



RESEARCH ARTICLE

Improving university policies and risk assessment to support inclusive fieldwork in environmental sciences

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Abstract

1. Higher education institutional policies on fieldwork, and associated fieldwork risk assessments, communicate in explicit and implicit ways how inclusive the institutional approach to fieldwork is, and whether fieldworker safety and wellbeing is an institutional priority. Appropriate policies, when effectively implemented, should protect individuals from harm and provide recourse if harm occurs.
2. We reviewed the extent to which 90 UK higher education institutions that provide environmental science courses addressed protected characteristics, the rights of fieldworkers and responsibilities for fieldworker safety in their fieldwork policy ($n = 67$) and risk assessment ($n = 77$) documents.
3. We found that 77% of policy documents mentioned protected characteristics, but only 40% stated that fieldwork participants have a right to safety in the field; only 5% stated a right to participate in fieldwork free from harassment.
4. Among risk assessments, 51% mentioned protected characteristics; only 10% identified discrimination as a potential risk.
5. **Solution.** Our results show that there is a need to develop more inclusive fieldwork policies and practice across UK institutions. Drawing from our results and existing literature, we recommend that institutions should: (i) strive for a philosophical and cultural change to make inclusion the default; (ii) develop institute- and fieldwork-specific policy and risk assessment documents; (iii) ensure that policies and risk assessments explicitly consider how characteristics and identities intersect with risk in the field; (iv) improve incident reporting procedures; (v) clearly articulate responsibilities; and (vi) use inclusive language that values fieldworkers and embeds their rights to safety.

KEYWORDS

EDI, marginalised characteristics, participation, safety, universities, wellbeing

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1 | INTRODUCTION

Environmental fieldwork for education or research often inherently involves risk. However, the risk to some researchers can be far greater than to others, as fieldworkers with marginalised characteristics and identities can face additional discrimination, harassment and abuse in the field (Carlin et al., 2023). In their seminal study, Clancy et al. (2014) documented that among survey respondents, 70% of women said they had experienced sexual harassment, and 26% of women said they had experienced sexual assault. Fieldworkers can be at increased risk because of their gender, race, sexual orientation, gender identity, religion, maternity status, a visible or invisible disability or the intersection of multiple of these characteristics and identities (Carlin et al., 2023; Demery & Pipkin, 2021). In response to increasing awareness across the scientific community of the discrimination and risk faced by fieldworkers, researchers have developed and are publishing recommendations for changes in fieldwork practices to improve the safety of at-risk individuals. This includes integrating consideration of identity-related risks into fieldwork planning and risk assessment (e.g. Coon et al., 2023; Demery & Pipkin, 2021).

Recommendations largely focus on practices that fieldworkers themselves, and their principal investigators or supervisors, can adopt, although some also identify the need for institutional support in implementing better practice and structural change (e.g. Coon et al., 2023; Cronin et al., 2024). However, relatively little attention has been paid to how institutional policies and processes currently address Equality, Diversity and Inclusion (EDI) in fieldwork. Institutional policies are articulations of the rights of fieldworkers in terms of their safety and participation in fieldwork and provide explicit understanding of who is responsible for fieldworker wellbeing. Institutional policies can seem disjunct from fieldwork practice, but they are important for shaping the fieldwork environment and experience for researchers. Robust and effectively implemented policies should actively protect marginalised and at-risk individuals from harm. This may include, for example, an institutional responsibility to support trans individuals with navigating the paperwork required for international travel (Coon et al., 2023). Policies should also provide recourse when harm occurs. For example, institutions could have a code of conduct with a zero-tolerance policy for harassment and assault, which is enforced through confidential reporting and clear disciplinary consequences for misconduct (Cronin et al., 2024). A critical mechanism for ensuring appropriate implementation of policy is a comprehensive risk assessment, which provides the opportunity to identify and mitigate risk in the field and reaffirm responsibilities for safety and wellbeing. Together, these processes should enable the researcher to make informed decisions about their participation in fieldwork, empowering them to decide upon an acceptable level of risk with the support of their institution. Moreover, in an educational setting, these processes should ensure that everyone has the opportunity to participate in educational fieldwork.

Institutional policies and processes designed to ensure fieldworker safety and wellbeing have evolved in a historical context

where strong assumptions were made about the type of person who undertakes fieldwork. The 'macho' stereotype associated with fieldwork, which is also racialised, classed, ableist and heteronormative, persists today (e.g. Carlin et al., 2023; Nash et al., 2019). Persistent stereotyping creates barriers to participation, including physical barriers (e.g. where tasks exceed the fieldworker's physical capabilities, or conversely, where fieldworkers are not afforded the opportunity to participate because of a perceived inability), and gender-based harassment, where majority groups create a patriarchal, sexualised culture (Nash et al., 2019). Such assumptions also do not allow for the consideration of how researchers with protected or marginalised characteristics may experience fieldwork differently and may face different or greater risks to personal safety in the field. Risks may come from uninformed planning, prejudices within the field team or from the particular location of the fieldwork in, for example, areas with a history or current culture of hate crimes against particular identities (Demery & Pipkin, 2021; Nash et al., 2019). Our experiences suggest that, broadly, institutional fieldwork policy and risk assessments focus on physical risks and neglect to consider how identities and characteristics intersect to impact the risk to fieldworkers.

Fieldwork policies and risk assessments that meet the needs of the more diverse fieldworkers of today, and create a safer place for the more diverse fieldworkers of tomorrow, are critical mechanisms that need to be in place at the institutional level to enhance EDI in fieldwork (Nelson et al., 2017; Yarinck et al., 2023). Such processes create the necessary institutional architecture to support actions that can be taken by individuals—whether principal investigators, supervisors or researchers themselves—to ensure fieldworker safety and improve inclusivity in the field (Clancy et al., 2014; Ramírez-Castañeda et al., 2022). For example, with appropriate risk assessment and supporting policy, fieldworkers may make the decision to avoid lone working or be empowered to change field site, as risk mitigation measures. Moreover, explicit institutional support for diverse characteristics helps to create a culture and support institutional mechanisms through which prejudice can be tackled rather than ignored. Such mechanisms include an effective incident reporting system that ensures that those who have experienced prejudice have confidence that their reports will be taken seriously, dealt with sensitively and in confidence and that there will be appropriate disciplinary consequences for the perpetrators (Cronin et al., 2024).

This study aimed to understand the extent to which Equality, Diversity and Inclusion is considered in institutional fieldwork policy and risk assessments. To do this, we reviewed fieldwork policy and risk assessment documents from 90 higher education institutions across the UK. Reflecting our primary area of research, we focussed on institutions that offer courses in environmental sciences. Much of the literature on EDI in environmental fieldwork has come from the USA (e.g. Clancy et al., 2014; Coon et al., 2023; Demery & Pipkin, 2021) and so a focus on the UK expands our understanding to a different context. In the UK, the Equality Act 2010 protects those with particular characteristics from discrimination in various areas, including education and work (UK Government, 2010). Whilst

UK higher education institutions are not immune to changing political landscapes (e.g. they must carefully balance freedom of speech alongside ensuring a safe and inclusive environment, Malcolm, 2021), they have shown a general trend towards embracing EDI initiatives, evidenced by increasing engagement with the Athena Swan gender charter and the Race Equality Charter (Xiao et al., 2023).

Our aim was to gather fieldwork policy, fieldwork guidance and fieldwork risk assessment documents, acknowledging that in some cases only a subset of these documents may exist. We systematically extracted data on the content of documents in relation to protected characteristics, the rights of fieldworkers and the responsibilities for fieldworker safety. We also considered how the language used was more or less inclusive. In the context of this review, we make recommendations to improve institutional policies and approaches to risk assessment that aim to improve the safety of fieldworkers with marginalised identities and ultimately increase inclusivity in fieldwork.

2 | MATERIALS AND METHODS

2.1 | Gathering fieldwork policy and risk assessment documents

We identified relevant UK higher education institutions as those offering courses in subjects likely to include environmental science fieldwork. Thirteen relevant subjects (biosciences, biology, ecology and environmental biology, plant sciences, zoology, others in biosciences, animal science, geography, physical geographic sciences, environmental sciences, others in geographical studies, earth sciences, geography earth and environmental sciences (natural sciences)) were identified from the Higher Education Statistics Agency (HESA; www.hesa.ac.uk). We then used HESA to identify institutions that offered courses in at least one of these subjects.

We were interested in (i) fieldwork policy or guidance and (ii) risk assessment guidance or risk assessment templates/examples. Fieldwork policy can be considered mandatory and expresses the rules of an institution, whilst fieldwork guidance is more advisory. Where an institution has both types of document, there is likely to be overlap in their content, but the policy may focus more on rules (e.g. who is responsible) whilst the guidance may focus more on practical details (e.g. the safety equipment that responsible person should consider when planning fieldwork). Risk assessment guidance should provide the advice needed to complete a risk assessment of fieldwork, whilst a template/example provides the structure of a risk assessment (with or without a completed example), and may or may not include guidance within it. Documents were gathered using two sequential steps. First, we navigated to the official websites of the identified institutions. Here we used the websites' in-built search functions to conduct repeated searches using the following search terms: Fieldwork policy, Risk assessment, Fieldwork guidance, Health and Safety, fieldwork health and safety, 'fieldwork' 'policy', fieldwork risk assessment, outdoor working, lone working. We then followed the returned links and used snowballing to follow further

links until the documents were retrieved or until it was evident that the documents were behind a firewall or did not exist online (Wohlin et al., 2022). Searches were conducted for a maximum of 30 minutes per institution. This time allocation was decided by conducting preliminary searches trialled on institutions with known access, lack of access or no documents. Where institutions had multiples of each type of document (e.g. documents specific to each school), we retained the documents within the school(s) or faculty(s) relevant to environmental sciences. Searches were conducted between 25th January and 28th February 2023. Searches returned a total of 39 documents from 20 institutions.

If all documents were not retrieved from the search, the second step was to request the documents directly from the institutions. Initially, if a suitable contact email was given online, we used this to submit the request. However, it became apparent that institutions treated these enquiries as Freedom of Information Requests (FOI). Therefore, we submitted our enquiries as FOIs, and in the case where no response was received from our initial email enquiries, we then followed this up with an FOI. Emails and FOIs were submitted between 25th January and 31st March 2023. Emails and FOIs returned a total of 115 documents from 82 institutions (out of 95 institutions that were contacted).

2.2 | Extracting data on EDI considerations in fieldwork policy and risk assessments

We developed a protocol for extracting data from documents that allowed us to quantitatively assess how EDI was considered in fieldwork policy and risk assessments. Fieldwork policy and guidance were considered interchangeable, whilst risk assessments were treated separately. We were interested in how documents addressed protected characteristics (which are, according to the UK Equality Act 2010: age, disability, gender reassignment, marriage or civil partnership, pregnancy and maternity, race, religion or belief, sex and sexual orientation), participation and safety in fieldwork. Acknowledging that individual documents cannot be expected to provide all necessary information, we were also interested in the extent to which documents signposted to supporting resources, particularly related to protected characteristics. In this context, signposting means providing clear direction (e.g. a link) to the specific information or resource. We therefore developed a data extraction protocol that produced mostly binary or categorical variables reflecting these issues. Our data extraction coding is presented in Table S1. Information extracted from policy/guidance included whether the document was fieldwork specific, the protected characteristics mentioned, stated the right to safe participation in fieldwork and specified responsibilities for fieldworker safety. Information extracted from risk assessments included whether the risk assessment mentioned protected characteristics (and if so which characteristics were mentioned), made explicit reference to discrimination as a risk and signposted to relevant resources such as training, policy and incident reporting systems. When extracting

the specific protected characteristics mentioned from policy/guidance documents and risk assessments, we extracted the language used in the document, which did not necessarily align directly to the protected characteristics under the Equality Act (e.g. this included gender and gender identity).

To provide additional context around the quantitative analysis of whether or not particular statements were present in documents, we conducted a qualitative analysis of the policy/guidance documents, with the aim of understanding how these statements were articulated. Where fieldwork policy or guidance documents included statements that we were specifically searching for, we extracted the relevant quote. Specifically, we extracted statements that (i) could be interpreted as a right to safety in the field, (ii) referred to making reasonable adjustments, (iii) described responsibilities when fieldwork took place in another country with differing laws on protected characteristics. There were too few samples to analyse statements that could be interpreted as a right to participate free from harassment (see Section 3 below). Risk assessments tended to be written very concisely and provided less opportunity for qualitative analysis; therefore, we limited this analysis to the policy/guidance documents.

Rather than consider all extracted statements together, we conducted three separate analyses for each of the three types of statements (i–iii) above. Data were coded iteratively by the lead author to identify the patterns present. Descriptive codes were developed inductively, meaning that the themes identified were linked to the data themselves, rather than being driven by theoretical or analytical interest (Skjott Linneberg & Korsgaard, 2019). We took a semantic approach to coding, which means that the themes were identified within the explicit or surface meaning of the data (this is in contrast to a latent approach that examines the underlying ideas and assumptions that are theorised as shaping the semantic content of the data; Braun & Clarke, 2006). This was considered appropriate because the purpose of policy and guidance documents is to be read and understood explicitly. For each type of statement (i–iii), we describe the patterns identified in the data, with a particular focus on the prevalence of themes among documents.

2.3 | Inter-rater reliability

Data extraction from documents was carried out by two authors. To assess inter-rater reliability, which is the degree of agreement between the two independent authors assessing the documents, data were extracted by both researchers for a random subset of 21 institutions (just over 20% of the sample). We then calculated Cohen's Kappa to measure the agreement (McHugh, 2012) of the two raters for 13 categorical variables extracted relating to the policy/guidance documents. Cohen's Kappa measures the agreement of two raters on categorical scales, making it suitable for assessing the data extracted using categorical coding. Calculations were made using package 'irr' (Gamer et al., 2022) in the statistical software R (R Core Team, 2024). Not all of the 21 institutions randomly selected for

validation had policy or guidance documents available, and not all of the variables extracted could be coded for each available document; hence, the number of subjects per variable varied. The number of subjects (number of cases where there were data from both raters) ranged from 14 to 21 among the 13 variables (Table S3). Cohen's Kappa ranged from 0.3 to 1 (mean=0.74, median=0.76; Table S3). There are different interpretations of what should be considered a 'moderate' or better strength of agreement based on Cohen's Kappa. Taking a threshold of >0.4 to indicate moderate or better agreement, 12 out of 13 variables show moderate or better agreement between raters. A higher threshold of >0.6 gave 10 out of 13 variables with moderate or better agreement.

3 | RESULTS

3.1 | Document search and retrieval

We identified 117 institutions that offered courses in subjects within environmental sciences (Table S2). However, fieldwork policy, guidance or risk assessment documents were only available for 90 (77%) of these institutions (Figure 1; Table S2).

3.2 | Fieldwork policy and guidance

Among the 90 institutions, we found or were provided with policy or guidance documents for 67 (74%) institutions (Table 1). A further 16 (18%) did not have a policy developed by the institution and instead referred to Universities Safety and Health Association (USHA) guidance; so we separately extracted data from USHA guidance (see *USHA guidance* section below).

Among the 67 institutions for which we obtained policy or guidance documents (that were not the USHA guidance), six (9%) provided documents that were not fieldwork specific and did not include any subsection specific to fieldwork (for example, they were general health and safety policies). Five (7%) documents were not fieldwork specific overall, but did include a subsection on fieldwork, and the remaining 56 (84%) documents were fieldwork specific overall.

Of the 67 policy or guidance documents, 41 (61%) were policy documents; the remaining 26 (39%) were guidance. Documents ranged in year from 2006 to 2023 (Figure S1). We include all 67 documents in our analyses below.

3.2.1 | Consideration of protected characteristics

Protected characteristics were mentioned in 77% of documents ($n=50$; Table 1). Disability was the characteristic mentioned most often, with 69% of documents mentioning disability (Figure 2). The next most frequently mentioned characteristics were age (33%), sex (18%), race (16%) and sexual orientation (16%). The umbrella term 'protected characteristics' was used in 3% of documents. There was

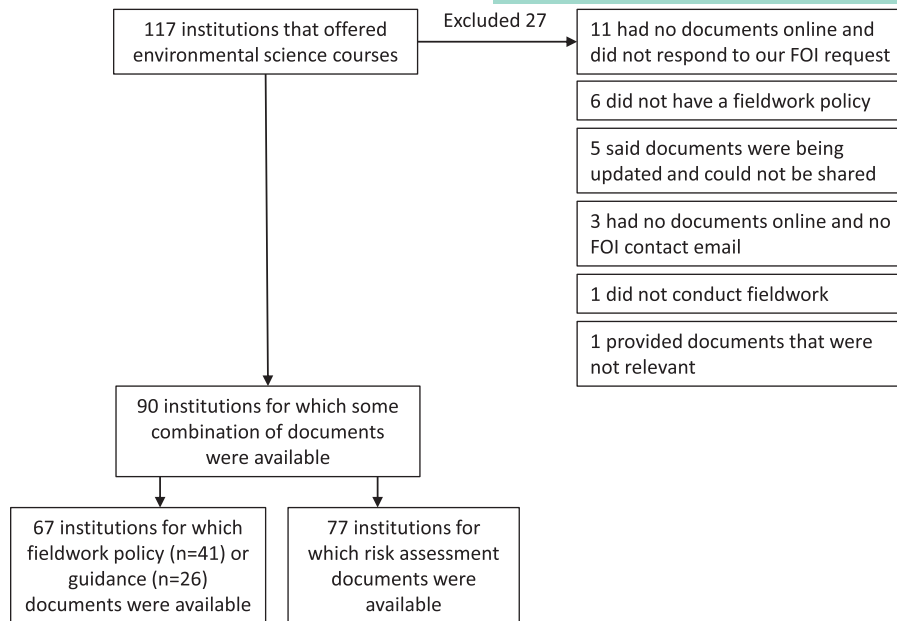
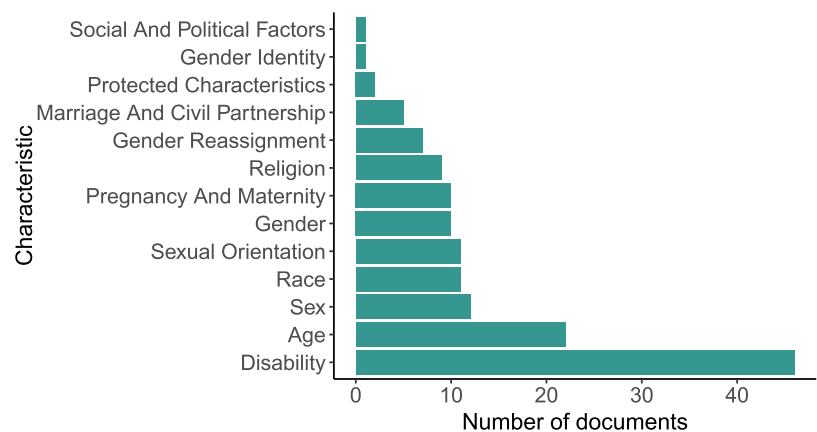


FIGURE 1 Number of institutions that offered environmental science courses, their reasons for exclusion from the study, and final number included.

TABLE 1 Summary of results for extracted data that were comparable among institutional policy/guidance, USHA guidance and risk assessments.

Document type	Sample size	% fieldwork specific	% mentioned protected characteristics	(up to) 5 most common protected characteristics
Institutional policy/guidance	67	84%	77%	Disability, age, sex, race, sexual orientation
USHA guidance	2	100%	100%	Age, disability, gender
Risk assessment	77	57%	51%	Disability, age, sexual orientation, religion, pregnancy and maternity

FIGURE 2 Number of fieldwork policy or guidance documents that mentioned each protected characteristic (Equality Act 2010) and other additional characteristics relating to identity (out of a total of 67 documents included in analyses, 50 mentioned at least one characteristic or identity).



variation among documents in the language used to capture gender diversity, with 'gender' (15%), 'gender identity' (1%) and 'gender reassignment' (10%) all appearing. All characteristics protected by UK law appeared at least once. The expression 'social and political factors' was used in one case, in the context of assessing human hazards to fieldworkers.

Whilst the language used to refer to protected characteristics did not necessarily align directly to the protected characteristics covered by the Equality Act 2010, the words themselves used to describe identities and characteristics were considered acceptable in relation to the current cultural norms, with one exception: the expression 'handicapped people' was used in a document from 2011.

3.2.2 | Rights to safe participation and reasonable adjustments

Only 40% of documents included statements that could be interpreted as fieldwork participants having a right to safety in the field. The most common theme was a focus on the institution's legal responsibilities and duty of care for the safety of those undertaking fieldwork. Whilst these statements were factual and functional, the reference to the legal responsibilities of the institution towards fieldworkers creates a strong foundation for accountability and could be considered very positive, as fieldworkers can understand from this that responsibility for their safety does not fall solely upon themselves. Another common theme was that safety during fieldwork should be 'ensured' or 'protected', often framed in relation to the institution's legal responsibilities, and sometimes mentioned alongside references to managing risk. Much less commonly, there were statements that good safety practice should facilitate fieldwork 'even in the most remote and challenging of environments and conditions', which implies that safety considerations need not limit the scope of fieldwork. Two statements were found that explicitly said health and safety should come first and 'override all other considerations, including academic'. Such statements are potentially very empowering, ensuring that fieldworkers know their right to put safety before research priorities. Finally, only one statement placed a right to mental health and wellbeing alongside a right to physical safety.

Only 5% of documents included statements that there is a right to participate in fieldwork free from harassment. A single institution provided us with a dedicated fieldwork harassment policy, with a very explicit opening statement:

All students and staff at [institution] have the right to participate in fieldwork free from bullying, harassment, and sexual misconduct, of any form. These behaviours are not permitted at the University, in the work and learning environment, and there is no place for them in the field.

Some 61% of documents included statements that adjustments should be made to facilitate participation in fieldwork. Thus, the remaining 39% of institutions did not include statements that referred to their legal obligations under the Equality Act 2010 to make reasonable adjustments for disabled students and workers. Reasonable adjustments under the Equality Act 2010 refers only to those with disabilities, and hence statements dealt with disability almost exclusively. The sole exception was a document that gave the specific example that fieldwork leaders should meet accommodation needs for transgender students. Dominant themes emerged from the statements on reasonable adjustments that reflect how institutions understand and communicate their responsibilities under the Equality Act 2010. Documents variously stated that 'reasonable adjustments' or 'every effort' should be made to include those with disabilities in fieldwork or that those

with disabilities should not be 'put at a disadvantage'. Documents stated that fieldwork leaders should consider alternative activities to support inclusion (such as a change of fieldwork location) or should provide alternative or equivalent learning where participation was not possible (an example given was a virtual field course). The latter theme in particular suggests a focus of the policy on inclusion in education, rather than in research fieldwork. Whilst such themes could be considered inclusive to varying degrees, institutions also provided clear statements on the limit of their legal requirements, and often juxtaposed their statements on inclusion with circumstances that warranted exclusion. Documents stated that it was justified to restrict the activities of those with disabilities or exclude them in part or in whole from fieldwork, often citing cost as a potentially prohibitive factor to inclusion or circumstances where inclusion would pose a safety risk to the fieldworker themselves or to others.

3.2.3 | Responsibilities and incident reporting

Most documents (66%) included information on the responsibilities of fieldworkers, their managers and the institution (Figure 3). Some 27% specified responsibilities at only one or two of these levels; 7% included no mention of responsibilities.

Only 24% of documents included statements on responsibilities when fieldwork took place in another country with differing laws on protected characteristics. The most common theme was that fieldwork leaders should consider cultural or social differences as part of risk assessment. This places responsibility upon fieldwork leaders and identifies that cultural and social issues interact with fieldworker safety. Documents also often included statements that other countries do not have the same legal protections for characteristics, which is essential information, but there was considerable variation on how this was addressed. One document carefully explained the nuances in how LGBTQ+ identities are variously protected or persecuted among countries, whilst

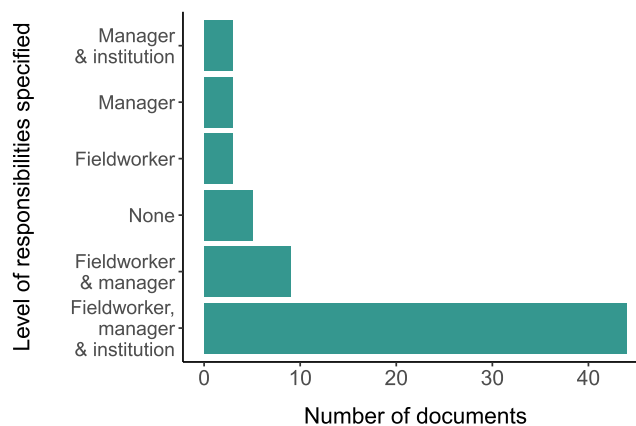


FIGURE 3 The number of documents that specify responsibilities for fieldwork at the levels of the fieldworker, manager and/or institution.

in contrast another stated that fieldworkers may 'fall foul' of host country legislation, citing the example of 'offences around same gender sex'. This shows how different language around the same issue—the safety and legal rights of LGBTQ+ fieldworkers—can convey either explicit support or implicit contempt of those with protected characteristics. Less prevalent were themes around the need for fieldworkers to be made aware of cultural, social or legal differences (with one document identifying this explicitly as part of the institutions duty of care) and the responsibility of the institution to provide training on appropriate conduct in the field. Only one document stated that staff and students should feel no obligation to attend fieldwork in countries 'where the legal practices and cultural norms conflict with their own moral and ethical values', empowering fieldworkers to evaluate locations based on more diverse criteria than local laws.

Signposting to incident reporting systems was only included in 54% of documents. Generally, documents stated that 'injuries' or 'near misses' should be reported and made no reference to reporting incidents such as discrimination, harassment or bullying. However, one document, for example, stated that fieldworkers should report 'concern', which provides a broader scope for interpretation.

3.3 | USHA guidance

Sixteen institutions (18% of the 90 institutions for which documents were available) referred to USHA guidance; three (3%) referred to USHA (2011) and 13 (14%) to USHA (2018). We extracted the same data as above from both documents and found the same results for both versions. The protected characteristics mentioned were age, disability and gender. The documents included a statement that could be interpreted as the fieldworker having a right to participate safely, but there were no statements on the right to participate free from harassment. The documents included reference to reasonable adjustments and made specific reference to the Equality Act 2010. Notably, the USHA guidance juxtaposed the legal requirement for institutions to make reasonable adjustments for fieldworkers with disabilities with clauses for exclusion, citing as examples the cost of

adjustments as a potential reason for exclusion and cases where participation would compromise the safety of themselves or others. The use of these examples in the USHA guidance potentially explains the prevalence of these themes in the institution-specific policy/guidance documents, which are likely to have drawn directly from the USHA guidance. The documents specified the responsibilities of the fieldworker and the institution but did not explicitly address responsibilities when fieldwork takes place in a country with differing laws on protected characteristics.

3.4 | Fieldwork risk assessments

We obtained risk assessment documents for 77 (86%) institutions (Table 1), composed of risk assessment guidance and templates or examples. For eight (9%) institutions, both a guidance and a template/example risk assessment document were available. For these institutions, we combined data from the two documents, such that we considered the occurrence of information in either document to indicate the availability of this information for that institution overall. Examples or templates were available for 69 (77%) institutions, and guidance was available for the remaining 8 (9%) institutions.

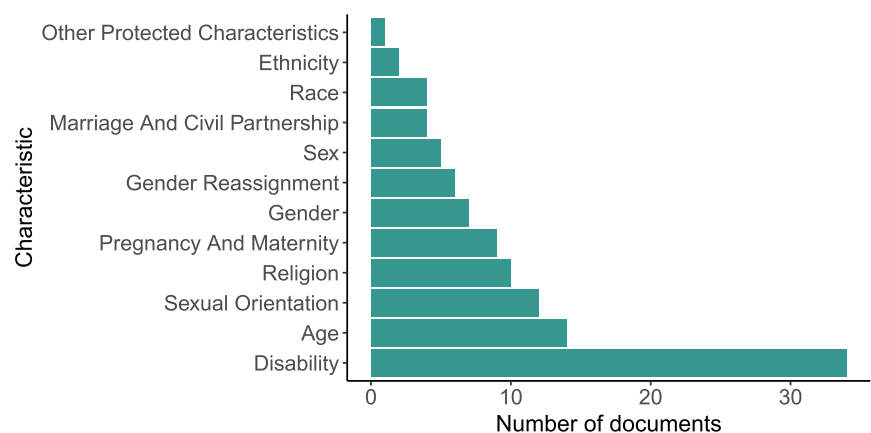
The risk assessment documents ranged in year from 2010 to 2023, and included 21 undated documents (Figure S2). Risk assessment documents that were fieldwork specific were only available for 57% of institutions ($n=44$).

3.4.1 | Consideration of protected characteristics

Some 51% of risk assessment documents mentioned protected characteristics (Table 1). Of these, the most commonly specified characteristic was disability (31%), followed by age (18%), sexual orientation (16%) and religion (13%) (Figure 4).

Only 10% of documents identified discrimination as a potential risk. Some documents identified the risk to individuals with specific characteristics, for example, listing 'Gender, ethnicity, sexual orientation', whilst others described hazard categories that should be considered, which included the risk of discrimination.

FIGURE 4 Number of risk assessment documents that mentioned each protected characteristic (Equality Act 2010) and other additional characteristics relating to identity (out of a total of 77 documents considered, 39 mentioned at least one characteristic or identity).



3.4.2 | Responsibilities and signposting

The chain of responsibility for fieldworker's safety was outlined in only 18% of documents. Only 3% of documents signposted to training specific to risks for those with protected characteristics, and 6% signposted to external resources specific to risks for those with protected characteristics. Institutional policy on fieldwork was signposted to in 22% of documents; 22% signposted to the incident reporting system (these documents were not the same subset, only 13% of documents did both).

4 | DISCUSSION

Fieldwork policies and associated risk assessments in higher education institutions reflect, both explicitly and implicitly, the inclusivity of the institution's approach to fieldwork, as well as the priority given to fieldworker safety and wellbeing. Policies that are appropriate and effectively implemented should actively protect at-risk fieldworkers from harm, whilst comprehensive risk assessments should allow individuals to make an informed decision about their participation and suitable risk mitigation (Coon et al., 2023). We assessed document attributes that we considered critical to an inclusive institutional approach to fieldwork. Among UK universities, we found that there is limited consideration of the safety and wellbeing of fieldworkers with protected and marginalised characteristics. Where protected characteristics were mentioned, documents most frequently referred to disability, which reflects the explicit requirement under the Equality Act to make reasonable adjustments for those with disabilities. The patterns among other characteristics are difficult to explain, with, for example, age being the second most frequently mentioned, whilst race was rarely mentioned. Understanding the experiences of racialised fieldworkers in the UK is challenging because of their underrepresentation across the UK higher education sector (Carlin et al., 2023). Despite the introduction of the Race Equality Charter, racism continues to affect the experiences of racialised researchers in UK academia (Bhopal & Pitkin, 2020) and we suggest that a lack of attention to race in fieldwork policy reflects this systemic prejudice.

Glossing over the diversity of protected characteristics creates a dangerous ambiguity around whether those with particular characteristics should be included in fieldwork. Moreover, there is evidence that a desire to consider EDI 'efficiently', rather than address the nuances of different and intersectional characteristics, results in the privileging of, for example, gender over race and perpetuates inequalities (Bhopal & Henderson, 2019). The seemingly haphazard consideration of the diversity of protected characteristics—and the lack of attention to the risk of harassment and discrimination—strongly suggests that fieldwork policies and risk assessments are developed without any real or informed consideration of EDI. This is despite the wealth of scientific literature identifying barriers and changes needed to make fieldwork more inclusive for diverse

characteristics (e.g. Chiarella & Vurro, 2020; Giles et al., 2020; Lawrence & Dowey, 2022; as well as previous references) and demonstrates that EDI is not yet embedded into institutional practice.

Below, we make specific recommendations for institutions to improve their fieldwork policy and risk assessment documents; drawing conclusions from our results and supported by the wealth of articles that discuss safe and inclusive fieldwork.

4.1 | Make inclusion the default

We found repeatedly that documents used more words to justify the exclusion of individuals from fieldwork than to state their support for inclusion in fieldwork, creating a sense that inclusion was not deemed to be a priority to the university. Overcoming our preconceptions about who fieldwork is for, and therefore who has a right to be in the field and to be safe in the field, requires a cultural, philosophical and structural shift on the part of universities (Carlin et al., 2023). Institutions need to think beyond their minimum legal requirements and consider safe participation in fieldwork to be the default for everyone.

Changing the status quo to inclusion as the default requires strong leadership to translate the philosophy of equality, diversity and inclusion into policy and practice, and will also, inevitably, require a willingness to commit resources to realising change. We start with this very broad recommendation because, as Koutsouris et al. (2022) discuss, approaches to EDI in UK universities can be performative, rather than leading to meaningful and material changes. It is therefore imperative that the suggestions we make below are implemented within a wider culture that values and actions EDI, rather than approaching it as a tick-box exercise (Yarincik et al., 2023).

4.2 | Develop institute- and fieldwork-specific policy and risk assessment documents

Although in the minority, some institutions had no fieldwork policy. Other institutions referred to USHA guidance rather than having their own policy or provided documents that did not refer to fieldwork at all. Moreover, around 40% of risk assessments obtained were not fieldwork specific. Given the unique challenges that fieldwork presents (Bastia et al., 2022; Hamylton et al., 2023; Moss et al., 2019; Pollard, 2009), it is very difficult to capture fieldwork-specific issues in general health and safety or travel documents. Moreover, USHA guidance does not set a high standard when it comes to EDI considerations; the only protected characteristics mentioned are disability, age and gender. USHA has no statements on the right to participate free from harassment, and it does not address responsibilities when fieldwork takes place in a country with differing laws on protected characteristics. There is also the need for tailored policies to articulate the institution's structure and hence hierarchy of responsibilities for fieldworker safety, and to provide appropriate signposting

to institutional support relevant to fieldwork planning and execution (see recommendations 4 and 5 below).

The development and revision of fieldwork documentation can draw from a wealth of existing resources. For example, Rudzki et al. (2022) provide a list of articles that make inclusive fieldwork recommendations. An example of an inclusive risk assessment is available, which could be used as a template by institutions (Prior-Jones et al., 2020). Revisions to institutional policies and risk assessments require support and commitment at an institutional level, working across departments to implement necessary change and adherence to those changes.

4.3 | Ensure that policies and risk assessments explicitly consider how characteristics and identities interact with risk in the field

There was a clear trend for fieldwork documents to focus on physical risks and failure to recognise that an individual's characteristics or identities can increase their personal risk in the field. This was demonstrated by the vast majority of, first, policy documents that did not include statements on the right to participate in fieldwork free from harassment, and second, risk assessments that did not identify discrimination as a potential risk. Consequently, fieldworkers are rarely encouraged to consider how their characteristics and identities may affect their safety in the field, meaning there is a lack of opportunity to mitigate any risk. To support this, institutions must also explicitly and comprehensively consider the diversity of characteristics in their documentation, to avoid favouring some characteristics over others.

4.4 | Use language that values fieldworkers and embeds their rights to safety

Whilst protected characteristics were mentioned in 77% of policy documents, most of these focused on disability, suggesting that institutions were simply aiming to meet their minimum legal requirements under the Equality Act 2010. The variable mention of other individual characteristics implies that not all characteristics and identities are valued equally. Moreover, language around characteristics was highly variable. For example, sex, gender, gender identity and gender reassignment were used, seemingly interchangeably and without understanding of their specific meanings. The need for the careful and specific use of language has become particularly evident in the wake of the recent supreme court judgement that found that the term 'woman' as used in the Equality Act refers only to a 'biological woman' (a cis-gender woman) and therefore excludes transwomen (For Women Scotland Ltd (Appellant) v The Scottish Ministers (Respondent), 2025). This has major implications for trans rights, especially in relation to single-sex spaces, and demonstrates just how important language within EDI policy is. A willingness to update language as social and cultural norms and expectations change

is part of being an inclusive workplace, and we suggest institutions are falling behind in this regard.

We also argue that it is not just what is said, but what is absent, in such documentation, that creates the institutional culture. For example, we suggest that the omission of explicit statements on the right to participate in fieldwork free from harassment has the potential to create a culture where harassment and risks (whether intersecting with characteristics and identities or not) are expected to be tolerated rather than tackled. On the other hand, appropriate and supportive language, supported by positive response mechanisms (such as clear lines of responsibility and reporting), can empower fieldworkers to assert their rights. We recommend that policy documents should communicate explicitly the rights of staff and students to participate in fieldwork, regardless of their characteristics and identities, and to do so safely and free from harassment. Such positive framing demonstrates that the institution values the well-being of its fieldworkers and provides them with the understanding that they should not tolerate undue risk or harassment in the field.

4.5 | Improve incident reporting procedures

Tailored policies are needed to provide appropriate signposting to institutional support relevant to fieldwork planning and execution. The type of incidents described as report-worthy were generally 'injuries' or 'near misses', and there was a lack of reference to reporting incidents such as discrimination, harassment or bullying. Incident reporting is critical not only to resolve an immediate situation safely but also to improve fieldworker safety over the longer term. Without the reporting of harassment or discrimination incidents, future fieldworkers planning research in the same location cannot make an informed decision about risk—and the institutions are absolved from proactively having those in place (Clancy et al., 2014).

4.6 | Clearly articulate responsibilities

Many policy documents included information on the responsibilities of fieldworkers, their managers and the institution. However, a third of policy documents specified responsibilities at only one or two of these levels or not at all. Furthermore, three-quarters of documents made no mention of responsibilities when fieldwork occurs in countries with different laws on protected characteristics. When lines of responsibility are unclear, assumptions can be made about a fieldworker's safety and rights. For example, employees or students often assume the institution has a responsibility and the ability to act if an incident occurs whilst doing fieldwork (e.g. Schneider, 2020). However, the extent of responsibility and the capacity to respond can vary depending on the nature of the incident, the individuals involved, and the location, and may also differ across institutions. Clear and consistent communication of responsibilities is essential for informed decision-making and should include recognition of the limitations of such responsibilities and of the ability to respond.

4.7 | Limitations and future directions

Our study was limited to the UK context, and it was clear that particular aspects of fieldwork policy, such as reasonable adjustments, reflected national equality law. Whilst it is clear that fieldworkers from other countries and disciplines grapple with similar challenges (e.g. Carlin et al., 2023; Demery & Pipkin, 2021; Procter & Spector, 2024), analysis of policies among countries may help identify best practices from more diverse contexts and would be particularly relevant given the international mobility within the higher education sector. We approached this study as environmental fieldworkers ourselves, with an interest primarily in what policies and risk assessments communicated to fieldworkers, and much could be gained from a deeper analysis of institutional interpretation of equality and health and safety laws, considered alongside the complexities of inclusion in higher education (Koutsouris et al., 2022).

5 | CONCLUSIONS

Whilst we found some examples of inclusive and supportive fieldwork policy and risk assessment documents from UK higher education institutions, the overall landscape suggests that inclusion and safety in fieldwork are not given sufficient priority. Institutional leaders themselves may contest such a statement; but we argue that our results present strong evidence that the principles of Equality, Diversity and Inclusion have yet to be fully integrated into fieldwork policy and practice. The recommendations we make are essential steps that all institutions should take or ensure they have taken, to create an inclusive, safe and supportive fieldwork culture and practice for all involved—academics, researchers, students, technical and fieldwork staff alike.

AUTHOR CONTRIBUTIONS

Louise Mair, Zarah Pattison, Laura Brauhnoltz, Natasha Mannion and James Hardwick conceived the ideas and designed methodology; Natasha Mannion and James Hardwick collected the data; Louise Mair analysed the data; Louise Mair and Zarah Pattison led the writing of the manuscript. All authors contributed critically to the drafts and gave final approval for publication.

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CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

PEER REVIEW

The peer review history for this article is available at <https://www.webofscience.com/api/gateway/wos/peer-review/10.1002/2688-8319.70109>.

DATA AVAILABILITY STATEMENT

The data analysed were extracted from documents obtained from institutions included in this study. The anonymised extracted data are available from Mair et al. (2025).

STATEMENT ON INCLUSION

Our study was focussed on EDI in the UK context and was a document analysis that did not require local data collection. The authorship team is based at UK institutions and varies across sex, sexual orientation, race, (dis)ability, pregnancy and maternity, marriage and civil partnership and socio-economic background. We acknowledge, however, that representation in some of these characteristics and identities is limited and that our perspectives will have been shaped by our identities.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

Table S1. Typology and coding for data extraction. Note that for protected characteristics (field codes 3.2 and 7.2) we extracted the language used in the document, which included for example ‘gender’ and ‘gender identity’ that are not used in the Equality Act 2010.

Table S2. Institutions identified as offering courses in subjects within environmental sciences, whether they were included or excluded in the study, and which documents were obtained. Reasons for exclusion are not given because these include failing to respond to Freedom of Information requests, and so we avoid naming institutions that did not meet their legal duty to do so.

Table S3. Cohen's Kappa on 21 randomly selected institutions. Field codes are the same as in Table S1 above.

Figure S1. The distribution of document dates for the sample of 67 policy and guidance documents analysed.

Figure S2. The distribution of document dates for the sample of risk assessment documents obtained for 77 institutions.

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