<tr>
<td>17–18</td>
<td>65</td>
<td>70</td>
<td>75</td>
<td>35</td>
<td>10</td>
</tr>
<tr>
<td>18–19</td>
<td>65</td>
<td>70</td>
<td>75</td>
<td>35</td>
<td>5</td>
</tr>
</tbody>
</table>
Doctoral students who identify as Black British - African are the predominant group of studentship new starts amongst the Black ethnic group.

- Amongst awardees from Black ethnic groups, students from Black British - African ethnicities are the predominant recipients.

- There are only small numbers of doctoral students from Black British - Caribbean and Other Black ethnicities.

- The pattern of distribution amongst the Black ethnic group of awardees has not shown any major changes over the five reporting years.

Figure 19: Proportion of Black Awardees for EPSRC Studentship New Starts by year

- African
- Caribbean
- Other
Doctoral students who identify as Other represent more than half of the Mixed ethnic group studentship new starts.

Amongst the Mixed ethnic group, around 50% of doctoral students identify their ethnicity as ‘Other’, followed by the ‘White and Asian’ ethnicity.

Doctoral students identifying as White & Black African and White & Black Caribbean make up a much smaller proportion of this group.

The pattern of distribution amongst the Mixed ethnic group doctoral students has not shown any major changes over the five reporting years.

Figure 20: Proportion of Mixed Awardees for EPSRC Studentship New Starts by year

<table>
<thead>
<tr>
<th>Year</th>
<th>Other</th>
<th>White &amp; Asian</th>
<th>White &amp; Black African</th>
<th>White &amp; Black Caribbean</th>
</tr>
</thead>
<tbody>
<tr>
<td>14–15</td>
<td>40</td>
<td>20</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>15–16</td>
<td>35</td>
<td>20</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>16–17</td>
<td>50</td>
<td>30</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>17–18</td>
<td>50</td>
<td>30</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>18–19</td>
<td>45</td>
<td>35</td>
<td>10</td>
<td>5</td>
</tr>
</tbody>
</table>
Proportion of applicants, awardees and doctoral studentship new starts by the White ethnic group
Applicants and Awardees disaggregated ethnic category of the White group

White British researchers form two-thirds of the White ethnic group PI and CI applicants, and half of the White ethnic group Fellowship applicants.

- Exploring the White ethnic group, more than two thirds of PI and CI applicants identify as White-British making this category the largest amongst the White ethnic group, followed by the ethnicities of White-Other and White-Irish. This is also reflected in the distribution of awards.

- The distribution of fellowship applicants and awardees is more evenly split between the White-British and White Other ethnic categories.

- The distribution amongst White ethnic group awardees has not shown any major changes over the five reporting years.

Figure 21: Proportion and Number of Applicants for the White Group by role and year

<table>
<thead>
<tr>
<th>Year</th>
<th>Principal Investigator</th>
<th>Co-Investigator</th>
<th>Fellowship</th>
</tr>
</thead>
<tbody>
<tr>
<td>14–15</td>
<td>1,005</td>
<td>2,220</td>
<td>115</td>
</tr>
<tr>
<td>15–16</td>
<td>1,010</td>
<td>2,455</td>
<td>185</td>
</tr>
<tr>
<td>16–17</td>
<td>1,095</td>
<td>2,705</td>
<td>90</td>
</tr>
<tr>
<td>17–18</td>
<td>1,095</td>
<td>2,305</td>
<td>105</td>
</tr>
<tr>
<td>18–19</td>
<td>885</td>
<td>2,185</td>
<td>140</td>
</tr>
</tbody>
</table>

Figure 22: Proportion and Number of Awardees for the White Group by role and year

<table>
<thead>
<tr>
<th>Year</th>
<th>Principal Investigator</th>
<th>Co-Investigator</th>
<th>Fellowship</th>
</tr>
</thead>
<tbody>
<tr>
<td>14–15</td>
<td>385</td>
<td>840</td>
<td>40</td>
</tr>
<tr>
<td>15–16</td>
<td>345</td>
<td>800</td>
<td>50</td>
</tr>
<tr>
<td>16–17</td>
<td>420</td>
<td>870</td>
<td>25</td>
</tr>
<tr>
<td>17–18</td>
<td>395</td>
<td>810</td>
<td>30</td>
</tr>
<tr>
<td>18–19</td>
<td>255</td>
<td>655</td>
<td>40</td>
</tr>
</tbody>
</table>

Note: The HESA EPS staff population data does not contain detailed ethnicity results for the White ethnic group.
Doctoral students who identify as White-British form two-thirds of all White ethnic group studentship new starts.

- Students identifying as White account for around 57% of all EPSRC studentship recipients.
- Of the White ethnic group studentship awardees, two-thirds are from the White-British ethnic group, followed by almost 35% from the White-Other ethnic group.
- The pattern of distribution amongst doctoral students in the White ethnic group has not shown any significant changes over the reporting period.

Figure 23: Proportion of White Awardees for EPSRC Studentship New Starts by year
Detailed ethnicity analysis on Peer Review participation

Peer Review College
Reviewers
Panel Membership
Panel Chairs
EPSRC Peer Review College

For the sixth consecutive year, an increase can be seen in the proportion of those describing themselves as an ethnic minority.

The proportion of ethnic minority groups including Asian (excluding Chinese), Black, Chinese, Mixed and Other is increasing from 9.6% in 2014-15 to 15.3% in 2019-20, but still remains below the HESA EPS academic population share percentage at 20.6%.

Figure 24: Proportion of Ethnic Minorities in the Peer Review College by Year Compared with the HESA EPS Ethnic Minority Population

Figure 25: Peer review College – proportions of ethnicity groups by year

[White: 83% (2011-12) – 77% (2018-19)]

- The data for the White ethnic group is not plotted on the figure. It is described in square [ ] brackets below the figure title to enable comparisons.
- The proportion of ethnic minority researchers within our peer review community has significantly increased but differentially across categories.
- In 2015/16, EPSRC refreshed the College membership and actively encouraged nominations from under-represented groups.
- In 2021, EPSRC will be actively encouraging self nominations for the College membership to increase the ethnic minority representation on the College.
Reviewer population

There is an increase in the proportion of ethnic minority researchers being requested to provide reviews by EPSRC

Figure 26: Proportions of Reviews Requested by Ethnic Group by year
[White: 78% (2011/12) to 73% (2018/19)]

- We observe an increase in the proportion of reviewer requests to Asian (2.7% to 5.2%) and Chinese (4.5% to 7.0%) researchers.
- Chinese and Asian (excluding Chinese) reviewers are well represented in providing usable reviews.
- Compared to other ethnic minority groups, Mixed and Black reviewers are comparatively under-represented in reviews requested. The proportions of the Mixed and Black reviewers are, respectively, similar to and lower than their HESA EPS academic population (1.6% and 1.2%).

The data for the White ethnic group is not plotted within the figures. It is described in square [] brackets below the figure title to enable comparisons.

Figure 27: Proportions of Usable Reviews by Ethnic Group by year
[White: 81% (2011/12) to 74% (2018/19)]
EPSRC panel members and panel chairs

The proportion of ethnic minority panel members has seen a steady increase.

Figure 28: Panel Membership by ethnic minority group in 2019-20 compared to HESA EPS academic population

Since 2011-12 the number of ethnic minorities on panels has increased from 4.7% to 8.1%. This increase is predominantly due to an increase in Asian (excluding Chinese), and to a lesser extent Chinese representation. The other ethnic groups do not show any noteworthy growth.

We observe high proportions of Unknown/Not Disclosed data. This is likely due to the selection of international and industry panel members.

The ethnic diversity of Panel Chairs is around 80% White. The proportion of ethnic minorities in the role of Chair is likely to be under-represented - due to the high ‘not disclosed’ and ‘unknown’ data this is difficult to establish. There is a slight growth over the last four reporting years of ethnic minority panel chairs, primarily due to the increase in the proportion of Asian and Chinese chairs.

Data on following page >
Figure 29: Proportions of Panel Members by Ethnicity by year
[White: 69% (2011/12) to 75% (2018/19)]

Figure 30: Proportions of Panel Chairs by Ethnicity by year
[White: 85% (2011/12) to 81% (2018/19)]

The data for the White ethnic group is not plotted within the figures. It is described in square [] brackets below the figure title to enable comparisons.
Conclusions

This detailed ethnicity analysis highlights that:

- Ethnic minority researchers are consistently **underrepresented** in our portfolio.
- Award rates for PI, CI and Fellowship applicants from White ethnic groups are consistently higher than that of applicants from ethnic minority groups.
- Researchers identifying as Chinese and Indian form the largest proportion of applicants and awardees from the Asian ethnic group for PI's, Co-I's and Fellows. Collectively, the two ethnicities form around 80% of all Asian investigator applicants and awardees. These two ethnicities are well represented as applicants and awardees when compared to their HESA engineering and physical sciences (EPS) academic population at 69% of the Asian ethnic group.
- The proportion of PI awardees who identify themselves as Black, Bangladeshi and Pakistani are underrepresented compared to the HESA EPS academic population.
- Whilst there has been an increase in the proportion of ethnic minority researchers participating in peer review, this is still **not representative** of the HESA EPS academic population.
Next steps and our commitment

EPSRC immediate action and commitment – after our initial data investigations, we are taking the following near-term actions:

- As part of our data investigations, we will continue to evolve our data capabilities and enhance our understanding by exploring the intersectionality of the ethnicity data with, for example, gender and nationality. We hope to combine our data understanding with that of universities to facilitate a broader picture.

- We will undertake a community engagement focused on ethnicity and race equality to enable us to build knowledge to better understand the factors that influence the representation of Black, Asian and ethnic minority researchers and doctoral students in our portfolio.

- We will continue work to safeguard decision making in peer review, challenging bias and ensuring fair and inclusive funding processes and to share ideas on minimum standards of expectation for equality, diversity and inclusion in our research and training grants.

- We will evaluate the process used for our National Productivity Investment Fund (NPIF) Innovation Fellowships, which resulted in the most diverse cohort we have funded, and which included a step for universities to inform us how they were ensuring diversity in the applications submitted.

- We will increase the representation of ethnic minority researchers on our Peer Review College to at least 20%. To achieve this we will encourage self-nominations to the Associate Peer Review College from all our researchers but particularly seek nominations from ethnic minority colleagues.

- We will increase the membership of ethnic minority representation on our strategic advisory bodies (Strategic Advisory Network and Strategic Advisory Teams) to at least 20%. To do this we will use positive action within our recruitment exercises.