Acknowledgements
We acknowledge the lived experience of our respondents and thank them for taking part in the survey. We would also like to thank Dr Emma Chapman, Dr Doyin Atewologun and Roger Kline for their help in creating the survey, and Phil Diamond and Dr Ben Fernando for their help in writing the survey report.

The Bullying and Harassment working group met from May to August 2023 and consisted of: Charlotte Thorley (chair, freelance), Sheila Kanani (RAS staff lead), Dominic Galliano (freelance), Jonathan Piotrowski (UKRI), Julie Wardlow (Lancaster University), Claire Davies (University of Exeter), Em Truman (National Space Academy, UKSEDS), Shanice Dunk (IOP).
The scientific workplace, as with all workplaces, should provide an inclusive and constructive environment with safe, supportive working conditions for all. Where a culture of bullying and harassment exists, it will have a significant negative impact on the workplace environment and those working within it. Our initial survey of colleagues in astronomy, solar-system science and geophysics reveals a significant problem, which cannot be ignored.

As a Society dedicated to promoting the study of these subjects, we want to ensure that no individual is excluded or suffers as a result of their experiences within the workplace. The RAS believes that all those working in our sector, have the right to work in a climate of respect; they should not be subject to incivility or to intimidating, hostile or humiliating treatment.

In line with this goal, this survey was designed to explore the perceptions and experience of bullying and harassment within astronomy, solar-system science, and geophysics, so that we can better understand the scale and nature of this issue in order to help us work with others to prevent and mitigate it.

The results presented in this report are bleak; they form a powerful case for change. The RAS is committed to supporting our community, and we strongly support further investigation of this issue across the broader science sector and the implementation of workplace policies and procedures that deliver positive change.

Prof. Emma Bunce
RAS President (2020-22)
“Senior staff are not aware of the impact of their actions.”

More than half the respondents had witnessed instances of bullying, harassment and unwanted behaviours.

Disabled people experienced bullying and harassment more frequently during the last 2 years.

Gay, lesbian and bi people experienced more frequent incidents of bullying and harassment in the last 2 years.

BAME respondents experienced more bullying and harassment in the last 12 months.

“Known bullies and harassers in UK astronomy have not lost their jobs.”

“One person who bullied me is on the committee in charge of upholding the code of conduct.”
This report summarises the experiences of bullying and harassment and related perceptions of workplace culture for astronomers, solar system scientists and geophysicists based on a survey carried out in Spring 2020.

Based on the responses, we conclude that bullying and harassment is systemic in astronomy and geophysics: **44% of the 661 respondents reported suffering it** in the workplace in the two years preceding the survey. When formal concerns are raised of bullying and harassment, reports are dealt with inadequately: **65% of respondents who reported concerns of bullying and harassment were either ignored or were not satisfied** with how their concern was dealt with. Furthermore, people from traditionally under-served and under-represented groups (such as Black and minority ethnic people, LGBTQ+ people, women and disabled people) are disproportionately affected by this, with **many of these groups being ~50% more likely** to report bullying and harassment.

Data suggests that respondents from these **under-served groups had the least trust in workplace procedures and policies against bullying and harassment**. For example, gay and bisexual respondents were twice as likely as straight or heterosexual respondents to report that their workplace did not do enough to prevent bullying and harassment. We also find that respondents from these **minority and under-served groups witnessed more instances** of bullying and harassment.

Most respondents were **more positive about their workplace than about their field** in general. Participants more readily recommended their workplace to colleagues already working in the field, than their career path to family and friends. This trend was stronger among under-served groups. Fewer respondents from Black, Mixed and other heritage backgrounds, for example, recommended their career path to family and friends, but many more of them would recommend their workplace to colleagues in their sector.

Our total of 661 respondents is sufficient for statistical analysis but we cannot be certain that it is representative of our community and therefore our findings are only indicative of wider issues. This response rate also means **we cannot look at intersectional issues** whilst preserving anonymity.

We acknowledge the lived experience of our respondents and thank them for taking part in the survey. The RAS recognises its role in advocating for equal access to astronomy and geophysics for all, but cannot directly change the policies and procedures of workplaces and organisations in the field. We hope that by **giving a voice to the experiences** of our Fellows and colleagues, universities, research councils and other workplaces in the sector will improve their working practices as a result.
2 Introduction

Evidence suggests, from high profile individual cases in astronomy and geophysics from neighbouring science, technology, engineering and mathematics (STEM) sectors such as chemistry, physics, the space sector, and the wider UK higher education sector, that bullying and harassment is likely to occur frequently in many institutions with employees and students in astronomy and geophysics. Bullying and harassment affects mental health, staff retention, and people from minority groups are more likely to be affected by it.

Prior to this study no data capturing the extent of the issue in our sector had been collected, and this report aims to remedy that.

Understanding the experience of employees in astronomy and geophysics, both positive and negative, is crucial for the future health of the sector. We hope that this report will influence leaders in different workplaces, and in funding bodies, to shape a better workplace environment for all.

Definitions

Though sexual harassment is legally defined, bullying is not. Though they may overlap, they are also distinct, and the appropriate responses may not be the same. The difference between bullying and harassment is more to do with the way it’s set out legally rather than the action that has occurred/occurring.

Bullying is defined by ACAS as: ‘Unwanted behaviour that can be offensive, intimidating, malicious or insulting, from a person or group. An abuse or misuse of power that undermines, humiliates, denigrates or cause physical or emotional harm to someone.’

Harassment is defined in the Equality Act 2010 as: ‘Unwanted conduct related to protected characteristics (age, sex, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity/paternity, race, religion or belief, sexual orientation), which has the purpose or effect of violating an individual’s dignity or creating an intimidating, hostile, degrading, humiliating or offensive environment for that individual.’

1 R. Bennett, British Universities spend £87m gagging staff, The Times (2019)
2 Royal Society of Chemistry, Breaking the Barriers (2018)
3 L. M. Aycock et al., Sexual harassment reported by undergraduate female physicists, Physical Review Physical Education Research (2019)
4 The Space Skills Alliance, Women in the UK space sector (2022)
5 UCU, Survey shows bullying and harassment far too common in UK universities (2012)
6 C. M. Steele, A Threat in the Air, American Psychologist (1997)
3 Aims

The aims of this survey were to:

- Capture the experiences and perspectives of the astronomy and geophysics community regarding bullying and harassment, workplace culture and policies;
- Understand which communities are most likely to be adversely/disproportionately affected by these issues;
- Generate a robust dataset as a starting point and baseline for change in the fields.

4 Methods

The RAS survey was written with members of the RAS Committee for Diversity in Astronomy and Geophysics (CDAG) and external experts in the field. Questions were posed based on literature reviews of data from other communities, and worded in line with guidance from organisations including Stonewall7 and the Employers Network for Equality & Inclusion8.

The full list of survey questions can be found at https://ras.ac.uk/education-and-careers/ras-bullying-and-harassment-survey-questions. Respondents were asked whether they ‘strongly agree’, ‘agree’, ‘neither agree or disagree’, ‘disagree’ or ‘strongly disagree’ with key statements; there were also questions with yes or no answers. We collected responses using SnapSurvey software, and the survey was accessible on most devices and browsers. No paper option was available.

The survey was disseminated by the RAS by email to members, points of contact in universities, to space agencies and to industry. We also promoted the survey through the RAS website and social media accounts.

The survey was open for four weeks in April 2020 and attracted 671 responses, 661 of which were complete and valid. Many questions had the option of ‘other’ and all questions were optional; results were normalised to 100% to produce the figures below, giving sample sizes varying by 5–10% between questions.

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7 Stonewall, Do Ask, Do Tell – Capturing data on sexual orientation and gender identity globally (2016)
8 Employers Network for Equality and inclusion, enei.org.uk NHS Workforce Statistics – September 2020
5 Results

5.1 Demographics of Respondents

Only those who reported they were currently or had previously been working or studying in astronomy, solar system science and geophysics were able to complete the survey. 60% of respondents were members of the RAS, styled Fellows. Most respondents (61%) were based in the UK, most of them in the southeast of England (75 respondents). 57% of respondents were men, 37% women and 3% non-binary and other gender. The most well-represented age group was 25 to 34. 6% of respondents consider themselves to be disabled. Of the disabilities recorded, invisible disabilities included anxiety, depression and autism, and physical disabilities included visual impairments and mobility issues. The rate of disclosure is similar to that (4%) in the most recent NHS staff survey, for example.

Location of UK survey respondents

The geographical distribution of respondents from the bullying and harassment survey. Most respondents were based in the UK, with all areas of the UK represented. Numbers shown in the UK map are raw numbers, not percentages.

(Source: Royal Astronomical Society. Created with Datawrapper)
87% of respondents fell within the census categories of White, including White British, Irish and White Other. 10% of respondents were in Black, Asian and Minority Ethnic (BAME) categories, ranging from Asian, and Multiple Ethnic to Black Caribbean ethnicities. 3% did not disclose their ethnicity. Amongst the BAME respondents, the largest representation was from people of Multiple Ethnic backgrounds and Indian backgrounds.

In order to understand the impact of bullying and harassment on different groups within the survey, we disaggregated the data where it was possible to do so without compromising anonymity. We acknowledge that this erases the experience of many of our respondents, but to do otherwise would have made some respondents identifiable, and not have provided statistically sound data. We therefore merged all White ethnic groups, all Asian ethnic groups, and Black, Mixed and other ethnic groups. We selected these groups after disaggregation/pivot table analysis that showed trends in common within each group.

The career stage responses were also merged to form three groups: all student respondents, those on temporary contracts, and those on permanent contracts.

80% of respondents described their sexual orientation as heterosexual/straight, 7% as bisexual and 3% as gay/lesbian. These datasets were large enough to be disaggregated.

66% of respondents said they did not have a religion; 21% chose Christian (all denominations). Low representation of other faiths means that we have not featured faith in our disaggregating analysis of bullying and harassment data. We did not find strong evidence of a link between bullying and religious faith.
**Age Distribution of Respondents**

- Do not wish to say: 2
- 65 & over: 9
- 55 to 64: 13
- 45 to 54: 16
- 35 to 44: 24
- 25 to 34: 31
- 24 or under: 6

**Respondent Gender Breakdown**

- Do not wish to say: 2
- Other: 1
- Non-binary: 3
- Women: 37
- Men: 57

**Proportion of disabled respondents**

- Disability: 5
- No Disability: 91
- Do not wish to say: 3

**Sexuality of respondents**

- Do not wish to say: 7
- Other: 2
- Bisexual: 7
- Gay or lesbian: 3
- Heterosexual or straight: 80
### Career stage of respondents

- **Do not wish to say**: 2
- **Other**: 6
- **Permanent contract (non-academic)**: 8
- **Permanent contract (academic)**: 35
- **Research or teaching fellow**: 5
- **Temporary contract (non-academic)**: 3
- **Temporary contract (academic)**: 7
- **Post-doctoral researcher**: 15
- **PhD student**: 16
- **Masters student**: 1
- **Undergraduate student**: 1

### Ethnicity of respondents

- **Asian**: 4
- **Black, mixed, other**: 6
- **White**: 86
- **Do not wish to say**: 4

### Religious beliefs of respondents

- **Other**: 2
- **Spiritual**: 1
- **Buddhist**: 1
- **Jewish**: 1
- **Muslim**: 1
- **Hindu**: 1
- **Christian (all denominations)**: 21
- **No religion**: 66
5.2 Workplace Environment Responses

When asked if they agreed that ‘My work gives me a sense of personal accomplishment’, 90% of respondents strongly agreed or agreed. This is a very high proportion and a positive feature of work in this sector.

68% of respondents strongly agreed or agreed that ‘Those who manage my work or are responsible for my engagement recognise when I have done my job well’. 19% neither agreed nor disagreed with this statement, compared to 5% for the previous question.

In response to the statement ‘I would recommend the work I do as a career choice to a friend or family member’ – assumed to work outside the field – 50% agreed or strongly agreed, 30% neither agreed nor disagreed, and 20% disagreed or strongly disagreed. That 1 in 5 people in our community would not recommend their career choice to family and friends suggests many of us are unhappy and do not wish our experiences on others.

In response to the statement ‘I would recommend my workplace as a place of work to colleagues elsewhere in the same field’ 67% agreed or strongly agreed, 19% neither agreed nor disagreed, and 15% of respondents strongly disagreed or disagreed. This is more positive than the responses for the previous question, suggesting that respondents feel more positively about their workplace than they do about the sector as a whole.

The final statement in the workplace culture section asked if respondents felt that their workplace was supportive, fair and open. 68% of people agreed or agreed strongly, 14% neither agreed nor disagreed and 18% disagreed or disagreed strongly with the statement. This suggests that views about workplace culture are in line with how strongly respondents would recommend their workplace to colleagues.

“90% of respondents strongly agreed or agreed that ‘My work gives me a sense of personal accomplishment’. This is a very high proportion and a positive feature of work in this sector.”
5.2.1 Work, workplace and career for demographic groups

A selection of disaggregated responses are outlined below (gender, disability, ethnicity, age, career path). All other disaggregated data available are in the report appendix.

Our data indicate that men feel more accomplished than other gender groups. Asian respondents felt most recognised for good work; disabled people and those of Black, Mixed and other ethnicities felt less recognised. All disaggregated groups felt more positive about recommending their workplace to others in the field, than they did in recommending the career to family and friends; men and older respondents are more positive in both cases.

**Gender and personal accomplishment: Men are the most likely to feel personal accomplishment from their work**

94% of men agreed or strongly agreed with the statement ‘my work gives me a sense of personal accomplishment’. Women, non-binary people and those of other genders are the least likely to feel accomplished in their work, with 88% of women agreeing or strongly agreeing, and only 75% of non-binary and other gender respondents. 20% of the latter group disagreed.

**Disability and recognition at work: Disabled people report less recognition in the workplace**

54% of disabled people either agreed or strongly agreed with the statement ‘Those who manage my work or are responsible for my engagement recognise when I have done my job well’, compared to 70% of respondents who are not disabled.
Ethnicity and recognition at work: Asian people reported more recognition in the workplace
77% of Asian respondents agreed or strongly agreed with the statement ‘Those who manage my work or are responsible for my engagement recognise when I have done my job well’; only 53% of Black, Mixed, and other ethnicity respondents agreed or strongly agreed. This is consistent with a trend in our data whereby Asian respondents are the most positive about their workplace compared to other ethnicities.

‘Those who manage my work or are responsible for my engagement recognise when I have done my job well’ (by ethnicity)

<table>
<thead>
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<th>Disagree</th>
<th>Neither</th>
<th>Agree</th>
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<tr>
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<td>37</td>
<td>13</td>
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<td>3</td>
</tr>
<tr>
<td>White</td>
<td>26</td>
<td>43</td>
<td>19</td>
<td>8</td>
<td>4</td>
</tr>
</tbody>
</table>

‘I would recommend the work I do as a career choice to a friend or family member’ (by age)

<table>
<thead>
<tr>
<th>Age Group</th>
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<th>Disagree</th>
<th>Neither</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>65 and over</td>
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</tr>
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<td>55 to 64</td>
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<td>12</td>
<td>23</td>
<td>35</td>
<td>21</td>
<td>8</td>
</tr>
<tr>
<td>24 or under</td>
<td>19</td>
<td>27</td>
<td>32</td>
<td>14</td>
<td>8</td>
</tr>
</tbody>
</table>

Age and career recommendation: the oldest respondents were most positive about recommending their career to family and friends.
Respondents aged over 65 recommended their workplace the most strongly (79% strongly agreed and agreed). Those aged 25-34 were least likely to recommend their career path (35% agreed or strongly agreed). Those under 24 were more likely to agree compared to those aged 25 to 44; this may represent a difference in experience between the youngest students and other early career researchers.
Gender and career recommendation:
More men recommend their careers to family and friends

Almost 60% of men agreed or strongly agreed with the statement ‘I would recommend the work I do as a career choice to a friend or family member’. Women, non-binary people and respondents of other genders had a similar overall distribution of responses: 40% either recommended or strongly recommended their career choices. This suggests that men in astronomy and geophysics are 50% more likely to recommend their careers to family and friends than women and non-binary and other gender respondents.

Figure 14 Responses to ‘I would recommend my workplace as a place to work to colleagues elsewhere in the same field’ (by gender)

Gender and career recommendation:
More men would recommend their workplace to colleagues in the field

70% of men agreed or strongly agreed that they would recommend their workplace to colleagues in the field, compared to 60% of women, and 55% of non-binary and other gender respondents. These are higher proportions than those who would recommend their career to family and friends, a pattern that is consistent for all disaggregated groups analysed.

Figure 14 Responses to ‘I would recommend the work I do as a career choice to a friend or family member’ (by gender)
5.3 Experience of bullying and harassment

We asked about experiences of bullying and harassment, to find out about the frequency of bullying and harassment experienced in the workplace over the last 12 months, and about whether this had occurred once or more often, over the last two years. We also asked about experiences online.

To the question ‘How often, if at all, have you been personally subjected to any type of bullying and harassment in your workplace in the last 12 months’ 56% responded with ‘never’. 41% had been subjected to some type of bullying and harassment in the last 12 months, 29% had encountered bullying and harassment less often than once per month, 6% at least once per fortnight, 5% at least once per week and 1% were subjected to bullying and harassment every day.

“43% had been subjected to some type of bullying and harassment in the last 12 months”
21% of people said that they had been subjected to online bullying.

The responses indicate that 43% of respondents have been subjected to bullying and harassment in the workplace in the last 2 years, 32% more than once. 12% of respondents reported that they had experienced bullying and harassment fortnightly or more frequently over the past year.

Our data are largely comparable to those of the University College Union (UCU)'s 2013 report, which surveyed 14,667 participants working in higher education, 48% of whom reported being subjected to bullying at work.\textsuperscript{10}

Bullying via email, video conferencing and social media

\textsuperscript{10} G. Kinman & S. Wray, \textit{Higher Stress – A survey of stress and well-being among staff in higher education}, University and College Union (2013)
5.3.1 Experience of bullying and harassment for demographic groups

We now consider disaggregated data for gender, ethnicity, sexuality, age, career stage, and disability. Each graph shows the answer to one of the two primary questions; all other disaggregated data are available in the appendix.

Our data indicate that bullying and harassment occurs in all areas of astronomy and geophysics but is much more likely to be experienced by traditionally under-served and marginalised groups. Data are compared to similar reports in different STEM sectors where appropriate. We could not carry out intersectional analyses (e.g. comparing BAME LGBTQ+ people to BAME straight people) because the sample sizes were too small and we would not have been able to maintain the anonymity of respondents.

Career Stage and Experiences of Bullying and Harassment: students report highest levels

50% of student respondents reported suffering bullying and harassment in the last 12 months, 15% at least once per fortnight or more. 48% of those on a temporary contract (in academia and industry) reported bullying and harassment in the workplace in the last 12 months, 13% recording it once per fortnight or more.

Gender and Experiences of Bullying and Harassment: non-binary and other genders fare worst

63% of non-binary respondents and those of other genders reported bullying and harassment in the last 12 months, with 21% reporting a frequency of at least once a fortnight. 53% of women reported suffering bullying and harassment in the last 12 months, compared to only 33% of men. Our data also showed that 60% of women and 61% of non-binary and other gender respondents experienced bullying and harassment in the last two years, compared to only 35% of men.
Disabled people reported bullying and harassment more frequently during the last 2 years.

Frequency of bullying and harassment during 2 years preceding survey (by gender):

- Women: 39% reported more than once, 16% reported once, 56% reported no.
- Men: 67% reported more than once, 6% reported once, 9% reported no.
- Non-binary, other: 39% reported more than once, 6% reported once, 56% reported no.

Frequency of bullying and harassment during 2 years preceding survey (by age):

- 24 or under: 70% reported more than once, 4% reported once, 26% reported no.
- 25 to 34: 67% reported more than once, 6% reported once, 27% reported no.
- 35 to 44: 55% reported more than once, 12% reported once, 33% reported no.
- 45 to 54: 55% reported more than once, 10% reported once, 35% reported no.
- 55 to 64: 50% reported more than once, 17% reported once, 33% reported no.
- 65 and over: 70% reported more than once, 4% reported once, 26% reported no.

Frequency of bullying and harassment during 2 years preceding survey (by disability):

- Disabled: 39% reported more than once, 9% reported once, 52% reported no.
- Not disabled: 56% reported more than once, 12% reported once, 32% reported no.

Legend:
- Blue: No
- Yellow: Once
- Red: More than once
The adverse experiences of women in astronomy and geophysics communities are not unique. These data are similar to those in the EPSRC-funded report\textsuperscript{11} on bullying and harassment in computer science and engineering, in which 49\% of women surveyed experienced bullying and harassment, compared to 34\% of men. In addition, the Space Skills Alliance’s Women in the UK Space Sector report (2021) found that 41\% of women in the space sector have experienced discrimination, compared to 10\% of men. The Space Skills Alliance report also found that women feel much less welcome in the sector compared to men (47\% of women always feel welcome, versus 79\% of men).

Age and experiences of bullying and harassment: older respondents experienced less bullying or harassment

50\% of respondents aged 34 and under suffered bullying and harassment in the last two years, compared with only 30\% of those aged 65 and over.

Disability and experiences of bullying and harassment; disabled people experienced more bullying and harassment

61\% of disabled respondents reported suffering bullying and harassment in the last two years, compared to only 44\% of respondents who are not disabled. The 2021 Bullying and Harassment Evidence Review led by UKRI\textsuperscript{12} on bullying and harassment in academia by UKRI found that little has been reported specifically on the experiences of disabled staff regarding bullying and harassment. As a result, our data cannot be compared with other areas in the STEM sector.

\textsuperscript{11} Graham, H., Raeside, R., Maclean, G., 2017. Understanding the status of under-represented groups in the Information and Communication Technologies – A report to the Engineering and Physical Sciences Research Council 140.

\textsuperscript{12} Institute of Physics, Royal Astronomical Society and Royal Society of Chemistry, Exploring the workplace for LGBT+ physical scientists (2019)
Sexuality and Experiences of Bullying and Harassment: gay lesbian and bi people experienced more bullying and harassment

50% of gay/lesbian respondents and 47% of bi respondents experienced bullying and harassment in the two years before the survey; 57% of heterosexual/straight respondents experienced none. 20% of gay or lesbian respondents had been subjected to bullying or harassment at least once a fortnight or more in the previous 12 months, compared to 11% of straight respondents.

In 2019 the RAS, RSC and IOP published a report on the experiences of LGBTQ+ physical scientists in the workplace which found that 18% of LGBTQ+ respondents experienced exclusionary behaviour (intimidating, offensive or harassing behaviour because of their gender identity or sexual identity), compared to only 10% of those who did not identify as LGBTQ+. This 8% difference almost matches the difference between heterosexual/straight and LGBTQ+ respondents in this survey, suggesting a similar level of exclusionary behaviour in our community. However, given the disparity between the two datasets we simply cannot be sure, highlighting how little information exists on these behaviours in general.

“50% of gay/lesbian respondents and 47% of bi respondents experienced bullying and harassment in the two years before the survey”

Frequency of bullying and harassment during 2 years preceding survey (by sexuality)
Ethnicity and Experiences of Bullying and Harassment: BAME respondents experienced more bullying and harassment

60% of white respondents reported never having suffered bullying and harassment compared to 45% of Asian respondents and 46% of Black, Mixed and other heritage respondents. The latter group also report the highest frequency, with 20% of this group reporting instances at least once a fortnight, and 3% every day. The Universities UK Tackling Racial Harassment in Higher Education report\textsuperscript{13} found that 29% of Black students and 27% of Asian students had experienced racial harassment while at university and that 33% of minority ethnic higher education staff had experienced racial harassment in the form of name-calling, jokes and insults. 70% of those staff members who experienced racial harassment reported being subjected to racial ‘microaggressions’, sometimes on a daily basis.

Our survey did not ask respondents detailed questions about the nature of the bullying and harassment they were subjected to; as a result we do not know how much this is connected to race. However, given that our data suggests BAME respondents are around 35% more likely to experience bullying and harassment (54% of minority ethnic respondents, compared with 40% of White respondents), this is similar to the 33% figure from the Universities UK (2020) survey above, and suggests a similar level of racial harassment.

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\textsuperscript{13} Universities UK, Tackling racial harassment in higher education (2020)
5.4 Witnessing bullying and harassment

Survey respondents were asked if they had personally witnessed any of the types of bullying, harassment or any of the unwanted behaviours listed: 57% of respondents said that they had. This is significant. Studies have shown that witnessing bullying and harassment in the workplace affects employee wellbeing. Sprigg et al. showed that 6 months after witnessing bullying, employees who already have low optimism and who receive little supervisory support are more likely to have a higher level of work-related anxiety and depression.

Of the 3% who listed ‘other’ in our survey, answers included that they had observed it on social media, or that they were aware of it occurring at their institution, but they themselves had not personally witnessed it.

5.4.1 Witnessing bullying and harassment for demographic groups

Selected disaggregated responses to the survey question that asked if respondents had witnessed bullying and harassment in the last 2 years are shown below. Our data indicate that people in traditionally marginalised, minority, and under-served groups are the most likely to observe such behaviour.

Sexuality and witnessing bullying and harassment: straight people witness less

58% of straight/heterosexual respondents reported witnessing such behaviours, compared to 65%, 68%, and 75% of respondents who identified as gay or lesbian, bi, and other sexualities respectively. This suggests, for example, that bi astronomers and geophysicists are more likely to witness bullying and harassment. 30% of the respondents in the RAS/RSC/IoP LGBTQ+ physical sciences report had witnessed gender/sexuality-based exclusionary behaviour. Our results suggest that LGBTQ+ astronomers and

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geophysicists are more likely to both experience and witness bullying and harassment than in the physical sciences as a whole. However because the survey did not ask the nature of any harassment, we cannot be certain of this.

**Age and witnessing bullying and harassment: youngest and oldest witness less**

Our results suggest that astronomers and geophysicists between the ages of 25 and 44 are much more likely to witness bullying and harassment than their younger and older colleagues. 68% of respondents aged 25–34 and 65% of those aged 35–44 had witnessed bullying and harassment, compared to 55% of those aged 55–64 and only 39% of those aged 65+. The youngest age group (24 and under) report lower levels of witnessing bullying and harassment than most age groups (49%).

“**Astronomers and geophysicists between the ages of 25 and 44 are much more likely to witness bullying and harassment than their younger and older colleagues**”

Respondents aged 25-34 witnessed most bullying and harassment
5.5 Perception of employers’ responses to sexual harassment

Our survey asked respondents if they thought their employer takes sufficient action and responds appropriately if sexual harassment at work is reported. 32% said yes, 49% were not sure, and 13% said no.

5.5.1 Perceptions of employers’ responses to sexual harassment for demographic groups

We show selected disaggregated responses to the question asking respondents whether they felt their employer takes sufficient action and responds appropriately if sexual harassment is reported. Our data suggest that marginalised groups are more likely to think their employer does not respond adequately to sexual harassment.

Age and perceptions of responses to sexual harassment: younger people are less satisfied with employers’ responses

Only 24% of the youngest respondents thought that their employers took sufficient action and responds appropriately. This proportion increases with age: 38% of those aged 55–64 believed that their workplace responded appropriately and 58% of those aged 65+ perceive that their workplace has sufficient measures in place to respond to reports of sexual harassment.

Gender and perceptions of action on sexual harassment: Men are most likely to feel that their employer responds appropriately

28% of non-binary and other gender respondents, and 19% of women, answered ‘no’ to the question ‘do you think your employer takes sufficient action to prevent bullying and harassment or unwanted behaviours at work?’, only 10% of men did. Women respondents are almost twice as likely to distrust their employer’s responses to sexual harassment as men; non-binary and other gender respondents are almost three times as likely as men to distrust their employer in this way.

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‘Do you think your employer takes sufficient action and responds appropriately if sexual harassment at work is reported?’ (by age)

<table>
<thead>
<tr>
<th>Age Group</th>
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<th>Not Sure</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>65 and over</td>
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<td>34</td>
<td>58</td>
</tr>
<tr>
<td>55–64</td>
<td>10</td>
<td>51</td>
<td>38</td>
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<tr>
<td>45–54</td>
<td>14</td>
<td>53</td>
<td>33</td>
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<tr>
<td>35–44</td>
<td>14</td>
<td>54</td>
<td>33</td>
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<tr>
<td>25–34</td>
<td>17</td>
<td>53</td>
<td>29</td>
</tr>
<tr>
<td>24 or under</td>
<td>16</td>
<td>59</td>
<td>24</td>
</tr>
</tbody>
</table>

‘Do you think your employer takes sufficient action and responds appropriately if sexual harassment at work is reported?’ (by gender)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Yes</th>
<th>Not Sure</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-binary/other</td>
<td>28</td>
<td>52</td>
<td>28</td>
</tr>
<tr>
<td>Men</td>
<td>10</td>
<td>52</td>
<td>38</td>
</tr>
<tr>
<td>Women</td>
<td>19</td>
<td>52</td>
<td>29</td>
</tr>
</tbody>
</table>
5.6 Experiences of preventative measures in the workplace

Respondents were asked ‘do you think your employer takes sufficient action to prevent bullying and harassment or unwanted behaviours at work’. 37% of all respondents said yes to this, 33% said no, and 27% said they were not sure (3% responded with ‘other”).

Respondents had the opportunity to explain their answer. There were some positive examples:

- Clear communication
- Clear reporting structure and chain of command, and clear alternatives to chain of command when problems occur. Good support among students and early-career researchers.
- Reporting procedures at their workplace. Although reporting differs from prevention, many respondents mentioned this. The existence of reporting procedures may deter perpetrators.

Many more respondents expanded on their answer with negative examples. A selection of these are listed below:

- Unclear reporting procedures at many institutions
- Supervisor relationships make reporting/whistleblowing difficult
- Policies aren’t there to protect staff or prevent bullying and harassment, they are there to cover organisations’ backs
- Those in positions of power and influence are perceived as ‘invincible’ and are not punished; many perceived that there were no sanctions for those who secure large grants for their universities

Respondent comments included:

“It is difficult to educate senior staff on their behaviour. Some individuals are not aware of the impact of their actions and do not believe they have done anything wrong.”

“There are robust procedures in place ... However, the processes for dealing with anything short of very serious are not great, and victims are dissuaded from pursuing complaints. There appears to be an unwillingness to take action.”

“They try by doing all the recommended trainings and reporting systems. It fails still.”

“I strongly believe that most institutions and managers only care about their image and making sure they look good and lawful on paper. They do not care about bullying and harassment or unwanted behaviours at work, and this is why known bullies and harassers in UK astronomy have not lost their jobs.”

“More recently, yes – but when I just started out, no. When I started my PhD it was unclear if I could report things, where, and how – so when an incident happened, I didn’t report [it]. Later incidents I have been able to report, because my institution since has made it very clear where and how to report inappropriate behaviour.”

“There is very minimal training for academics to properly manage people with dignity and respect. There is no recourse when they do bully or harass students/colleagues. They will not be disciplined or fired so their behaviour continues. New students and postdocs are repeatedly not warned of [an] academic’s long histories of bullying and harassing multiple previous students (all previous students quitting due to bullying) and the new students find out the hard way as the behaviour”

“On paper they do, but there are always some people in more ‘powerful’ positions who don’t treat students with respect, especially those who are struggling with a disability”

“A code of conduct exists, but one of the persons who bullied me is one of the chairs of the committee in charge of upholding it”
5.6.1 Experiences of preventative measures for demographic groups

We present selected disaggregated data; all data is available in the appendix. Our data suggest that marginalised groups feel less confident that their employers take sufficient measures to prevent bullying and harassment.

**Ethnicity and perceptions of preventative measures: fewer Black, Mixed and other heritage respondents think their employers do enough to prevent bullying**

45% of Black, Mixed and other heritage respondents answered No to this question; 32% responded ‘Not sure’. 24% of these respondents and 28% of Asian respondents answered Yes, compared to 41% of white respondents. White people were 71% more likely to believe their workplace did enough to prevent bullying and harassment, compared to Black, Mixed and other heritage respondents.

**Sexuality and perceptions of preventative measures: fewer LGBTQ+ respondents think that their employers do enough to prevent bullying**

20% of gay or lesbian respondents answering Yes to ‘do you think your employer takes sufficient action to prevent bullying and harassment or unwanted behaviours at work’, compared to 41% of heterosexual respondents. This suggests straight astronomers and geophysicists are twice as likely to trust their employers to protect them from bullying and harassment, as their LGBTQ+ colleagues.

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‘Do you think your employer takes sufficient action to prevent bullying and harassment or unwanted behaviours at work?’
(by ethnicity)

‘Do you think your employer takes sufficient action to prevent bullying and harassment or unwanted behaviours at work?’
(by sexuality)
5.7 Experiences of reporting bullying and harassment

Our respondents were asked if they had reported bullying, harassment or unwanted behaviours, and if so, whether they were satisfied with how their concern was dealt with. 40% of respondents reported such instances; only 35% were satisfied with the response they received. 40% were not satisfied with how their report was dealt with and 25% of reports were ignored.

This is symptomatic of a wider issue with poor investigations and reporting procedures on bullying, harassment and abuse in higher education. A recent freedom of information request by the Al Jazeera Investigations Unit\(^\text{15}\) found that of the 1403 student sexual misconduct complaints made in 125 UK universities, only 487 were investigated.

The sample size of the answers to this question was not large enough to allow us to look at disaggregated responses to this question for most demographic groups (i.e. to assess if reports from any one demographic group was more likely to be ignored than another). This is because this question addresses only those who had reported bullying and harassment and a disaggregated analysis of this group would not be statistically sound. An elementary analysis suggested women were approximately twice as likely as men to be dissatisfied with how their reports were dealt with. This is in line with our other results on workplace culture, suggesting that under-served and minority groups are less likely to have reports of bullying and harassment dealt with than their majority counterparts in the sector, such as white people, men, straight people and those who are not disabled.

![Bar chart showing experiences of reporting bullying and harassment](image)

Most respondents who report bullying and harassment are not satisfied with how their report was dealt with

\(^{15}\) Al Jazeera Investigations Unit, Degrees of Abuse (2021)
5.8 Conclusions

The survey data indicate that astronomy, solar system science and geophysics have a bullying and harassment problem that is both endemic and systemic. Historically marginalised and under-served groups such as disabled people, women, Black and minority ethnic, and LGBTQ+ people are much more likely to be bullied and harassed than men and White, straight, and non-disabled people. Our data also suggest that those at more precarious stages in their careers (students and those on temporary contracts) are also more likely to be bullied and harassed.

Minority and marginalised groups in our field feel their workplaces do the least to prevent bullying and harassment, and the majority (65%) of our respondents who reported concerns of bullying and harassment felt that their concerns had been handled inadequately.

This report is a snapshot of the workplace environment in 2020, and its results should concern the astronomy and geophysics community. Based on the data, we believe we are able to report that bullying and harassment takes place throughout our fields and disproportionately affects minority and marginalised people. We must put in more effective policies, procedures and safeguards to protect all our colleagues, to support students, and to ensure that everyone can achieve their potential and work in a safe and satisfying environment, regardless of their background.
6 Recommendations

Introduction

What follows is a series of recommendations that can be actioned by individuals, by managers and workplaces, and by organisations and associations. We know there are many working in the astronomical and geophysical sciences who want to be active allies, call out harm when it’s done, and to understand more about how to contribute to a supportive working environment. What appears to be needed is permission and trust. More explicit permission is needed to enable individuals to act, report, or disclose when harm is done. The procedures to deal with complaints need to be clear and transparent. They also need to be robust in how they deal with potentially vexatious complaints. This permission is useless if those involved cannot also trust that this will be acted upon, and received with the support it requires.

To that end these recommendations are suggestions for how we might build that sense of permission and trust, focusing on three critical areas: prevention, reporting and accountability. It is our intention that by enacting these recommendations, we can all make headway towards a safer and more inclusive workplace.
Prevention and understanding

Prevention should be our ultimate goal, so work is needed to develop more constructive working patterns and relationships, challenging systemic issues that lead to the normalisation of acceptance of bullying and harassment (B&H). We need individuals and organisations to understand that it is the consequences of the bullying and harassment that matters most, not their own perceptions of what is acceptable. We can achieve this by challenging the power dynamics and considering how structures and systems interact to perpetuate the issue. We also want to support a survivor-centred approach, which assures the next generation of astronomers and geophysicists that our community is safe and welcoming.

<table>
<thead>
<tr>
<th>Individuals</th>
<th>Managers and Leaders</th>
<th>Organisations</th>
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<tbody>
<tr>
<td>● Increase your understanding of what behaviours might be considered bullying and harassment. This might include: proactive EDI engagement, training, learning about other cultures, diversifying news and media feeds.</td>
<td>● Create a culture of sharing around cultural and social understandings. This might include scheduling shared coffee breaks/lunches, profiling people’s backgrounds and interests in newsletters, bringing in training around differences represented in your team, etc.</td>
<td>● Offer regular training and learning opportunities that are particularly relevant to issues faced by your staff/membership and their managers.</td>
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<tr>
<td>● Increase your understanding of what to do if you see bullying and harassment (like active bystander training).</td>
<td>● Commit to keeping yourself and other colleagues up to date on best practice with respect to B&amp;H (training, reading, listening). This needs to include behaviour in online spaces and at external events and activities, as well as your place of work, and to extend to all relationships whether in the lab, classroom, office, corridor, canteen or beyond.</td>
<td>● Promote good working practices through membership activities (registration, newsletters, events, terms and conditions) and fostering inclusive environments.</td>
</tr>
<tr>
<td>● Actively engage in teaching, management, leadership and mentoring training opportunities to keep practice up to date.</td>
<td>● Commit to regularly reviewing that all members of the team are given equal/equivalent access to opportunities (projects, training, collaborations).</td>
<td>● Advertise anti-bullying and harassment initiatives and EDI training, including through equitable existing structures, such as annual reviews, promotions and organisational membership criteria.</td>
</tr>
<tr>
<td>● Consider joining a union for support, guidance and advice in these areas.</td>
<td>● Openly discuss B&amp;H at committees, management team meetings and elsewhere to contribute to the culture of awareness around B&amp;H.</td>
<td>● Recognise the role of individuals in contributing to a safe and inclusive workplace by seeking positive attributes in recruitment.</td>
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<td>● Ensure events have a strong and actionable code of conduct.</td>
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<td>● Regularly review training and learning offerings, liaising with other similar bodies to keep the whole sector informed.</td>
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</table>
- Ensure all staff have clear expectations around workplace culture and how B&H arises (induction training).
- Review appointment processes for speakers, employees and consultants.
- Adopt a ‘whole organisation approach’ led by senior leadership in championing, preventing and tackling B&H in an organisation.
- Working with wider organisations such as The Advisory, Conciliation and Arbitration Service (Acas) to improve working life for employers and employees.
## Reporting and related processes

Current reporting processes for individuals to report instances of B&H maintain the working cultures where bullying and harassment get overlooked or deliberately ignored. Processes need challenging to ensure those who have been harmed are able to safely trust that their experience is being taken seriously.

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<thead>
<tr>
<th>Individuals</th>
<th>Managers and Leaders</th>
<th>Organisations</th>
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<tbody>
<tr>
<td>● Find out what your reporting options are (employer, memberships, police). Update this knowledge every year.</td>
<td>● Keep up to date on your institutional reporting mechanisms. Invite HR or an external expert in to keep your team up to date.</td>
<td>● Ensure that reporting processes are accessible and transparent, and for these processes to be comparable across relevant institutions (learned associations, membership bodies, universities, industry).</td>
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<tr>
<td>● If you witness any behaviour that might be considered to be B&amp;H, make a note of the circumstances, who, what, where and when. Be prepared to share this with the person who was harmed.</td>
<td>● Take every case brought to your attention seriously. Make time to follow procedure and regularly follow up.</td>
<td>● Set timelines on which B&amp;H reports will be investigated and the results communicated to all parties involved.</td>
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<tr>
<td>● You may also wish to directly report the incident, or at least seek advice from a local EDI or anti-bullying and harassment champion.</td>
<td>● Ensure there is a designated point of contact for reporting B&amp;H issues and that you are clear on who it is and how to contact them.</td>
<td>● Review membership of B&amp;H panels (for example a panel member hearing allegations of B&amp;H as part of a grievance or disciplinary procedure) to ensure members, are suitably impartial and properly trained to understand issues around B&amp;H.</td>
</tr>
<tr>
<td>● If you witness any behaviour that is harmful to you directly or by association, feel empowered to report this.</td>
<td>● Be clear about what might be reported and by who. Have processes in place to account for those who are being harmed directly, those who are being harmed indirectly or by association, and those who have witnessed harm.</td>
<td>● Review terms and conditions, and the skills of the panel, to ensure that bad practice is not being perpetuated.</td>
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<td>● If someone tells you they have experienced B&amp;H then take time to listen, signpost, and support reporting.</td>
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<td>● Ensure there is a clear process for acting on witness statements of B&amp;H, and ensure that procedures account for that fact that witnessing a behaviour can constitute B&amp;H, even if the witness is not the direct target.</td>
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<td>● Ensure the quality and coverage of organisational policies in order to ensure seamless reporting, even from outside the organisation.</td>
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<td>● Emphasise to staff that having things reported is a good thing – that it shows the reporting mechanisms are working and that staff trust that issues they raise will be addressed. A culture change will not occur if departments are concerned about how their reporting rates are perceived across a wider organisation.</td>
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</table>
Accountability, consequences and communication

Individuals and institutions who have caused harm need to be held accountable for their actions in such a way that has real consequences. These consequences should enable the injured party to go on and thrive in their career. Communicating these clear and transparent procedures publicly, including potential sanctions if an allegation is upheld, and any other potential impacts (e.g. pay progression, and potential requirement to report B&H to certain grant funders), without creating more work for the injured party, should be prioritised.

<table>
<thead>
<tr>
<th>Individuals</th>
<th>Managers and Leaders</th>
<th>Organisations</th>
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</table>
| • Understand that something that seems harmless or acceptable from your perspective might not be for a given individual.  
• Be prepared to learn, and to do better in the future. No-one is expected to be perfect, and mistakes will happen. | • When issues of B&H are raised, be prepared to discuss these in team and group meetings. Trust is built through transparency; whilst specifics might need to be protected on behalf of those involved, any incident that occurs is a learning opportunity for everyone. Remember that it is important to maintain confidentiality/personal data so anonymise names and some specific details as appropriate.  
• Seek any external badging of anti- B&H status offered (e.g., methods of accreditation/recognition for anti- B&H courses taken), and support team members to do the same. | • Procedures should clearly and transparently demonstrate appropriate and proportionate potential outcomes and sanctions. These might include removal from boards, roles, events, funding, membership or employment.  
• Ensure that any ‘warnings’ that are given following a disciplinary hearing are transparently communicated, and remain ‘live’ (commonly 6 months for a first formal warning and 12 months for a final written warning) for the appropriate time. Procedures should also transparently communicate any consequences of a further instance of B&H during the period the warning is ‘live’.  
• Extend accountability beyond individuals to research groups, teams and institutions, to challenge cultures of B&H.  
• Individual employment matters should be confidential – unless they have been heard before an employment tribunal which is a public forum. There may be certain duties of disclosure, e.g. to funders in confidence – but organisations should not disclose unless there is a clear duty to do so (statute or contract) – information should not be in the public domain due to breach of confidentiality. |
<table>
<thead>
<tr>
<th>Actions</th>
<th>Objectives</th>
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<tbody>
<tr>
<td>• Share the report and recommendations and publish the report and Nature Astronomy article, and launch the recommendations online and at an in-person event.</td>
<td>• Communicate the B&amp;H working group, process, and future plans for B&amp;H work in RAS documents and to partners and other learned societies.</td>
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<tr>
<td>• Lead by example.</td>
<td>• Consider if there is further work to be done in this area: could the RAS work with UKRI to provide barriers to funding, for example?</td>
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<tr>
<td>• Maintain links to the IOP work on the Physics Inclusion Award, and the UKRI work on B&amp;H processes, to ensure these recommendations are considered.</td>
<td>• One relevant staff training per year.</td>
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<tr>
<td>• Instigate training offerings for relevant RAS staff.</td>
<td>• Have one working group meeting in Autumn 2024, Autumn 2025 and Autumn 2026.</td>
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<tr>
<td>• Carry out a case study with one university to explore how the wider recommendations might be actioned.</td>
<td>• Next survey could be in 2025.</td>
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<tr>
<td>• Review the recommendations in one, two, and three years’ time to check progress.</td>
<td>• Review the process and approach for action if there is a breach in the code of conduct at RAS events.</td>
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<tr>
<td>• Offer accreditation for individuals (staff and members) and managers as anti-B&amp;H champions, through participation in training or logging learning.</td>
<td>• Ensure organisational information is communicated to future conference organisers and processes are enforced.</td>
</tr>
<tr>
<td>• Work with university departments and external conference organisers to ensure safety at all RAS related events and conferences.</td>
<td>• Ensure events have a strong and actionable code of conduct. Ensure the actions are carried out.</td>
</tr>
<tr>
<td>• Create a solid process for selecting speakers and accepting awards nominees.</td>
<td>• Offer appropriate training for LOC, volunteers and Chairs in how to deal with incidents properly.</td>
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<td></td>
<td>• Work with the awards officer and events officer to make this process as strong as possible.</td>
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</tbody>
</table>
- Work with our journal publishers (OUP) and the Committee on Publication Ethics (COPE) to ensure our publications fit COPE requirements.

- Offer to work with Individual/Manager/Organisations to help prevent or report B&H where possible.

- Awareness for Individual/Manager/Organisations to report to the RAS, whether that be regarding B&H at a RAS event/space, but also more generally.

- Help the community work towards a better system, one in which we retrain, relearn and use restorative justice. Keep communication channels open and for preventative measures, as opposed to defensive.

- Sign up to the UKRI Forum on Tackling Bullying and Harassment principles and see if the RAS can join the Forum.

  - Completed, November 2023