Academic Freedom

in the Digital University

An exploration of how digitally-enabled management practices, metrics and the culture of continuous evaluation mediate power relations between academic staff and their university employers in the contemporary digital university.

Report for the University and College Union (UCU) by Chavan Kissoon and Terence Karran.

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UCU
University and College Union

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Foreword

Academic freedom is a core value of higher education, one which provides the basis for the integrity of university teaching and research. Defending academic freedom is a high priority for UCU, and in recent months we have sought to highlight and push back against government interference, monitoring and meddling in the higher education sector. Back in October, we were forced to rebuke Michelle Donelan, the Secretary of State for Science, Innovation and Technology, for using her public platform to single out two academics on the UKRI's EDI Expert Advisory Group for their social media posts about the war in Israel and Palestine. Such high-profile attacks on academic freedom and freedom of speech reflect an attempt by politicians and media outlets to foster a 'culture war' in the UK.

This new research report entitled 'Academic freedom in the Digital University' shines a light on a neglected part of the current debate on academic freedom: namely, the ways in employer-implemented forms of digital technologies are eroding academic freedom norms. The study brings together two key areas for the union: the protection of academic freedom and the impact of digital technologies on academic work.

The report charts the ways in which digitally-enabled changes to performance management – for example, via mechanisms like the National Student Survey and the Research Excellence Framework – are leading to reduced academic freedom in teaching and research. Its findings – based on a survey of UCU members - build on the evidence that UCU submitted to the UNESCO/ILO Joint Committee of Experts about the diminution of academic freedom in UK higher education.

I would like to thank the authors - Chavan Kissoon and Professor Terence Karran, who are based at the University of Lincoln, for their comprehensive and thoughtful report. The report includes a number of important recommendations for the union to consider and we look forward to disseminating it widely amongst our membership.

Dr Jo Grady
UCU General Secretary

Executive Summary

Academic freedom is recognised as a core value of the UK higher education sector by both the representative body for universities — UniversitiesUK (2022) — and the representative body for academics, the UCU (2016a, 2019). It has long been standard practice for university policies to include formal commitments to ensuring the protection of academic freedom (see University of Bath, 1998; University of Exeter, 2022, University of Nottingham, 2023).

Drawing on data obtained from a survey conducted among UCU members, this report examines the variegated – and troubling – ways in which employer-implemented digital technologies are changing workplace power relations by enabling new structures of performance management, employee monitoring, and, thus, the ways in which academic freedom is exercised (for a layperson overview of academic freedom, see UCU's (2012) academic freedom guide).

The study results show that traditional worker management practices are evolving and established academic freedom norms are being destabilised. In the place of traditional worker management practices, more powerful and encompassing digitally-enabled

(i.e. those worker management practices which are only possible because of the affordances of digital technology) and digitally-enhanced (i.e. those worker management practices which have long existed but are enhanced through the use of organisational technology) management practices are taking root, along with a culture of working where digitally-enabled quantified-self (Moore, 2017) and quantified-other ways of working, seeing and understanding each other are either being actively embraced or reluctantly adhered to, but complied with, nonetheless.

In this study, the concept of academic freedom is used as a lens through which to understand how digital technology and digitally-enhanced and digitally-enabled forms of management are changing worker agency and employer-employee power relations in the UK's higher education sector, thereby disrupting existing worker-to-management equilibria resulting in a nuanced empowerment of one group (management) and a nuanced disempowerment of the other group (non-management academics).

Background and Rationale

While the focus of this study is on the role and influence of digital technologies (i.e. digital technology as the variable of interest in an exploration of the mediation of power between workers and managers in university settings), two factors foreground this study.

First, the impact of decades of UK government reform, which have shaped UK society and the UK higher education system along neoliberal lines (Schleck, 2022, Analogue University, 2019); secondly, the marketisation of the UK higher education sector (Tourish and Willmott, 2015) and consequent changes in the employment relationship between academics and their university employers, including the globalised nature of recruitment and new talent management practices (Smetherham, Fenton and Modood, 2010).

These have significantly contributed towards the intensification of competition between universities on multiple levels. Moreover, on an individual level, these have helped intensify competition for academics with regards to: i) securing jobs and, once some role stability has been obtained; ii) driving intense zero-sum competition between colleagues for recognition and progression. Of interest here is the role of technology in advancing these changes because technology is not neutral and should not be seen as neutral (see Hare (2022) for an overview of technology ethics and the key strands of the arguments for and against seeing technology as a neutral force).

By design, the strategic move towards digital transformation by UK universities is intended to alter university organisations structurally and change how work in universities is conducted to make institutions leaner, more agile, and financially sustainable, and therefore more shaped to succeed in market-based competition with other institutions, both nationally and internationally (Teesside University, 2023; University of Dundee, 2023; University of Edinburgh, 2022; University of Oxford, 2023; University of Leeds, 2020). In addition, digital transformation seeks to enable employees' entrepreneurial innovation by creating new incentives and disincentive structures (Kearney, 2021).

Beyond the noticeable changes to business processes (e.g. more efficient online enrolment), staff-student and employer-employee communication mechanisms (e.g. always-on email and Teams), and the digital student experience (online classes and online module evaluation which promise higher levels of engagement and inclusivity), there have been more significant, but less visible, esoteric shifts in the performance

Voices of **"** *academics*

> *"Management is able to create metrics and claim a lot of issues we experience as staff can some be resolved by using more technology or tweaking systems. It's rubbish. Students are also encouraged to act like vampiric clients and just take and take and take and expect more and more. Technology enables this".*

> *"The digital stuff should be enabling and has improved the experiences of students through accessing recorded lectures, direct links to academic sources (though we are spoon feeding them here) and our ability to include more creative classroom exercises. However, it is also used in rather oppressing ways too".*

> *"This is the problem because although in many ways I am highly successful it does not fit with the university themes or priorities. So I feel pressured to try and "fit in" which would be a mistake".*

> *"Academic freedom is being restricted by institutional research priorities and how these link to incentives".*

> *"Freedom to research is being limited by it needing to be aligned to certain themes/priorities generally decided by managers who do little to no research".*

management of workers (e.g. the maturing of sophisticated worker analytics) and an increased managerial potential for oversight.

These developments — digitally-enhanced and digitally-enabled worker analytics and increased managerial oversight — are the focus of this study, and the concept of academic freedom is used to aid understanding of what these changes mean for worker individual autonomy and worker-manager power relations. These less recognised shifts in the managerial potential for oversight and the performance management of workers enabled by digital technology can — depending on the extent to which a particular university culture utilises the increased potential for worker analytics — fundamentally change aspects of the power relationship between management and workers. As a consequence, established worker freedom (academic freedom) norms in the sector are being constantly challenged and negotiated, and understandings of the borders

where individual autonomy ought to end gradually shift as a new normal emerges and evolves.

Thus, to gain a comprehensive understanding of the implications of digital transformation for academics in the UK higher education sector, further research is needed to address how power is mediated, exercised, and experienced in the contemporary digital university. Existing research on the digital transformation of the UK higher education sector largely takes a pro-business and pro-productivity approach and focuses on the many efficiencies and affordances of technological transformation (e.g. Kaplan, 2022). Empirical studies generally eschew an academic labour perspective (notable exceptions include Williamson, 2020, and Moorish, 2019) and there is a need to look at how digital technology can mediate power relations between academic workers and employers (Selwyn, 2014). It is these gaps that this study seeks to address.

The Study

With a conceptual framework that draws on a rich range of concepts — including digital education governance (Williamson, 2016) and metric power (Beer, 2016) — the study explores how university knowledge workers experience academic freedom in the context of the digitally transforming university. Specifically, it applies the definition of academic freedom developed by Karran and Mallinson (2017) to examine academics' experiences of agency in the contemporary university. A quantitative methodological approach was adopted,

using the survey method. The survey comprised 50+ questions mapped to each of the dimensions of academic freedom (i.e. the different facets of freedom in teaching and freedom in research). The UCU distributed the survey to members in May 2021. Over 2,100 responses were received over a four-week period, making it one of the largest surveys on academic freedom in the UK higher education sector in the last decade. The survey design, which had input from both the Equality and Policy teams at the UCU, was developed to facilitate the statistical

testing of relationships between a range of demographic variables and perceptions of agency in the context of digitally-enabled and digitally-enhanced performance management. While the survey mostly comprised of Likert-style questions, the survey included a number of open-response options, which generated over 242,000 words of open-text data.

This study makes two key contributions to academic labour debates. Firstly, it expands existing understanding of academic freedom by considering the impact of workplace technologies as a mediating factor in the exercise of academic freedom. The study shows that such technologies often take the form of invisible forces of largely unrecognised influence that receive little resistance. In other words, the move towards digital transformation by universities has brought the benefits of surveillance capitalism (Zuboff, 2019) to the higher education sector, specifically to the micro-environment of a university workplace. Zuboff (2019) defines surveillance capitalism as a system that makes use of surveilled human experience for capitalistic ends (i.e. in the case of a university, to make use of surveilled data for more comprehensive employee performance management or to more closely monitor employee adherence to institutional goals).

A key feature of surveillance capitalism is what Zuboff (2019, p.378) labels instrumentarian power, which is a form of power "camouflaged by technology and technical complexity, and obfuscated by endearing rhetoric" and

is precisely powerful because "we are prone to undervalue its effects and lower our guard". In terms of the relationship to marketisation and neoliberal reform, surveillance capitalism practices are "inconceivable outside the digital milieu, but neoliberal ideology and policy also provided the habitat in which surveillance capitalism could flourish" (Zuboff, 2019, p. 54).

Workplace technologies (and profession-related technologies which are not institutional technologies in the traditional sense, such as Google Scholar, and can be used semi-formally within an institution for internal REF-reasons or promotion reasons) shape academic working lives and offer zero possibility for academics to opt out (i.e. one cannot choose to not be passively performance measured by services such as Scopus or Google Scholar or Altmetric). Crucially, there is also only a limited possibility for academics to strategically or tactically work the system to their advantage (e.g. with digital systems that are brought in centrally, it is not standard in UK higher education institutions to conduct meaningful worker impact analyses pre-implementation). As the study shows, these technologies can subtly re-draw power dynamics in the workplace by deftly

disempowering some groups (workers) and subtly empowering others (management), and this can be in ways not explicitly intended or desired by the institution at the time of implementation (for a summary of findings see p.20).

This study's second contribution is — within the context of the digital university — to enhance understanding of contract status as a mediating factor in the exercise of academic freedom. While academic freedom literature has long recognised tenure or employment security as a prerequisite for academic freedom (Neumann Jr., 2017: Schleck, 2022: UCU, 2012), this study is one of the few to explore this in the context of the modern marriage of job insecurity and new forms of digitally-enhanced and digitally-enabled worker performance management.

Recognising the impact of job insecurity on the extent to which one can exercise academic freedom is important. As argued by Finn and Grady, (2019): "to speak of academic freedom being restricted without tenure is one thing, to speak of meaningful academic freedom at all for colleagues trapped in a cycle of precarious employment is another". Another perspective was put forward by Professor Frans Berkhout during the second Kings College's Presidential Series on Academic Freedom event: "as a social scientist your success in the end is going to be around being noticed within your discipline ... and it's more likely that that will happen if you are somewhat averse or controversial" and, therefore, "the drive to innovate may be stronger amongst people who are looking for the next job and therefore pushing the boundaries is something that is sort of intrinsic to your career progress" (Kings School

of Education, Communication & Society, 2023). For Schleck (2022, p.40), the lack of a permanent and stable contract is a variable that weakens employee agency and skews power relations in favour of the employer, as "academic freedom is guaranteed through a particular employment arrangement". Furthermore, for the UCU (2022a), ensuring income and employment stability for fixed-term and hourly paid staff is a key priority, and the needs of this worker group form a key element of the Four Fights dispute. Under the Four Fights initiative, the UCU (2022a) seeks to "eliminate precarious employment" by replacing zero-hour contracts with "proper employee contracts" that include guaranteed hours. In the UK, 68% of research staff are employed on fixed-term contracts (UCU, 2021)

In this report, the respondent data for both fixed-term workers and non-fixed-term workers will be shown for those questions where the differences in response are statistically significant at the 5% level (see the Survey Results from p.xxxx).

Eschewing pessimistic determinism and fatalism, this study provides a range of agentic solutions that seek to empower those who value academic freedom and appreciate academic freedom's essential role in cultivating a thriving, successful higher education sector. In this way, the study seeks to help move forward the process — one begun by others — of creating healthier working environments in UK higher education institutions.

Key Findings

The respondent data showed that:

✓ Protection for academic freedom is declining in multiple ways. It is declining in terms of individual academic freedom for teaching, individual academic freedom for research, individual autonomy, university self-governance, and employment protection.

✓ Digitally-enabled changes to worker performance management are leading to reduced academic freedom, both in teaching and in research.

✓ The ways in which digitally-enabled measurements of the student experience are used by university management (and the sheer scope of what is measured) is reducing academic freedom in teaching.

✓ The culture of continuous real-time performance monitoring and assessment of academic staff from multiple angles — e.g. online module evaluations, the National Student Survey, various performance indicators used to predict REF performance (citations garnered, income won, the quantity of publications, the quality of publications, etc.) — within universities is reducing academic freedom in terms of both teaching and research. Thus continuous real-time performance monitoring and the assessment of academic staff from multiple angles at scale is only made possible through the use of digital technologies.

✓ From a structural and systemic perspective, universities use digital workload systems to establish a new form of organisational control over employee time through shaping academics' working schedules which enable certain forms of productivity over others (e.g. the workload one is allocated may enable that academic to be highly productive teaching-wise but less productive research-wise while the workload a colleague receives may be more conducive to research productivity). The ways in which digital workload systems are used leads to academic overworking and stress, worsens working conditions and disincentivises staff from adopting more ambitious approaches to their teaching and research (e.g. how they teach/research and what they teach/ research). Digital workload systems, if thought of as a structural and systemic technology of power, redraw power relations between managers and non-managers, and impact the ways in which academics feel able to exercise their professional academic freedom.

✓ The trajectory of digital monitoring and performance management is anticipated to lead to reduced academic freedom, greater institutional oversight of academic activities, and greater power for the student (consumer) voice in the future.

- Awareness of the institution's ability to digitally monitor multiple different aspects of staff teaching performance reduces academics' subjective sense of academic freedom and impacts upon many aspects of academic work, including the design of assessments and academic judgements when giving grades.

- As universities' online corporate reputation management activities (e.g. social media monitoring) expand, staff encounter more restrictions of their academic freedom and/or freedom of speech.

- Awareness of the institutional monitoring of research activities for employee performance management is greater than awareness of institutional monitoring of teaching activities. Awareness of the social media monitoring of academic voices is high.

- Academic freedom is considered essential for staff wellbeing, good performance, and work satisfaction.

- It is important to acknowledge that the experience of academic freedom is not uniform across all contract types. Survey respondents on fixed-term contracts often held different opinions in comparison to those on permanent contracts. This could be due to differences in contractual status, which can lead to alternate perspectives on key academic freedom issues, reflecting the knowledge asymmetries that exist between those employed fixed-term and those employed permanently and how this shapes working lives. These qualitative differences are more than contractual technicalities, they influence workers' subjective experiences of work and awareness of workplace issues.

Overall, respondents viewed the digital surveillance landscape of the UK higher education sector as a means of increasing institutional control while limiting academic freedom (both in teaching and research) and amplifying the influence of student (consumer) voice.

Recommendations

Rooted in the study's findings, this report makes the following recommendations to better protect academic freedom at UK universities.

Recommendation for all Stakeholders

Stakeholders — universities, unions, management, employees, sector bodies — in the UK higher education sector need to begin to recognise institutional digital technology as a variable that shapes academic freedom. They should also seek to better understand the nuanced and subtle ways in which institutional technology does this. This can happen, for example, by instigating alterations in power relations between employers and workers to create new areas of knowledge asymmetry, or by introducing new incentive and disincentive structures in university work environments to align worker behaviour more closely with organisational objectives. Additionally, stakeholders should also recognise that the nature of any changes to power relations that an institutionally-implemented technology brings might be incremental and either not present or difficult to predict during the decision-to-purchase and implementation period, and therefore on-going monitoring is essential.

Recommendations for Universities

There are four recommendations for universities.

Firstly, it is recommended that universities should seek to collaborate with their workplace unions to establish policies and principles that best ensure the ethical use of digital systems (see, for example, the Association for Learning Technology's (2022) framework for Ethical Learning Technology as an example of principles for the ethical use of digital systems).

Secondly, it is recommended that universities should seek to be transparent with unions and academic staff with regard to the operational and strategic goals intended to be achieved through the implementation of new digital systems.

Thirdly, it is recommended that universities should consider amending their academic freedom policies to incorporate this report's proposed **Principles for Protecting Academic Freedom in the Digital University** (see p.24).

Fourthly, it is recommended that universities should seek to commit to conducting detailed **Technology Impact Assessments** before purchasing and implementing new technologies. The joint International Labour Organisation (ILO)/UNESCO (2018) Committee of Experts on the Application of the Recommendations concerning Teaching Personnel (CEART) report recognises that changes in employment relationships that diminish employment security are likely to weaken "the full exercise of academic freedom

and therefore one of the fundamental pillars of excellence in teaching and research". It calls on the UK government to address growing employment insecurity among higher education staff by "ensuring participation of organizations representing teaching personnel in the design of accountability and research frameworks" and by "enhancing policy measures that safeguard tenure or its functional equivalent".

These Technology Impact Assessments need to consider the potential performance management impact of any new digital systems on existing power relations between management and staff (e.g. does this new technology enable new forms of performance management or employee surveillance that were not previously possible and has this been communicated openly to employees?).

The Technology Impact Assessment team ought to include union representation and should make the Technology Impact Assessment reports available to all staff.

The Technology Impact Assessments ought to be updated periodically and include an evaluation of the actual impact a technology has had, compared to the envisaged impact pre-implementation (i.e. has the technology been used in the way it was originally intended to be used?). Regular assessment of the impact of intended and unintended consequences of technology initiatives is important in ensuring that technological initiatives empower academic staff and mitigate any unforeseen negative effects.

Recommendations for Unions and Individual Academics

Firstly, academic staff should actively reflect, in positive and negative ways, on how different technologies could mediate their practice; recognise that policies regarding the use of organisational technology may have unintended negative consequences; and pro-actively communicate with central university teams when major policies and practices become counterproductive.

Secondly, unions, on the sector-level, should consider organisational technology as a key variable that can shape how power is exercised in the contemporary university; take an active interest in the implementation of digital technology and monitor the ongoing effects; and take a leading role in shaping debates around the implementation of digital technologies. This would ensure more consideration is given to the interests of employees and help normalise the consideration of worker interests in debates surrounding technological implementation in the UK higher education sector.

Thirdly, union branches, on the local level, should consider organisational technology as a key variable that could shape how power is exercised in their institution.

Fourthly, it is recommended for unions that they should plan and deliver an extended awareness raising campaign around academic freedom and Digital Education Governance, and also deliver training to branch reps in order to allow branches to better on-board and socialise academics — in particular ECRs and fixed term staff — into productive understandings of academic freedom and the risks and opportunities that digital education governance (Williamson, 2016) brings to the development of their careers.

Five Principles for Protecting Academic Freedom in the Digital University

The Five Principles for Protecting Academic Freedom in the Digital University are designed to complement existing initiatives that focus on academic freedom (Council of Europe, 2006; CODESRIA, 1990; the Magna Charta Observatory, 1988; World University Service, 1988) and on metrics, such as the San Francisco Declaration on Research Assessment (DORA, 2023), the Leiden Manifesto for Research Metrics (2015) and elements of Jisc's (2023) Future Research Assessment Programme (FRAP) (in particular, recent work on the responsible use of technology in research assessment and on reviewing the role of metrics in research assessment).

The principles below focus on digitally-enhanced and digitally-enabled forms of management, and are designed to guide institutions in implementing performance management practices that strike the right balance between three important factors that are both necessary in contributing to a university being successful (Karran and Mallinson, 2019): firstly, respecting the tenets of academic freedom (individual autonomy, freedom in teaching and freedom in research); secondly, meeting government-imposed organisational quality assurance objectives (in relation to teaching and research) through digitally-enabled oversight

mechanisms; and thirdly enabling the university to perform well in important commercial ranking competitions.

These principles are also designed to reduce the negative effects arising from the excessive performance management norms that have become widespread in the contemporary UK university. Hence, in deriving these principles, rather than trying to find a conclusive epistemological needle in a philosophical haystack, the goal is to provide some preliminary broad statements that are sharp enough to sew together the concepts of academic freedom and ethical digital education governance (Williamson, 2016), to produce a modus operandi, enabling both to flourish. This allows researchers to address the deficiencies inherent in the current system, facilitating the creation of a better system.

1   **Transparency, not opacity:** The ways in which universities use digital technology for performance management need to be transparent. Both academics and unions should have access to information about which tools are used, how these tools are used, the type of data collected, and the ways in which these tools and the data collected are used for performance evaluation (e.g. how they are used to inform recruitment and promotion).

2   **Informed consent not assumed consent:** To the extent that it is possible on a particular system, academics should have the right to provide informed consent as to whether or not they agree to their data being collected and used to evaluate their performance. They should also have the right to opt out of this process without negative career consequences (i.e. true consent and not pseudo consent). Unions should be informed by institutions of the systems that do not allow individuals to opt-out.

3   **Used developmentally, not punitively:** Digital performance management tools should be used developmentally, rather than punitively, and institutions should make academics and unions aware of the full scope of how they evaluate the performance of individual academics using different technologies.

4   **Equity, not equality:** Performance metrics should, where possible, take into account the differences in personal circumstances, workloads, and responsibilities between different academics, as well the make-up of different research and departmental teams (e.g. number of research active staff, number of early career academics, and relative teaching loads) when making judgements related to individuals and teams (i.e. not one size fits all). Unions should be involved in agreeing terms of use and overseeing the resultant effects.

5   **Shared open governance, not restricted closed governance:** Universities need to develop governance and oversight mechanisms for academics and unions to use to inform which technologies are implemented, along with their parameters of use, as well as being able to raise any concerns that arise.

Voices of " academics

"Digital systems for evaluating modules etc. basically pushed everything in quantifying performance (which I understand and it is part of the neoliberal, capitalist approach to HEI) but then the nuance is lost, as well as any important qualitative information you may get from feedback from students, and it becomes a number game for managers who have not been in a classroom for the last 15 years, but suddenly have an opinion on how we need to teach our modules".

"Whatever freedom I achieve both in my teaching/assessment and research is by using my personal time/life, which is quite sad. I think my family and myself suffer the consequences. But I really do not want to capitulate".

"The key problem with any freedom at all in my institution (so far) has been an excessive teaching pressures. For most of the academic year I have been working 17 hour days 6 days a week purely for this - this allowed for no basic human freedoms, let alone academic freedoms".

"Professors like myself have some freedom. Junior staff do not".

1. The affordances of digital technology and their influence in shaping higher education reform

Introduction

The Academic Freedom in the Digital University study explores how — in the marketised UK higher education sector (Munro, 2018) — metrics (Curry, Gadd, and Wilsdon, 2022) and the contemporary culture of continuous worker evaluation can mediate power relations between those academic staff being measured and the higher education institution employers doing the measuring.

This chapter examines the relationship between digital technology and higher education reform and is divided into two sections. The first section analyses the ways in which digital transformation works as a mechanism for altering employer-employee power relations through enabling hypercompetition within an institution.

The second section, which is more macro-focussed, explores the reforms made to the UK higher education sector that have been initiated to drive improvement by increasing competition between universities through the introduction of league tables. For this study, what are key is the ways in which macro-level changes (i.e. governmental reform of the higher education sector) have meso-level impacts (i.e. universities seek to become better at addressing government targets through initiatives such as digital transformation and making changes in the institutional managerial culture and performance management culture) and micro-level impacts (i.e. the erosion of academic freedom and individual autonomy norms).

Digital transformation as a mechanism for altering employer-employee power relations through enabling hypercompetition within an institution and facilitating continuous real-time performance management

This first section of this chapter provides an overview of the ongoing digital transformation of the UK higher education sector; specifically with regards to what this means for power relations between university employers and their academic employees

Figure 1 shows the three key aspects of the contextual background of this study.

Figure 1. Contextual background of the study.
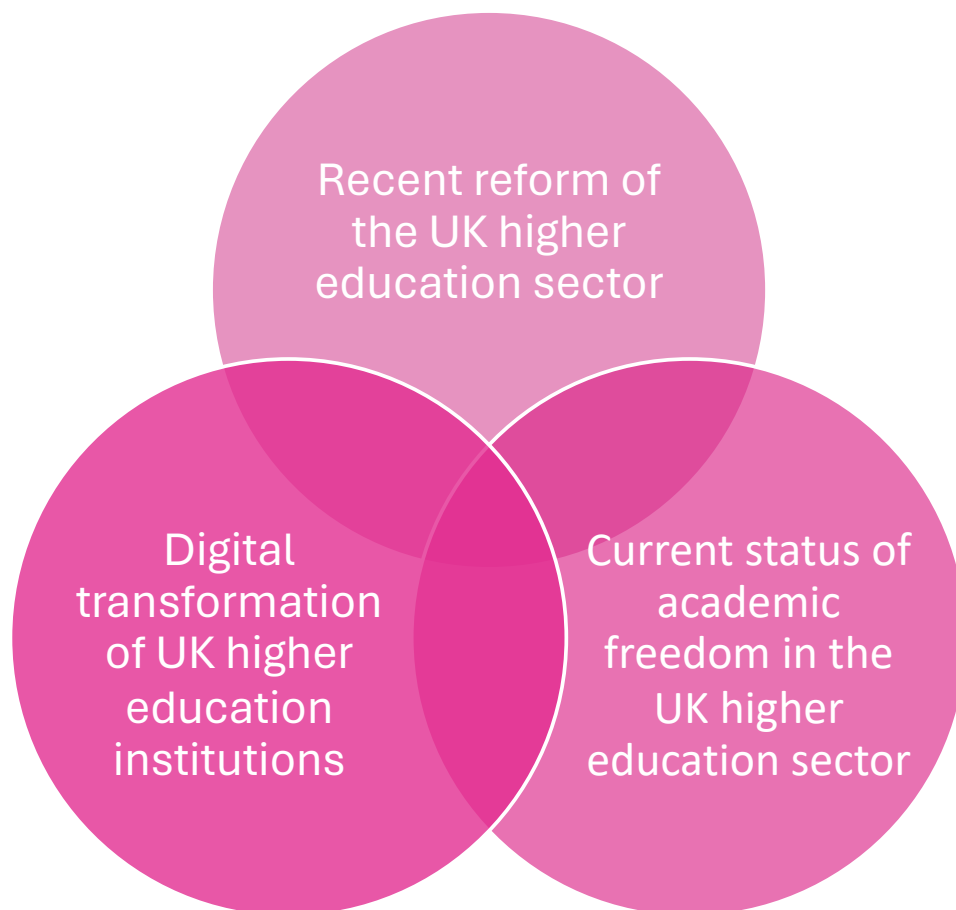
To provide a theoretical lens through which we can understand the significance of the three key areas detailed in Figure 1 (recent reform of the UK higher education sector; digital transformation of UK higher education institutions, and the current status of academic freedom), this section outlines several concepts which, when combined, enable a nuanced conceptual understanding of what the digital transformation of the UK higher education

sector means for academic labour.

The concepts — the digital university (Selwyn, 2014), digital education governance (Williamson, 2016), and digital transformation — will now be discussed in turn. These three concepts complement the concepts discussed in the second section of this chapter — the audit society (Power, 1997), metric power (Beer, 2016), and the data gaze (Beer, 2018) — through providing the conceptual lens with which to understand how academic lives and career trajectories are increasingly being shaped by metricised judgements, which create new frames through which academic employees may be judged, rewarded, or cautioned by their employers.

The digital university and the age of digitally-enabled and digitally-enhanced changes to performance management

Digital technology is intrinsically linked to broader changes in 21st century higher education and has become a driver of sectoral reform (Selwyn, 2014). It is key in shaping the direction of change in terms of how academic work is increasingly being carried out (e.g. e-books becoming more prevalent than physical books; e-marking becoming more common than paper marking; online or hybrid teaching replacing in-person teaching delivery). The concept of digital higher education refers to the contemporary phenomenon in which digital technologies are implemented through all aspects of a university (Selwyn, 2014). Selwyn (2014, p.ix) argues that higher education is "now infused with digital technology to an extent that was hard to imagine even a few years before". Of interest in this study is the impact of this digital infusion on how academic staff are managed, influenced, and incentivised by their organisations to follow certain paths over other alternate paths (and how this relates to academic freedom and individual autonomy). Of particular relevance for this report are Selwyn's (2014, p.x) questions concerning: "what forms of organization and management have grown up within university settings around the use of digital technologies … What practices and priorities, understandings and dispositions are associated with higher education in the digital age?"

Digital Education Governance

Universities' governing practices are said to currently be "increasingly augmented with digital database technologies that function as new kinds of policy instruments" (Williamson, 2016, p.123). Williamson (2016, p.123) argues that these "digital policy instruments … are now at the centre of efforts to know, govern and manage education" and that the sector is moving towards a data-driven style of governing, where real-time tracking shapes understandings and pre-emptive interventions, and where proxy metrics are becoming the norm. Williamson (2016) conceptualises this as digital education governance.

Indeed, it is now common for UK universities to dedicate significant resources to *Planning and Business Intelligence* (B&PI) departments (see Glasgow Caledonian University, 2023; University of Bristol, 2023; University of Edinburgh 2019; University of Manchester, 2023; University of Sheffield, 2019; University of St Andrews, 2023) which create and maintain data warehouses that enable institution-wide data-informed decision-making through taking in data from various digital systems and processing these into simplified (efficient, but imperfect) user-friendly data visualisations and dashboards. While these systems are integral in ensuring that universities can properly meet their regulatory requirements and provide the essential business intelligence that universities need in order to better institutional performance on both operational and strategic levels, these systems also usher in more data-driven ways of managing academic staff.

In addition to in-house developed systems, commercial solutions also perpetuate data-driven ways of managing faculties and faculty performance. For example, Elsievier's (2023) SciVal "offers quick, easy access to the research performance of 20,000 research institutions and 230 nations worldwide … SciVal enables you to visualise research performance, benchmark relative to peers, develop collaborative partnerships, and analyse research trends". Though SciVal is marketed for use at the institutional comparison level, the system does allow for the drilling down into the performance of individuals (as, ultimately, institutional performance is, in part, a reflection of the productivity of the entire workforce).

Digital Transformation and the Implications for the Academic Worker

The UK is a global leader in higher education and is considered to have the 2nd strongest education system in the world and the strongest system in Europe (QS, 2019). Despite this reputation, within mainstream business and political discourse, there is a consensus that UK universities need to modernise and embrace digital transformation (Barber, 2021; Iosad, 2022) in order for the UK higher education sector to continue to thrive in the medium and long-term in an increasingly competitive global educational marketplace (Fayaz, 2022). Here, threats to UK universities' financial sustainability come not only from domestic competition (such as traditional universities in the same country and, to a lesser extent, from private providers enabled by government deregulation) (Hunt and Boliver, 2021), but also from increasingly intense international competition (QS, 2019).

To maintain the country's leadership as a global higher education powerhouse which produces excellent research and delivers impactful teaching (UniversitiesUK, 2023), universities in the UK have been embarking on heavily funded, strategically-important, and well-resourced digital transformation programmes (e.g. Teesside University, 2023; University of Dundee, 2023; University of Edinburgh, 2018; University of Oxford, 2023; University of Leeds, 2020) in order to compete effectively with universities in China and the US, as well as elsewhere (Department for Business, Energy and Industrial Strategy (BEIS), 2022; Grove, 2023b).

What is Digital Transformation?

Digital transformation programmes, in their ambition, aim to enable universities to accomplish the significant, top-down, institution-wide changes that are needed to allow them to survive and thrive in – what is anticipated to be – the highly competitive digitally transformed economy of the future (Department of Digital, Culture, Media and Sport, 2022). Digital transformation programmes seek to achieve a specific type of change. For example, the University of Edinburgh (2018) defines digital transformation as "(t)he changes associated with the complete application of digital technology in all aspects of a modern university".

The aim of digital transformation at the University of Leeds (2020) is to:

> *use digital technologies, data and digital approaches effectively, creatively, innovatively and in a research-informed way to enhance our students' learning and experience, to provide and enrich learning opportunities for individuals globally, to enhance our research activity and impact to tackle global challenges, and to improve the University's processes, infrastructure and physical estate.*

While universities (see Teesside University, 2023; University of Dundee, 2023; University of Edinburgh, 2018; University of Oxford, 2023; University of Leeds, 2020) choose to accentuate certain aspects of digital transformation (especially those that can lead to increased business efficiency, expanded market reach, and increased competitiveness), some important implications of digital transformation receive little attention in both university materials and inmainstream debate.

For example, beyond the highly visible changes that digital transformation brings to business processes (e.g. online enrolment), staff-student and employer-employee communication mechanisms (e.g. email and Microsoft Teams) and the digital student experience (online classes, online exams, and online module evaluations of staff performance), digital transformation has also led to lesser-known esoteric shifts in the managerial oversight of workers (e.g. creation of new forms of worker analytics which universities can use to better align worker behaviour to institutional aims through having a more complete performance management oversight of their employees).

In recent years, digital technologies have become central to how universities operate, facilitating increased managerialism, worker surveillance and bureaucratization in the UK higher education sector, as well as creating new skill requirements for academic staff, and helping to better align academic worker behaviour with institutional interests. For example, digital systems can subtly influence academic behaviour through the creation of new incentive structures (e.g. the operationalisation and reification of concepts such as the citation count or the h-index); by shaping discourses through terminology (e.g. how teaching management systems are termed learning management systems, but the functional affordances are primarily in teaching, administration, and surveillance, rather than learning); by introducing new ways of conducting work (e.g. the shift of certain types of administrative tasks from administrative staff to academics, thereby blurring the boundaries between academic and non-academic work); and by creating new requirements for success (e.g. the contemporary need for academics to be digitally literate across multiple systems, as well as being a subject matter expert).

As detailed above, universities tend to frame the need for digital transformation in the language of business efficiency (see Teesside University, 2023; University of Dundee, 2023; University of Edinburgh, 2022; University of Oxford, 2022a; University of Leeds, 2022; University of Stratchlyde, 2023).

While the information universities make publicly available about their digital transformation programmes are explicit that their digital transformation initiatives seek to significantly alter how work is carried out, left implicit is the impact that digital transformation will have on existing worker autonomy norms. Of interest in this study is the relationship between i) the changes in processes and ideologies enabled by digital transformation, and ii) changes in norms related to academic freedom.

Enabling Marketised Competition Through Creating Metrics Informed Rankings

This second section of this chapter focuses specifically on the reforms made to the UK higher education sector that have been initiated to drive improvement by increasing competition between universities through the introduction of league tables. For a more general overview of other aspects of the UK higher education sector, see Atherton, Lewis, and Bolton (2023).

This section sets out a key aspect of the contextual background to this study by providing a brief overview of recent government-instigated reform of the UK higher education sector; in particular, those reforms focused on incentivising improvements in institutional performance by creating and operationalising specific sets of performance metrics (both quantitative and qualitative) to direct university behaviour. These reforms and their associated metrics have been used to create league tables that facilitate comparisons and increase competition between universities with regards to research and teaching excellence.

These league tables are clearly concerned with increasing macro level competition between universities (i.e. competition between educational organisations). However, it is also clear that these performance pressures can also lead to meso level organisational culture change that are then felt acutely on the micro level in ways that are not healthy for academics (see Moorish, 2019) as, ultimately, how well a university performs is the result of the combined individual efforts of numerous employees — the human resources — who work for the university educational organisation and how they respond to meso-level organisational practices, policies and incentives. This section ends with an exploration of the roots of audit culture and considers how metrics can change power relations between workers and managers by providing new mechanisms for worker performance management, and create new important areas of information asymmetry.

Within the UK higher education sector, "[d]ata power is incorporated into the infrastructures, software, measures, and algorithms that constitute the digital architecture of HE" (Williamson, Bayne, and Shay, 2020, 362). Enabled by the affordances of digital systems, in recent times there has been a trend towards the UK government constructing new competitive landscapes through the mechanism of league tables.

These are often discursively framed as 'excellence frameworks' – where institutions are rated and ranked for a selection of proxy measures that seek to neutrally provide an objective measure of institutional performance. These changes to the UK higher education sector can be understood within a broader Western contemporary culture that "is increasingly defined by data, indicators and metrics" (Williamson, Bayne, and Shay, 2020, 351). For universities, performing well in these competitive rankings holds the potential

to create market differentiation and good performance in these excellence exercises can potentially help an institution attract a higher calibre of students and more established staff (see the University of Southampton (2023) for an example of how universities can discursively operationalise good performance for market differentiation).

The Research Excellence Framework (REF) and new Incentive Structures

The Research Excellence Framework (REF, 2023), like its precursor, the Research Assessment Exercise (RAE), has three main purposes, which are to:

provide accountability for public investment in research and produce evidence of the benefits of this investment. To provide benchmarking information and establish reputational yardsticks, for use within the higher education sector and for public information. To inform the selective allocation of funding for research.

Thus, the REF (2023) informs how government research funding is distributed to each university, with high performing universities (as determined by institutional performance against the chosen measures) receiving greater government quality-related (QR) research funding than lower performing institutions (i.e. funding is allocated through a system that is ideologically meritocratic). For example, the results of REF2021 helped to inform which universities benefitted most from the circa £2 billion per year the UK government distributes in quality related (QR) funding (UKRI, 2022b), with the University of Oxford (2022) being rewarded with "the largest share of Quality-related Research (QR) funding at just over £164 million for 22/23". The REF (2023) does not use system-generated metrics per se but instead uses a system of reviews conducted by expert panels made up of academics, non-UK based experts, and research users across 34 units of assessment. The expert panel for each unit of assessment considers the quality of research outputs, the impact of the research beyond academia, and the quality of the working environment that supports research (REF, 2023). The qualitative evaluation of the expert panel is then converted to a quantitative score, which is used to create the performance rating (REF, 2023).

In the context of this study, from the perspective of the UK government and the research funding bodies, the purpose of the REF is to use artificially constructed competition to ensure that UK universities are producing high-quality, world-class research and that the UK higher education sector maintains its reputation as one of the best in the world (QS, 2019). The competitive pressure that the UK government puts on UK universities around research performance can be understood at three levels, one level is government-to-institution pressure (macro level), and the second and third levels —the levels of interest here — are institution-to-worker pressure (meso level), and how this pressure shapes academic freedom on the individual level (micro level).

The Teaching Excellence Framework (TEF) and new ways of Measuring the Value of Teaching

The Teaching Excellence Framework (TEF) — which was announced in 2015 (Johnson, 2015) and ran its first iteration in 2017 (Office for Students, 2023) — seeks to measure and rank universities on the basis of teaching quality across three rating categories (TEF Gold, TEF Silver and TEF Bronze). The TEF is mandatory in England but optional in Scotland, Wales, and Northern Ireland and, for the most recent TEF, all Scottish higher education institutions decided not to participate (Universities Scotland, 2022).

In his speech launching the TEF, the Universities Minister at the time, Jo Johnson (2015), set out his expectations for the TEF to provide "a clear set of outcome-focused criteria and metrics" and to create "clear incentives to make 'good' teaching even better" as well as change university priorities through "[s]ome rebalancing of the pull between teaching and research", making explicit reference to the ideological belief that "[m]ore competition will also be central to our efforts to drive up standards".

The TEF ranking is used to inform the maximum amount of undergraduate student tuition fees a university can charge to Home students (Office for Students, 2023) and is also intended to impact students' consumer decision-making when choosing which university to attend (Johnson, 2015). Participating universities receive an overall ranking (i.e. gold, silver, or bronze) as well as a rating for the quality of the student experience and how their graduates fare post-graduation as educated professionals in a competitive job market (Office for Students, 2023a).

The TEF rates and ranks universities across several proxy metrics that aim to measure teaching quality. The aim of the TEF is to "encourage higher education providers to improve and deliver excellence in the areas that students care about the most: teaching, learning and student outcomes (whether students go on to managerial or professional employment, or further study)" (Office for Students, 2023a). In the current iteration, the Office for Students does this by assessing and rating universities in terms of the quality and standard of undergraduate courses.

Much like the REF, the validity of the TEF metrics that the Office for Students uses to rate universities is subject to some controversy and debate (Moorish, 2019b). For example, Moorish (2019b) argues that the TEF metrics are designed to instil neoliberal subjectivity in those who are subjected to the metrics (universities, staff, and students). This can be seen, for example, through the ways in which the graduate salary is used as a proxy metric for course quality, as graduates from arts courses or post-92 universities located in more deprived areas are statistically more likely to obtain lower salaries post-graduation than STEM (Science, Technology, Engineering, and Mathematics) graduates or graduates from Russell Group universities (UniversitiesUK, 2018).

The University and College Union (UCU), in their response to the Teaching Excellence Framework Technical Consultation from the Department for Business, Energy and Industrial Strategy (2016, 2) made the following points:

> Everyone recognises the need to support high-quality teaching, but it is hard to see how many of the measures which have been proposed for the TEF will either measure quality or improve it. In particular, we remain concerned about the use of flawed, proxy metrics as indicators of 'teaching quality' and the increased bureaucracy and game playing that will result in the implementation of the TEF. We also believe that the introduction of the TEF will significantly undermine the linkages between teaching, scholarship and research embedded within higher education ... UCU remains very concerned about the use of metrics, including a highly skilled employment metric, as part of the TEF. This is because graduate employment outcomes are heavily shaped by external factors such as social class, gender, ethnicity, geographical location, subject choice and institutional reputation, rather than simply on the basis of 'teaching quality.

As with the REF, the pressures that the UK government leverages on UK universities with regards to teaching performance are manifest at several levels, including: i) government-to-institution pressure; and ii) institution-to-worker pressure in the form of teaching performance metrics.

The Knowledge Excellence Framework (KEF), the National Student Survey (NSS) and Commercial Rankings of Universities

The Knowledge Exchange Framework (KEF) is another recently introduced government system for measuring performance and ranking and categorising universities, based on whether a university is classed as high or low performing (judged by the metrics for KEF). The KEF, which operates in England only, seeks to ascertain how universities collaborate with various external partners – such as businesses and community groups – to benefit the economy and society (UKRI, 2022a) and to "increase efficiency and effectiveness in the use of public funding for knowledge exchange (KE) and to further a culture of continuous improvement in universities".

The Office for Students' (2023b) National Student Survey (NSS) has three aims. These are: to "inform prospective students' choices, provide data that supports universities and colleges to improve the student experience, support public accountability". The NSS (2023) does this by gathering "students' opinions on the quality of their courses" via a series of Likert-type questions (prior to the 2023 iteration of the NSS) on 11 areas of their student experience (teaching, learning opportunities, assessment and feedback, academic support, organisation and management of the course, learning resources, learning community, student voice, student union, wellbeing, and freedom of speech). As well as shaping the various NSS league tables (by institution, by subject), NSS results also inform some of the commercial university league tables.

In addition to the government-related league tables, universities are also ranked on a wider range of influential non-governmental league tables, such as the QS World University Rankings (2023), which seeks to "compare the world's top universities" in terms of region and subject across a range of parameters, such as academic reputation, employer reputation, staff-to-ration, citations per staff member, international staff to domestic staff ratio, international student ratio, international research networks, employment outcomes, and sustainability. The QS World University Rankings (2023) are said to be particularly influential in shaping the consumer behaviour of international students from China and India when choosing universities (ICEF Monitor, 2017). For the domestic market, other commercial league tables are considered to be more prominent in shaping student consumer behaviour, such as the Complete University Guide (2023), which uses 10 measures to rank universities: "Entry Standards, Student Satisfaction, Research Quality, Research Intensity, Graduate Prospects: Outcomes, Graduate Prospects: On Track, Student-Staff Ratio, Spend on Academic Services, Spend on Student Facilities, and Student Continuation" (University of Aberdeen, 2023). The combined pressures that these ranking mechanisms place on universities manifest as additional pressures for

academics, and these additional pressures can shape the exercise of academic freedom in teaching and research.

This section provided a brief overview of the most recent digitally-enabled sector-wide higher education reform initiatives that have sought to improve the UK higher education sector through increasing competitive pressure by creating publicly visible league tables (to aid accountability and transparency while informing consumer decision-making) powered by a range of proxy measures. In Esposito and Stark's (2019, p.15) conceptualisation of a "society of rankings", they argue that "simplified and standardized metrics act as key reference points for making sense of the world". The question here is: what vision of the world do they push, and how does this vision relate to the ways in which academic work is now carried out? Houtum and van Uden (2022, p.2014) posit that the "university risks turning itself into a mere corporate factory of publications and diplomas, in which quantity is mistaken for quality and control for freedom, thereby derailing itself further and further from its societal function and orientation" and that by "mimicking a hypercompetition inside the organization in order to adapt to the imaginary of a survival-threatening hypercompetition, the modern university has been turning the competition against itself, resulting in a vicious suicidal circle of repression".

The Roots of Audit Culture in Contemporary UK University Environments

To obtain a full understanding of the rationale for the reforms detailed above (REF, TEF, etc.), it is important to ground these changes historically and ideologically. Part of the legacy of the so-called New Public Management (NPM) reforms of the 1980s has been the establishment of a well-rooted audit culture of governance within the UK public sector (Power, 1997). Auditing, as a tool of power and governance, works by stimulating competition according to a certain ideological criteria and incentivising high performance against said criteria (and thereby disincentivising low performance) (Power, 1997). As a technology of power, auditing culture works on several levels, and it disciplines and shapes the performance of less powerful groups (i.e. employees), making them more auditable to metrics created by more powerful groups (i.e. employers) (Power, 1997). In the context of the UK higher education sector, the audit culture makes relatively autonomous professionals, like academics (who recognise and buy into ideas like academic freedom), increasingly accountable to their university employers (who may buy into ideas like academic freedom to a lesser extent). It also makes universities more accountable to the government and to the public in a new set of ways and in ways that may not have been hitherto historically expected.

Power (1997, p.7 and p.10) argues that auditing is "not simply a solution to a technical problem but a way of redesigning" management practice, and it

relates to "emergences in transformation and conceptions of administration and organisation" based around control. Importantly, discourses around auditing can be self-validating (Power, 1997) and thus difficult to challenge. For example, taking into consideration the REF, given that government financial support for research will always be limited, it would be difficult to construct a sensible argument against the existence of a meritocratic mechanism for distributing government research income. As such, arguments against the REF focus on other aspects, such as the cost or the perverse incentives it creates. Additionally, public discourse needs to suggest that an auditing exercise works. However, the way in which it works, and the overall return on investment, can be unclear. For example, the TEF was introduced to enable the ranking of universities based on the quality of teaching, and the aim was for this ranking-based competition (TEF Gold, Silver or Bronze) to inform consumer (student) decision-making, which in turn would drive improvement in teaching quality in the UK higher education sector (as, logically, TEF Bronze universities would struggle to attract students compared to TEF Gold universities without altering their tuition fee price point). Thus, the TEF can simultaneously be considered both a success in terms of its propensity to encourage higher education institutions to focus and report back on key metrics (Pearce, 2022), and also a burdensome bureaucratic exercise for universities (Mckie, 2018), as it takes resources away from the delivery of teaching and provides an uncertain value in increasing tuition fee revenue by making an institution more attractive to potential students (Kernohan, 2017). In essence, the return

on investment can be difficult to quantify with any great clarity.

Auditing systems deeply ingrain capitalist beliefs and neoliberal values (Power, 1997), and auditing succeeds because the introduction of a major audit (e.g. the UK government's TEF or REF) helps create an environment of auditable performance along the specified criteria. As a consequence, key stakeholders (universities, academics, and administrators) have little choice but to buy in and comply in order to score well in the audit, as the act of "affixing the right labels to activities can change them into valuable services and mobilize the commitment of internal participants and external constituents" (Power, 1997, p. 7). Audit systems work on two levels: programmatic and operational.

The programmatic level can be understood as the concept and the values and goals embedded in the audit scheme. Power (1997, p.7) argues that "[a]ll practices give accounts of themselves which are aspirational rather than descriptive". The operational level is where the aspiration meets reality and changes reality, even though the (proxy) metrics used for auditing tend to imperfectly address the desired goals. For example, in the case of two of the excellence frameworks in the UK higher education sector — the TEF and the REF — the extent to which the metrics can be said to accurately measure what they purport to measure is the subject of debate (Frankham, 2017; Curry, Gadd, and Wilsdon, 2022). Nonetheless, a range of other metrics – such as the h-index and Altimetric – have currency among academics and institutions and are used,

formally and informally, as a lens through which to judge others and with which one can judge oneself (possibly in the absence of better alternative measuring instruments). In this way, audits tend to measure what can be measured (digital citations, re-tweets, etc.) and these tend to be the relatively-easy-to-measure outputs (e.g. number of papers, number of likes or shares) rather than the more difficult-to-measure yet more important outcomes (such as the consequences of the research in practice, policies, and on beneficiaries).

Sieber (1981) argues that systems of audit can work on the incentive level as a fatal remedy by creating dysfunction. For example, Power (1997) notes how the Research Assessment Exercise (RAE, the precursor to the REF) resulted in research becoming increasingly seen as more important than teaching – an imbalance that the TEF seeks to address – and it encouraged traditionally vocational-focussed ex-polytechnic institutions to prioritise becoming more research active and to resemble traditional universities through making their offerings less vocational education focussed.

Additionally, the REF, as an audit mechanism, has had a number of other perverse impacts: it created a transfer market for research staff (Grove, 2022a), incentivised academic practice to think in the timeframe cycles of REF, rather than what may be best for a research project (Groen-Xu and Coveney, 2023), and led to academics in some disciplines prioritising publications in prestigious journals rather than publishing books (Macfarlane, 2017). From a cost/benefit perspective, arguments can be made on the extent to which the REF (and RAE) exercises led to improved research excellence in the UK or, more circumspectly, it can be argued that the research excellence exercises achieved the outcome of improved research excellence, but at great financial cost (£471m per institution for REF2021 on average, or £67m per year) (Grove, 2023a) and with a significant opportunity cost. Furthermore, to some extent, certain important non-REF measured activities have become either rendered invisible, as these sit outside of the judgement framework academics were trying to comply with (Hidden REF, 2023), or they can become disincentivised, as they take time and resources away from activities that do count (e.g. journal editing, reviewing for journals, and conference organising are time-consuming and take time away from working on outputs and impact projects that count).

Ultimately, key questions centre on the extent to which (and the ways in which) one can directly credit the REF (and the RAE before that) for improving the UK higher education research culture, and the full cost-benefit trade-off of introducing and maintaining a research excellence exercise with the characteristics of the current REF (and its previous iterations). As discussed, the metrics used for auditing sometimes only imperfectly align with the aims of audit activity, but the processes that accompany the audit activity tend to have real-world value, as they help to create new norms and performance incentives that, if met, can lead to institutional success and personal career progression. However, these "support abstract cultural values at the expense of other cultures of performance evaluation" (Power, 2013,

p.13). Similarly, "rather than provide a base for informed discussion, audits demand that their efficacy is trusted" (Power, 2013, p.13). This trusting can then lead to the aforementioned fatal remedy, identified by Sieber (1981).

Tourish (2019) details how audits weaken academic freedom, specifically for UK business school scholars, by: defining a preferred choice of journal outlets (i.e. pressure for publications to be in a short selection of AJG3 and above ranked journals); indirectly setting the research agenda for staff (i.e. something topical that may find favour in the handful of AJG3 and 4 ranked journals); setting external income generation Key Performance Indicators (KPI) targets for academics that require them to submit multiple time-consuming applications that have a small statistical chance of succeeding; and incentivising scholars to adopt an instrumental mindset and publish research for the purpose of annual appraisal targets, rather than incentivising them to produce meaningful research aligned to their intrinsic interests and to what they feel is most importany (which may be in opposition to normative understandings of what is most important).

As far back as 2011, Kelly and Burrows (2011, p.131) summarised this key aspect of the UK higher education system:

The life-world of the university is increasingly enacted through complex data assemblages drawing upon all manner of emissions emanating from routine academic practices such as recruiting students, teaching,

marking, giving feedback, applying for research funding, publishing and citing the work of others … [S]ome of these emissions are digital by-products of routine transactions (such as journal citations), others have to be collected by means of surveys or other formal data collection techniques (such as the National Student Survey (NSS)) and others still require the formation of a whole expensive bureaucratic edifice designed to assess the quality of administrative, teaching and research work.

Among the negative consequences of this excessively managerial setup is that needless competition leads to unnecessary (and wasteful) duplication (Heller, 2021). In the *Academic Incentives and Research Impact: Developing Reward and Recognition Systems to Better People's Lives* report for Academy Health, Grant (2021) identifies the following unintended consequences of the current system of academic incentives on researchers and research culture:

- While *rewarding academics for a high publication count* is intended to improve research productivity and provide a framework for evaluating academic performance, it has, in part, led to the publication of a large amount of, what some consider, "substandard, incremental papers; poor methods and increase in false discovery rates leading to a natural selection of bad science; reduced quality of peer review" (Grant, 2021, p.3).

- While *rewarding researchers for a high citation count* is intended to help identify high-quality, influential work, it has, in part, been said to lead to authors inflating citation counts through unnecessarily long reference lists and reports of peer reviewers requesting "citation of their work through peer review" in order to increase their citation count (Grant, 2021, p.3)

- While *rewarding researchers through the metric of research income generated* is intended to encourage researchers to carry out ambitious, appropriately funded and tightly scoped research projects, it has, in part, led to increased amount of academic time spent writing proposals that have a small chance of being funded and, by using time that could be better spent, this has taken academic time away from the conducting of research. Additionally, publication outputs from funded research projects can sometimes be seen as "overselling positive results and downplaying negative results" (Grant, 2021, p.3).

- *Rewarding researchers through the metric of PhD student numbers* (supervisions, completions, etc.) can lead, in some cases, to lower entry standards, as the incentive is for universities to admit more students and, further along the line, this could lead to an oversupply of PhD candidates for a limited supply of academic jobs. Additionally, some entry-level academic positions now require completion of a postdoc, as a PhD qualification is increasingly becoming not enough in some institutions due to the oversupply of PhD-level candidates and the need to differentiate between candidates.

Similarly, the authors of the Leiden Manifesto (2015) state that: research evaluation has become routine and often relies on metrics But it is increasingly driven by data and not by expert judgement. As a result, the procedures that were designed to increase the quality of research are now threatening to damage the scientific system.

To remedy this, they propose the following ten principles: 1) quantitative evaluation to support qualitative expert assessment; 2) measure performance against the research missions of the institution, group, or researcher; 3) protect excellence in locally relevant research; 4) keep data collection and analytical processes open, transparent, and simple; 5) allow those evaluated to verify data and analysis; 6) account for variation by field in publication and citation practices; 7) base assessment of individual researchers on a qualitative judgement of their portfolio; 8) avoid misplaced concreteness and false precision; 9) recognise the systemic effects of assessment and indicators; and 10) scrutinize indicators regularly and update them (Hicks, Wouters, Waltman, de Rijcke, and Rafols, 2015).

The DORA (2023) declaration — which many UK universities are signed up to — argues that there is a "need to improve the ways in which researchers and the outputs of scholarly research are evaluated", proposing 18 recommendations for a range of stakeholders (funding agencies, institutions, publishers, companies providing metrics, researchers), including these two recommendations for institutions: "be explicit about the criteria used to reach hiring, tenure, and promotion decisions, clearly highlighting, especially for early-stage investigators, that the scientific content of a paper is much more important than publication metrics or the identity of the journal in which it was published" and "for the purposes of research assessment, consider the value and impact of all research outputs (including datasets and software) in addition to research publications, and consider a broad range of impact measures including qualitative indicators of research impact, such as influence on policy and practice".

The role of metrics as a governance power over worker behaviour

This section has thus far explored rankings, league tables, and metrics in the UK higher education sector, tracing the ideological roots of these reforms. This section explores how metrics administered by university management can be used to subtly and not-so-subtly script academic behaviour and construct new frames of what constitutes a successful academic (while deconstructing existing, long-standing frames).

In Metric Power, Beer (2016) explores the rise of calculative and anticipatory governance, the role of metrics and how an ever-increasing level of quantification in daily life has become the norm (for example, many individuals now embrace some level of quantified self practice, such as counting steps and other forms of self-tracking enabled by digital devices). Beer (2016) argues that capitalism is entering a stage where data is a valued resource and digital infrastructure allows for new means of stimulating competition through the creation of new data-informed frameworks (e.g. Teaching or Research Excellence), league tables (NSS, Complete University Guide), and KPIs to create rankings in areas where previously there was none and to cultivate intense competition in areas where the competitive pressure was originally less or took a different form. These rankings then become instruments of power to further stimulate competition. Thus, taking the example of the excellence frameworks, universities that end up ranking lower in the REF exercise receive less government research funding than those institutions which are ranked higher, while universities with lower TEF ratings risk receiving reduced recruitment numbers through the perceived reputational hit of not

having gold-standard teaching and a potential loss of competitive advantage to universities which achieve a higher TEF rating when it comes to student recruitment. Thus, for an institution, a poor performance in either of these excellence exercises can risk financial stability as well as a reputational hit (although, as the excellence exercises are continuous, a chance for redemption is always present if the university adopts a more competitive mindset).

Metrics, and ranking tables, can also work to stimulate competition on an individual level (e.g. institutions may use h-index scores or a ranking tables of module evaluation scores to inform which individual get recruited, promoted, or released). These various levels of imperfect measurements tend to hold currency, as they have high-use value (e.g. REF performance determines a university's research funding) and they shape academic behaviour to be more readily captured and measured. Hence, as career progression can also be influenced by metrics, being completely indifferent to one's data gaze (Beer, 2018) is perhaps a less than prudent career-building strategy.

This study moves beyond Beer's (2016) core focus on quantitative-based metrics. It is important for this study to incorporate, but also look beyond, solely quantitative performance indicators, because non-quantitative performance measures – such as NSS free text comments and module evaluation comments – can powerfully impact staff experiences. Nonetheless, the concept of metric power (Beer, 2016) provides a lens with which to understand academics'

lived experience of academic freedom in the age of continuous performance evaluation, as the performance management infrastructure, enabled by the data collection inherent in digital systems, is key in facilitating the type of increased managerial control that can corrode the lived experience of academic freedom.

The data self and its potential for shaping lived experience and career trajectories

Contemporary capitalism's growth is now increasingly data-driven, shaping mindsets into adopting a "data rationality" (Beer, 2018, 6) which manifests as a data gaze. Governments use forms of the data gaze to rank and categorise universities in ranking systems, such as the REF or TEF, while universities increasingly use forms of 'the data gaze' to measure the performance of individuals and departments.

Beyond individual assessment, these systems grant universities a holistic overview of the data gaze of their whole institution, appraising departments in relation to each other and individuals in comparison to others via systems like Microsoft Academic and Elsevier's SciVal. SciVal (Elsevier, 2023) provides individuals and institutions with a tool that has "unparalleled power and flexibility" to "visualize research performance, benchmark relative to peers, develop collaborative partnerships and analyse research trends".

Beer (2018) posits that the infrastructure and discourse around the value of the data gaze as something worthwhile leads to two outcomes. Firstly, wider cultural changes, such as real-time, immediate-term output analytics, gain currency as a criterion of judgement rather than longer-term outcomes, which are more difficult to measure. Secondly, changes in how power is communicated normalise, with a move away from (perceived-as-biased) human decision-making towards (perceived-as-neutral) statistical decision-making (e.g. when recruiting and promoting).

Additionally, in the context of the UK higher education sector, there has also been a move away from universities and academics (relatively) autonomously self-regulating themselves towards regulation by external non-university actors and non-academic professional service teams within universities who are now influential in setting the boundaries of what is measured and what counts (e.g. policy makers and statisticians at the Higher Education Statistics Agency, business intelligence departments in universities, data scientists at Elsevier and at other for-profit educational technology companies).

As performance management systems evolve, the quantified data self, as constructed by digital systems, can become more influential in certain domains (e.g. in achieving career progression) than the non-data self is, thus normalising quantified self ways of understanding the world (Lupton, 2016). As stated by Moorish (2019, 363):

> despite a reasoned, evidenced critique of the power of metrics, we are all rendered helpless as neoliberal subjects. We check our h-indexes, we feature on staff dashboards, and we present our work for REF evaluation.

In this way, a key affordance that digital transformation makes pertains to what is termed by scholars as digital monitoring or digital surveillance (Riso, 2021). Often used interchangeably, there is no clear-cut distinction between these two terms among researchers and practitioners; although sometimes digital monitoring is used to refer to less exploitative forms of digital surveillance (Riso, 2021).

Conclusion

This chapter provided a brief overview of some key concepts that provide insight into what the onset of the era of the digital university and metrics-based performance management means for academic workers. In essence, to determine the value of the work carried out by academics, universities are increasingly embracing quantitative forms of performance management via proxy metrics. Of relevance for this study is how the lives and career trajectories of academic workers are increasingly shaped by the metricised judgements of employers, and what the current period of digital transformation within the UK higher education is likely to mean for established academic norms and freedom.

Overall, the concepts covered in this chapter combine together to provide foundational insights into the digital systems of governance and the digital metric surveillance infrastructures that accompany the digital transformation of higher education. In particular, the ways in which these mediate how power is exercised within higher education institutions and enable new forms of performance management and employee oversight.

"Workloaded hours rarely facilitate more creative, participatory or inclusive research endeavours or studies with disadvantaged and hard to reach groups".

"Research comes with its own constraints with respect to which funding body may fund it and these strongly influence the scope of academic freedom, notwithstanding any time/freedom your institution may or may not allocate to you to do your research".

Voices of academics

Voices of " academics

"University managers do not take seriously workload inequalities and staff overworking. If stuff needs to get done in how many hours necessary, that's what they will want regardless of impact on workload, well-being, etc".

"Although I have generally pursued my own research agenda, I do feel constrained by: - REF: pressure to ensure research is geared to the desired number of outputs, rather than encouraging more ambitious projects and initiatives which may take longer and be less conducive to hitting the REF targets; -Target journals: We are encouraged to aim for certain journals on the basis of reputation or standing, rather than those which might serve our target audience better; - Disciplinary constraints: There is an expectation that we will work primarily within our discipline, which discourages new work which may be unrelated to my departmental affiliation".

2. Academic freedom as lens with which to understand changes in academic autonomy norms

Introduction

This chapter provides a detailed overview of the concept of academic freedom. In this study, academic freedom is used as lens through which to understand how digital technology (through ushering in digitally-enhanced and digitally-enabled forms of management) is changing power relations in the UK higher education sector, thereby disrupting the existing worker-to-management equilibrium. This chapter begins with an exploration of the need for clarity as relates to the meaning of the concept of academic freedom. This chapter then sets out the main elements that can be said to constitute the concept of academic freedom.

Academic freedom: the need for clarity

Academic freedom continues to be a commonly used but misunderstood concept. As a moral and quasi-legal concept, academic freedom has a history as long and complex as those of the universities which have invoked it. The nature and scope of university activities (and academic freedom) has altered over the centuries. The development of the contemporary doctrine of academic freedom is largely derived from the nineteenth century German concepts of Lehrfreiheit and Lernfreiheit (Goldstein, 1976), which are associated with the reforms at the University of Berlin by Wilhelm von Humboldt.

This subsequently provided the template for the development of academic freedom, as the hallmark of the research university, initially in the European states and the USA, and subsequently across the globe.

With the huge growth in the scope and scale of university operations in the UK in recent decades, the right of academic freedom has become a neglected – rather than protected – right, and has been largely ignored by academics (a number of whom have scant knowledge of the concept), by universities (although most pay lip service by having an academic freedom institutional statement, these vary considerably in length, comprehensiveness, and accuracy owing to the lack of any European-wide guidelines,), and by government ministers and departments (who have often viewed academic freedom as an impediment to

the marketisation of university functions).

The unique historical circumstances of different countries and their universities have meant that, as Scott (1996, p.165) argues: "the concept of academic freedom carries many meanings (the defense of individual rights of inquiry, of unpopular ideas and corporate autonomy), and … these meanings are (and have been) developed differently in different relationships of power and in different historical circumstances". Consequently, Menand (1996, 5) points out that the idea that "there exists some unproblematic conception of academic freedom that is philosophically coherent and will conduce to outcomes in particular cases which all parties will feel to be just and equitable" is manifestly false.

The lack of clarity over what academic freedom means is further compounded by a general level of unfamiliarity among academic staff as to the *de jure* academic freedom rights assigned to them in constitutional and national legislation, and in relation to internal institutional provisions which may operate to protect de facto normative academic freedom within subject departments of universities. Hence, describing academic freedom as an "eroded concept", Moens (1991, p.58) states that: "only a minority of academics bother to explain what the concept of academic freedom means to them or even know what the concept really is".

Previous research provides empirical confirmation of this general lack of knowledge with regards to the concept and its protection within the UK context. A study undertaken by Karran and Mallinson

(2017) for the UCU found that over 70% of 2,327 respondents did not know whether or not their individual university had an official institutional policy on academic freedom, while over 80% said that they would welcome additional information on the concept of academic freedom and the rights and responsibilities associated with it.

The absence of a consensus as to the characteristics and functions of academic freedom is surprising, given that the last 40 years has seen declarations on academic freedom developed by a diverse array of international organisations, including the Council of Europe (2006), CODESRIA (1990), the Magna Charta Observatory (1988), and the World University Service (1988). Most of these worthy declarations encourage and exhort universities, in general terms, to respect academic freedom, but are usually insufficiently detailed to enable the operationalisation of a benchmark against which the level of (and changes to) academic freedom could be measured.

However, the most detailed recommendation is UNESCO's (1997, 26) *Recommendation concerning the Status of Higher-Education Teaching Personnel* which, as can be seen in the extended extract below, affirmed the following:

> *the right to education, teaching and research can only be fully enjoyed in an atmosphere of academic freedom … the open communication of findings, hypotheses and opinions lies at the very heart of higher education and provides the strongest guarantee of the accuracy*

and objectivity of scholarship and research... the principle of academic freedom should be scrupulously observed. Higher-education teaching personnel are entitled to the maintaining of academic freedom, that is to say, the right, without constriction by prescribed doctrine, to freedom of teaching and discussion, freedom in carrying out research and disseminating and publishing the results thereof, freedom to express freely their opinion about the institution or system in which they work, freedom from institutional censorship and freedom to participate in professional or representative academic bodies.

These elements, along with the lack of tenure, form the basis for this examination of academic freedom in the UK context. Nevertheless, given the previously alluded to national variation in academic freedom, any such categorisation, however carefully constructed, must be considered indicative rather than definitive. Each of these elements will be examined in turn, with reference to the UK context, using the UNESCO Recommendation as a guide.

The three supportive elements of academic freedom

Despite national variations, as the UNESCO (1997) document establishes, academic freedom can be understood to comprise supportive and substantive elements. The existence and strength of the two substantive elements are dependent on, and governed by, the three supportive elements, which are tenure (i.e. job security), shared governance, and autonomy (both individual and institutional).

Tenure

Tenure primarily requires that academic staff with the requisite high level of competence in research and teaching (as judged by stringent and rigorous appraisal of their performance by their peers during a probationary period) are given protection from dismissal for the professional views that they express.

In the process of tenure assessment, recognition is often given to other academic responsibilities, including pastoral care and other services for students; managerial and administrative duties and service on university committees; public service for the community at local, state, or national levels; and evidence of scholarly merit and academic recognition, such as fellowships, honours, and election to office in scholarly or professional organisations. Conversely, where staff fail to meet minimum levels of competence or professional standards of conduct in their teaching and research,

tenure may be revoked. To obtain tenure, it is incumbent upon the probationer to demonstrate competence. It is incumbent upon the institution to demonstrate due cause in order to revoke this. To uphold the integrity of academic freedom, faculty members must be just as willing and empowered to recommend the revocation of tenure and the dismissal of a faculty member for a just cause, as they are to recommend the granting of tenure for staff that meet the necessarily high probationary standards.

With respect to tenure, the UNESCO 1997 *Recommendation* declares (1997, 32) that: "Tenure or its functional equivalent, where applicable, should be safeguarded as far as possible even when changes in the organisation of or within a higher education institution or system are made, and should be granted, after a reasonable period of probation, to those who meet stated objective criteria in teaching, and/or scholarship, and/or research to the satisfaction of an academic body."

There are numerous defences of tenure in the academic literature - see for example, Chemerinsky (1998, p.640) who states that "tenure is a key mechanism for protecting academic freedom" but offers no empirical evidence in support of this assertion. By contrast the statistical analysis of Ceci et al. (2006, p.553) challenged "the assumption that tenure can be justified on the basis of fostering academic freedom."

However, with respect to the UK context, despite being a signatory state of the UNESCO Recommendation, the Thatcher government abolished tenure with the 1988 Education Reform Act, (for more detailed information on the decline of tenure in the UK context, see Dnes & Seaton, (1998)).

Governance

The second supportive element of academic freedom is shared governance, about which the UNESCO Recommendation (1997, p.30) states: "Higher-education teaching personnel should have the right and opportunity, ... to take part in the governing bodies ... and they should also have the right to elect a majority of representatives to academic bodies within the higher education institution".

To guarantee academic freedom, in terms of shared governance, academic staff must: have an equal right to voice their opinions on their institution's educational policies and priorities without the imposition or threat of punitive action. They should also be able to fulfil their collegial obligations in a professional manner; have a determinant voice and a prominent role in university decision-making processes; and be able to appoint, from among their number and beyond, people into positions of managerial authority, and hold them to periodic account through agreed democratic processes.

As with tenure, academic literature endorses the central contribution that governance has for academic freedom. For example, Gerber (2001, p.22) argues that shared governance and academic freedom are "inextricably linked", while the AAUP (1994) suggests: "a sound system of institutional governance is a necessary condition for the protection of faculty rights and thereby for the most productive exercise of essential faculty freedoms".

There has been very little empirical work, if any, on the importance of governance with regards to academic freedom. However, a study by Brown (2001, 129) found that "increased faculty control in decision-making is associated with lower levels of institutional performance".

In the UK context, governance structures within higher education institutions in the UK have two basic types. Pre-1992 institutions, established by Royal Charter, have governance structures specified in their Statutes. Typically, such institutions are governed by a Visitor, Chancellor, Vice Chancellor, Council, and Senate. The University Council is the executive body of the university. At the University of Leeds, for example, the University Council comprises the Chair of Council and Pro-Chancellor, the Vice-Chancellor, four members from the Faculties, two support staff (council appointees), the Union Affairs Officer, the Education Officer of the University of Leeds' Student Union, and thirteen external appointees. The Council has a collective responsibility to promote the University's wellbeing and to ensure its sustainability. Its specific responsibilities include: corporate strategy, plans, and budgets; corporate policy and major business decisions; establishing the framework for governance and management; and monitoring institutional and executive performance. The Senate is the supreme governing body of the university for academic matters. It usually comprises staff from the Vice Chancellor's office, Heads of Colleges

and/or Heads of Departments, Student Union representatives, members elected by the academic staff, and co-opted members. At the University of Leeds, the Senate consists of the Vice-Chancellor, four Deputy Vice-Chancellors, the Pro-Vice-Chancellor, seven Executive Deans of the Faculties, seven heads of schools and institutes, six Faculty Pro-Deans for Learning and Teaching, Research and International, the University Librarian, sixteen elected members, five co-opted members, and five student members. The Senate is responsible for academic governance and regulation with regards to: the admission of students, the curriculum; academic standards; and the awarding of degrees and other qualifications. As such, in pre-1992 universities, the powers of governance are shared between the Council and the Senate, and their compositions are such that academic staff have an input into all of the decisions that these bodies make.

In contrast, post-1992 institutions, which were established as higher education corporations by the 1988 Education Reform Act and were granted university status by the 1992 Further and Higher Education Act, have quite different governing structures. The Board of Governors is the University's governing body, responsible for determining the university's educational mission and ensuring that the university's funds are used effectively and efficiently. Typically, the Board has around twenty members. For example, the Board of Governors at Manchester Metropolitan University (2023) comprises the Vice-Chancellor, thirteen independent members, one Academic Board nominee, two student nominees; and seven co-opted members.

The Academic Board is the University's principal academic authority and is responsible for overseeing and regulating all academic activities, maintaining the academic standard of awards, and enhancing the quality of educational provision. The Academic Board has a membership of twenty-seven: the Vice-Chancellor, the Deputy Vice-Chancellor, the Chief Operating Officer, eight Pro-Vice-Chancellors, four Heads of Department (one from each faculty), three Faculty Heads (Education, International, and Research), three nominated members of the Professoriate, four elected staff members (one from each Faculty), the Students' Union President, and the Students' Union Education Officer.

Hence, in many UK universities, the opportunities for meaningful participation in institutional governance are probably insufficient and would not meet the requirements of the UNESCO Recommendation.

Voices of " *academics*

> *"[C]orporate management is by definition opposed to academic freedom".*

> *"The whole notion of 'Corporate Management Activities' is telling here - we are not a corporation, we don't have 'customers' we are educators and researchers and we have learners".*

> *"The measurement of the employee-to-employer relations stretches over 20-25 years since the encroachment of the marketisation of Further and Higher Education. There's nothing else to take but the freedom of speech of staff and students"*

> *"We are in the most repressive academic climate now relative to my entire academic career. "Group think" and "political correctness" have suppressed academic dissent. The politically correct academics and administrations are actively shutting down dissenting voices. It is amazing that academia has become so politicized that the government has to regulate so that students are not indoctrinated at Universities but rather are exposed to a range of views and learn to think for themselves. It has happened fairly rapidly in the UK, but it is driven by this phenomenon being imported from US academia".*

# *Voices of* 	" 	*academics*

"My university is currently pursuing a vindictive complaint about anti-Semitism against colleagues, for tweets they once "liked" about the labour party. The complainant has not been taught by any of the accused academics. Instead the complainant has stalked their online profiles for tweets to report. I am horrified that my colleagues are being taken to a disciplinary for liking tweets about the Labour Party or supporting Palestinian human rights".

"The institution's Social Media Policy greatly restricts staff speech, defining 'social media' so broadly that most private communication with friends and family during the pandemic would qualify, unless face to face or via call or SMS. Criticism of policies or management is forbidden. Likewise, staff are not allowed to express any political opinions or promote any product under their real names anywhere on the internet. The University claims to want industry experienced staff, but my activities freelancing in industry are counter to the policy as my work promotes commercial titles. I suspect that my filling out this survey and voicing criticisms of the University is counter to the policy".

Autonomy

The final supportive element of academic freedom is autonomy. In relation to autonomy, the UNESCO (1997, 28) Recommendation states that:

The proper enjoyment of academic freedom … require(s) the autonomy of institutions of higher education. Autonomy is that degree of self-governance necessary for effective decision-making by institutions of higher education regarding their academic work, … and respect for academic freedom and human rights. … Autonomy should not be used by higher education institutions as a pretext to limit the rights of higher-education teaching personnel provided for in this Recommendation.

With respect to the impact of autonomy on academic freedom, Barendt (2010, p.67) points out that: "there is a link between institutional autonomy and individual academic freedom. An authoritarian Government that exercises tight control on all aspects of university governance … would have no reason to tolerate individual academic freedom and would not allow it in practice." However, the form and focus of the institutional autonomy of universities have altered considerably since the UNESCO (1997) Recommendation. Surveying such changes, Erkkilä and Piironen (2014, p.184) concluded that:

a very peculiar conceptualisation of autonomy that potentially contradicts more traditional accounts (including the notion of academic freedom) has come to dominate the recent European discussion. … Autonomy is increasingly seen as the managerial property of the university leadership, and not as the property of the entire academic community.

Individual autonomy enables academics to act as free agents in exercising their academic freedom rights, with respect to their professional activities of teaching, research, and shared governance, without interference by internal or external individuals or bodies. Institutional autonomy requires that universities, acting as corporate bodies and via a process of shared governance, are able to make decisions concerning their strategic academic priorities and the day-to-day functions of teaching and research without interference from extramural entities and individuals, including local, national and international governments, religious foundations, national and international NGOs (Non-Governmental Organisations), and private companies. When institutional autonomy is compromised and external bodies determine universities' policies, the exercise of individual autonomy in shared governance is circumscribed and academic freedom is nullified.

Henkel (2007, p.88) notes that "in Anglo-Saxon contexts, the term *academic autonomy* incorporates two distinct but connected ideas: individual academic freedom, and university autonomy or the right to institutional self-governance. … In other contexts such as the Humboldtian

system, this duality is absent; the protection by the state for the academic freedom of those appointed professors or chair holders … is central". Duality in the UK has caused the link between individual and institutional autonomy to be lost and, as Davies (2015, p.990) describes, "academics may find themselves fighting not with their university against external encroachment, but against their university as a direct threat to aspects of their academic freedom". A cross-EU study by the European Universities Association (Pruvot, Thomas, and Estermann, 2017, p.42) revealed that "the UK leads in the area of organisational autonomy: its higher education system scores 100% on all indicators, meaning that it can decide without state interference on all aspects encompassed by this autonomy area". It is therefore evident that, although institutional autonomy in the UK's universities has been enhanced, this has resulted in a consequential decline in individual autonomy and academic freedom.
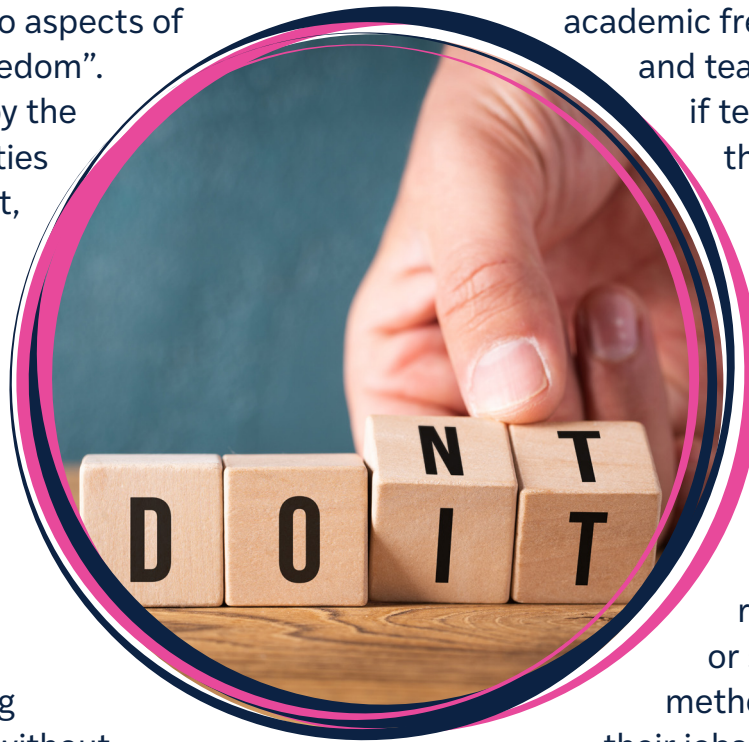
These three supportive elements acting in tandem are essential for academic freedom, but each in its own right is insufficient for academic freedom to flourish. The single elements are less individually important than the fact that they mesh together. Thus, where one of the mutually supportive elements falters, it necessarily undermines the other two, and thereby weakens substantive academic freedom for research and teaching. For example, if tenure is lacking (as is the case in the UK), then academics may not be able to enjoy autonomy, participate in shared governance, or make objective decisions on (inter alia) institutional research priorities or subject teaching methods for fear of losing their jobs.

Within the UK context, it is evident that the supportive elements of academic freedom are relatively weak – academics have been without job security for over 30 years, governance structures in many UK universities deny representation for academics in the decision-making progress, and while institutional autonomy has increased, this has been at the expense of individual academic freedom.

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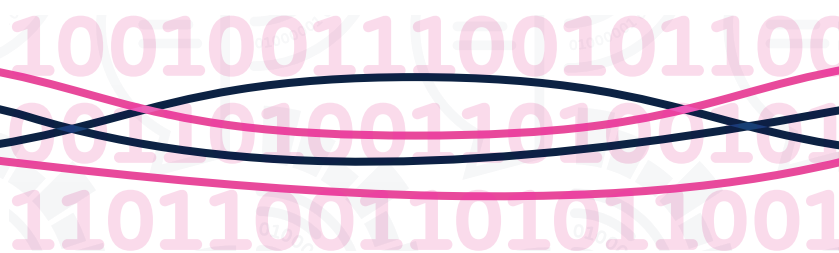
The two substantive elements

The two substantive elements of academic freedom are the freedom to teach and the freedom to research. The meaning of these are detailed next.

Freedom for teaching

In respect to the freedom to teach, the UNESCO (1997, p.30) Recommendation declares that:

> *Higher-education teaching personnel have the right to teach without any interference, subject to accepted professional principles including professional responsibility and intellectual rigour with regard to standards and methods of teaching…Higher-education teaching personnel should not be forced to instruct against their own best knowledge and conscience or be forced to use curricula and methods contrary to national and international human rights standards. Higher education teaching personnel should play a significant role in determining the curriculum.*

The importance of academic freedom for university teaching has been acknowledged ever since 1810, when Wilhelm von Humboldt identified the need for *Lehrfreiheit* in university teaching. This has been frequently re-affirmed each time that it has come under threat. Among the most frequently cited arguments for academic freedom is the US Supreme Court's verdict in 1957, in the case of Sweezy v. New Hampshire (1957, p.250) where it was argued that: "The essentiality of freedom in the community of American universities is almost self- evident. … Scholarship cannot flourish in an atmosphere of suspicion and distrust. Teachers and students must always remain free to inquire, to study and to evaluate, to gain new maturity and understanding; otherwise our civilization will stagnate and die." However, the growth in knowledge of effective learning processes in the classroom, allied to the greater use of educational technology in teaching, have led some to call for limitations in academic freedom for teaching. Finn (2020, p.116), for example, argues that "a professor's academic freedom should be limited when choosing teaching methods … many professors choose teaching methods without serious consideration of whether such methods are effective at achieving the course's learning outcomes. … professors ought to adopt teaching methods that educational research has shown to be effective." Such arguments have been heightened by the recent COVID-19 pandemic, during which lecturers were forced to shift to online delivery.

Within the UK context, the ability of academic staff to exercise academic freedom for teaching is severely limited. The Higher Education and Research Act (2017, Part 1, Paragraph (8) (B) (i)) explicitly states: "the institutional autonomy of English higher education providers means … the freedom of English higher education providers … to determine the content of particular courses and the manner in which they are taught, supervised and assessed".

Voices of **"** *academics*

"Head of School has called me out for a slightly mis-worded announcement on the VLE - I told the students to read and sign two documents and only one of them needed to be signed so I had a public telling off. it was about showing that he could micro manage everything I do as I had put in a grievance about him".

"The problem is the excessive monitoring".

"Maintaining academic standards, particularly in relation to withstanding the pressure to inflate grades is made much more difficult when the crude results data is used to name & shame those 'failing modules when compared with the inflated grades of others. Many academics either cave in, are subject to micromanagement and/or simply leave or end up on long-term sick leave".

"Monitoring results in loss of individuality/adaptation during lecturing; it results in a more bland/homogenous experience for the student".

Voices of **"** *academics*

"Systems designed and implemented by people who have no experience in or knowledge about teaching produce teaching strategies that are stereotyped, dated and inadequate".

"[Monitoring is happening] In every respect, from planning cycles to advice, review and decision making by those unequipped to understand design relationships, disciplinary need, and programme goals. To say nothing of dignity, pleasure and academic values for teachers and teaching, learners and learning or the pleasures of research they share".

Freedom for research

With respect to academic freedom for research, the UNESCO (1997) Recommendation is very thorough and covers both the process of research and the dissemination of research findings. The UNESCO Recommendation (2007, p.30) states that:

> *Higher-education teaching personnel have a right to carry out research work without any interference, or any suppression, in accordance with their professional responsibility and subject to nationally and internationally recognized professional principles of intellectual rigour, scientific inquiry and research ethics…. They should also have the right to publish and communicate the conclusions of the research of which they are authors or co-authors, The freedom to research normally includes the right to determine (without duress) what shall (or shall not) be researched; how it shall be researched; who shall research, with whom and for what purpose research shall be pursued; the methods by which, and avenues through which, research findings shall be disseminated.*

The freedom to undertake research and disseminate its results also incorporates the researcher's professional responsibility to critique others' research via peer review. The rationale for this iterative process is that, by undertaking research and testing its quality by means of critique, discoveries are made, and new knowledge is created. It is therefore evident that one of the benefits of academic freedom in research is that it facilitates major scientific discoveries to be made – many of which have irrevocably ameliorated society. The benefits of academic freedom in research and the cost associated with its negation are demonstrated by two contrasting case studies. During the 1930s, the Soviet agronomist Trofim Lysenko (1898– 1976) began a campaign against Mendelian genetics and promoted the Marxist idea that the environment alone shapes plants and animals. With backing from Stalin, Lysenko forced farmers to comply with his "law of the life of species". Hundreds, if not thousands, of scientists who refused to accept Lysenko's ideas were rounded up and dumped into prisons or psychiatric hospitals. However, everything grown in accordance with Lysenko's methods died or rotted. In consequence, as Kolchinsky et al. (2017, p.1045) report "Lysenko failed to save millions of Soviet citizens from starvation, especially during the drought that led to the famine of 1946–1947". The second case study is that of Francis Crick and James Watson, who discovered the structure of DNA. When they met, both were employed on research projects unrelated to DNA, and were told to discontinue their studies of DNA. Luckily, they continued with the work discreetly, which lead to the discovery of the double helix structure. They were awarded the Nobel Prize in 1962 (Pray, 2008).

Addressing academic freedom for research within the UK context, paragraph 2 (8) (c) of the 2017 Higher Education and Research Act states that "the institutional autonomy of English higher education providers means ... the freedom within the law academic staff at English higher education providers to question and test received wisdom, and to put forward new ideas and controversial or unpopular opinions, without placing themselves in jeopardy of losing their jobs or privileges they may have at the providers".

However, the presumed protection offered by this legal instrument has been progressively nullified by the impact of successive research evaluation exercises and greater managerialism within the UK higher education sector. For example, Watermeyer and Ollsen (2016, p.212) found that: "Some academic managers now argue that in responding to the terms of research evaluation, when a book has equal weighting with a journal publication, academics should abandon the first and focus on the latter because the cost-benefit ratio is more favourable. We also have experience of institutional managers who argue that academics should only write-up research which is the recipient of external funding." Hence, academics are discouraged from writing up their research results in textbooks, and encouraged to disseminate their findings in articles.

Moreover, as Sardesai et al. (2017, p.375-377) point out, the REF requires that: "academics are expected to deliver commodities that are calculable, marketable and tradable under the commercialised and managerialist regime. This undermines academic freedom, as academics are less able to exercise their professional discretion and expertise in choosing areas of research they consider relevant, potentially important or worth pursuing". Consequently, they argue that "constraints on academic freedom result in safe rather than speculative or contentious research, leading to intellectual stagnation and lack of innovation".

In essence, the *de jure* protection of academic freedom for research in the UK is negated by the absence of de facto protection and the application of managerial pressures in pursuit of improvements in REF ratings and increased government QR (quality-related) funding.

Voices of " *academics*

"The REF has been hugely damaging. As an ECR, its impact is definitely felt in the job market as it has precluded ECR entry at lower levels of publication. (I have one book out already, articles in a prior field, and one article out in my current one, with one forthcoming. But without a novel or creative work under contract, I cannot get a post.) This was not true say 5 years ago. And it is down to the REF".

"Any research must align to department research priorities".

"This is explicitly stated that we are expected to align our research to departmental and institutional priorities. There is an underlying threat that if our performance is "below average" for a sustained period that the job is insecure, and certainly pay is performance related".

"For job security you have to focus on the things they want you to. A lot of it is at the whim of the Head of Department - who does not understand the subjects being researched".

Voices of **"** *academics*

> *"I am nervous that a precedent has been set whereby staff can be made redundant if a head of School of senior leadership team member decides they don't like your approach".*

> *"At [name of university redacted] these systems are in place- but interpreted randomly depending on whether the Dean likes you. Hence, recently promotions are poorly qualified but favored/ advantaged individuals".*

> *"My HOS dictates what is undertaken and in turn what is fed forward. failure to comply, or even a hint of questions is met with threats of HR and HR policies being cited as answers rather than collaboration, discussion or negotiation.".*

> *"I'm lucky in that my research is of sufficient quality that I can defend it against such attacks. That said, the department doesn't discriminate. Watching close colleagues being made redundant for researching 'wrong' perspectives has inhibited me from following my interests".*

Voices of **"** *academics*

"It changes my priorities and forces me to look to the broader funding priorities rather than being curiosity driven".

"Pressure to generate research income, i.e. bend the research to grant funding calls. Align research with university/school strategy. Pressure to relate it to public engagement/impact".

Conclusion

In this study, academic freedom is used as a lens through which to understand how digital technology (through ushering in digitally-enhanced and digitally-enabled forms of management) is changing power relations in the UK higher education sector. Although the UK is a signatory state of the UNESCO 1997 Recommendation, it does not comply with the document's requirements in respect to the supportive elements required to facilitate academic freedom, especially with regards to job security and shared governance (among post-1992 universities). While institutional autonomy for UK higher education institutions is strong, individual autonomy has been diminished. The poor state of these supportive elements means that the substantive elements of academic freedom for teaching and research have been relatively weakened. Empirical research by Karran et al. (2021) has provided statistical verification of the weakness of academic freedom in the UK.

For this study, the definition of academic freedom used is that elaborated by UCU (2019) in their submission to the UNESCO/International Labour Organisation (ILO) committee of experts. This submission set out the UCU's allegation against the UK Government in respect to non-compliance with the 1997 UNESCO recommendation concerning the status of higher education teaching personnel. The UCU's (2019, p.7) definition splits academic freedom into substantive elements and supportive elements. The substantive elements are set out in this extended quote:

The substantive elements are freedom to teach and research. The former normally includes freedom to determine: what shall be taught (curriculum); how it shall be taught (pedagogy); who shall teach (via transparent selection procedures); whom shall be taught (the right to determine entry standards); how students' progress is evaluated (assessment methods); whether students' progress (via marking criteria and grade determination). Freedom to research normally includes the determination of: what shall be researched; the research method; the purpose of the research (and the possible refusal to undertake unethical research); the avenues and modes (conference presentations, journal articles) of disseminating research findings.

In this study, data is gathered on each of those aspects via one or more dedicated questions in this study's

research instrument. In addition to the substantive elements, UCU (2019, p.7) also set out the supportive elements:

These two substantive elements are buttressed and sustained by two supportive elements: self-governance and security of employment. Self-governance comprises the rights to: voice an opinion on the running of the university; democratic participation in decision-making within the university; be able to appoint people to, and dismiss them from, positions of managerial authority within the university. Tenure or its functional equivalent comprises the right to employment security, following a peer-reviewed assessment of academic accomplishments, after the completion of a probationary employment period.

As the definition of academic freedom being used is fairly dense, a visual representation of the UCU (2019) definition can be seen in Figure 2.

Figure 2. Authors' visual representation of the UCU definition of academic freedom (UCU, 2019).
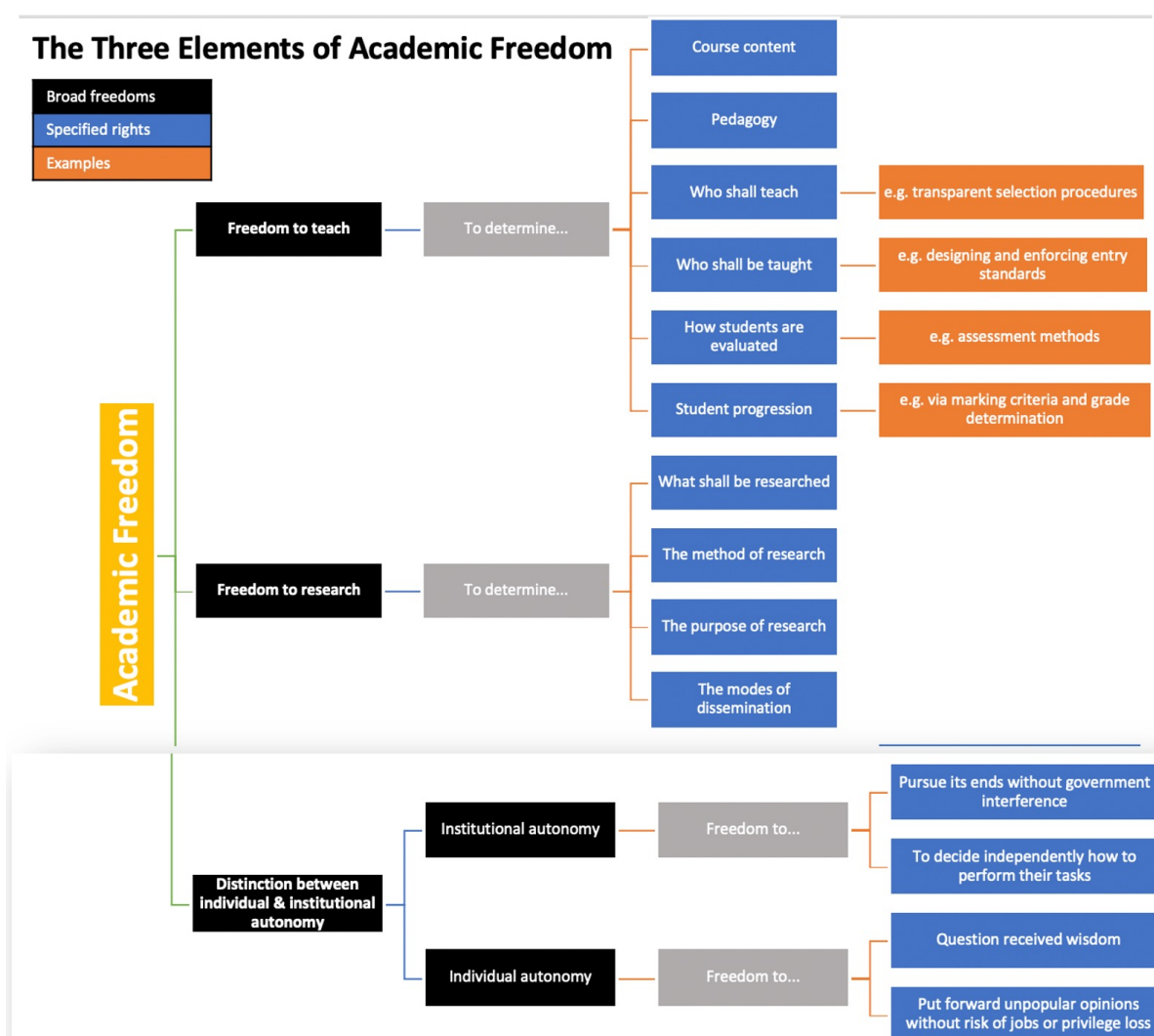
To mitigate the risk of a lack of a shared universal understanding of what academic freedom means, in the 'Academic Freedom in the Digital University' survey, respondents were presented with relevant definitions of academic freedom in relation to the questions they were asked to answer. These can be seen in Figures 3, 4 and 5.

Figure 3. First example of how definitions are presented to respondents within the survey instrument.

Academic Freedom and Digital Technology

The questions in this section explore your views on academic freedom.

UNESCO's 1997 Recommendation Concerning the Status of Higher-Education Teaching Personnel, equates academic freedom with:

"*the right, without constriction by prescribed doctrine, to freedom of teaching and discussion, freedom in carrying out research and disseminating and publishing the results thereof, freedom to express freely their opinion about the institution or system in which they work, freedom from institutional censorship and freedom to participate in professional or representative academic bodies*" (UNESCO, 11 November 1997, paragraph 27, p.30).

On a scale of 1-9, what do you believe to be the level of protection for academic freedom in the institution in which you work?

Low level of protection (1)	2	3	4	Average level of protection ⑤	6	7	8	Very high level of protection ⑨
○	○	○	○	○	○	○	○	○

In many institutions teaching higher education courses, it is argued that the protection for academic freedom has changed in recent years.

What is your view, with respect to your institution? (please select one option).

○ The protection for academic freedom has *greatly increased* in recent years.
○ The protection for academic freedom has *increased* in recent years.
○ The protection for academic freedom has *remained unchanged* in recent years.

Figure 4. Second example of how definitions are presented to respondents within the survey instrument.

Digital governance and academic freedom in teaching

In the context of teaching, academic freedom can be broadly understood as institutions giving staff a suitable level of freedom to (e.g. agency, discretion, judgement) to make choices over:

- content of the curriculum
- pedagogic approach
- entry standards
- assessment methods
- marking criteria
- grade determination

It also incorporates freedom from undue interference in the above areas.
Please indicate your level of agreement with the following statements.

I believe that staff academic freedom - as defined above - in teaching-related processes is important to ensure high levels of staff wellbeing and performance?

Figure 5. Third example of how definitions are presented to respondents within the survey instrument.

Digital governance and academic freedom in research

In the context of research, academic freedom can be broadly understood as institutions giving staff a suitable level of freedom to (e.g. agency, discretion, judgement) to make choices over:

- what to research
- how to research it (e.g. method)
- why to research it (purpose)
- with whom to research (collaborators)
- how to disseminate (conference presentations, journal articles, findings).

It also incorporates *freedom from* undue interference in the above areas.
Please indicate your level of agreement with the following statements.

Academic freedom - as defined above - in carrying out research aspects of their role is important for ensuring high levels of staff wellbeing and performance.

3. Research methodology

Introduction

For this study, UCU members were surveyed as to their views on academic freedom within the context of the digital university. The core focus was on the relationship between academic freedom and the use of institutional technologies that provide the employing institution with worker surveillance and performance management affordances. The survey questions, of which there were over fifty, each related to a key dimension of academic freedom. The Equality and Policy teams at the UCU were involved in the survey design, and they helped to ensure that the research instrument was developed to enable the statistical testing of the relationship between a range of demographic variables (age, gender, visa status) and academics' subjective experiences of academic freedom (e.g. in what ways is the experience of academic freedom different for men compared to women, or different for those of an ethnic minority background versus those of a non-ethnic minority background, or different for those with disabilities versus those without disabilities).

Prior to distribution, the survey was piloted at the University of Lincoln in order to optimise the wording of survey questions, the flow of the survey structure as well as to gather any other useful feedback that could be operationalised. The survey was distributed to all UCU members in May 2021 via dedicated email bulletins, and a link to the survey featured several times in The Friday Email – the UCU's weekly newsletter – during the month of May. The survey received over 2,100 responses over the four weeks it was open, and it generated over 242,000 words of open-text data.

Survey structure

The survey was divided into six sections and mostly used Likert—style level of agreement questions. The first section sought to gather demographic and employment information from respondents, in order to enable the running of statistical tests on the differences between the experiences of minority and majority groups based on race, gender, sexuality, contract type, and visa status.

The second section explored respondents' views on academic freedom and digital technology. It included questions that were carried over from the previous UCU survey conducted by Karran and Mallinson (2017), as well as new questions that sought to ascertain respondents' views on the relevance of different types of academic freedom (e.g. freedom to and freedom from), the role of digital systems in shaping contemporary

academic work, and the impact of workloading systems on academic freedom (i.e, in what ways do workloading systems shape academic freedom on the institutional level and in what ways do workloading systems shape academic freedom on the institutional level).

The third section looked at digital governance and academic freedom in teaching. The fourth section explored digital governance and academic freedom in research. The fifth section explored respondents' views on the impact of digital governance thus far and where they saw the trajectory of digital governance as likely to head. The closing section looked at freedom of speech and academic freedom in the context of the Conservative government's recent Higher Education (Freedom of Speech) Act 2023. The ways in which the questions were split across the sections can be seen in Figure 6.

Figure 6. An overview of the question makeup of the survey.

Demographic and Employment information (13 Questions)

Academic Freedom and Digital Technology (17 Questions)

Digital governance and academic freedom in teaching (11 Questions)

Digital governance and academic freedom in research (11 Questions)

Trajectory of digital governance (3 Questions)

Freedom of speech and academic freedom (4 Questions)

Survey questions

The questions were mostly Likert-style questions which were made up of a statement that asked respondents to choose the response option that best matched their level of agreement from a standard five-point scale (strongly agree, agree, neither agree nor disagree, disagree, or strongly disagree), with the additional option of unsure/prefer not to say (Figures 7 and 8). Respondents were not obliged to answer all questions and could choose to skip any questions they wished. Some questions therefore have a lower number of responses than others, either due to respondents skipping the question or selecting 'unsure/prefer not to say'. To further align this study with current best practices, 'unsure/prefer not to say' responses were treated as missing data and were excluded from the results (Kmetty and Stefkovics, 2022). This is considered best practice as, while researchers want to "reduce the amount of missing data, keep data quality on a high level" and not "show respondents an 'easy way out' … making responses mandatory is unethical" and if an "Unsure/Prefer not to say" option is not provided, then this means that "respondents who simply do not have a valid answer, may choose responses that can later have even worse consequences on data quality" (Kmetty and Stefkovics, 2022, 659). Only respondents who completed more than 50% of the survey were included in the data presented here.

Figure 7. Example of one of the Likert-style questions from the workload section.

In the context of teaching work, please indicate your level of agreement with the following statements regarding your experiences with workloading:

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Unsure/Prefer not to say
I am able to effectively negotiate my teaching workload.	○	○	○	○	○	○
The teaching hours allocated do not require me to put in additional undocumented hours (e.g. weekends, evenings, annual leave).	○	○	○	○	○	○
The hours allocated generally allow me to use the pedagogic approach I want.	○	○	○	○	○	○
The hours allocated generally allow me sufficient time to feedback on student work.	○	○	○	○	○	○
The hours allocated generally incentivise me to take an ambitious approach to teaching and marking.	○	○	○	○	○	○

Please indicate your level of agreement with the following statements about the role of digital systems (e.g., email, Teams, Scopus, Blackboard/Moodle) in contemporary UK HE.

Digital technology has significantly *improved* the working lives of teaching and research staff.

○ Strongly agree
○ Somewhat agree
○ Neither agree nor disagree
○ Somewhat disagree
○ Strongly disagree
○ Unsure/Prefer not to say

As this survey was exploratory, this report mostly presents descriptive statistics. Additionally, as employment security is considered essential to the exercise of academic freedom, special attention in this report is given to the responses of academics on fixed-term contracts.

Demographic variables and other moderator variables

For demographic questions, UCU recommended wording was utilised over University of Lincoln recommended wording. The survey sought to ascertain six aspects of respondents' demographic characteristics, with the aim of statistically testing whether or not these variables were significant factors in shaping the lived experience of academic freedom: gender, age, ethnicity, disability, sexual orientation, and visa status.

Furthermore, information was also sought in relation to an additional seven moderator variables: discipline, time in institution, role in institution, whether employment was full-time or part-time, whether employment was fixed-term or permanent, contract type (teaching only or teaching and research), and time in the UK higher education sector. The information collected can be found in the appendices.

As such, this study sought to collect data that would allow exploration of the extent to which being part of a minority group — for example, the minority ethnic, LGBTQ+, or disabled group — led to an experience of academic freedom that differed in a statistically significant way.

The study design also acknowledged the importance of intersectional identities and the importance of seeing how an academic's perceived sense of academic freedom might be influenced by a combination of factors (such as age,

race and gender) rather than solely race. While not addressed in this report, future micro reports will seek to provide an intersectional understanding of the extent to which different academic groups are able to exercise distinct aspects of their academic freedom in the contemporary marketised university.

Indeed, as one respondent noted in an open-text comment:

"Academic freedom in the contemporary university is an intersectional issue".

Survey respondent

However, this report fixes attention solely on the overall responses and the variable of contract status (fixed-term). As discussed earlier, tenure (or secure employment) is considered by some to be an essential prerequisite for one to be able to exercise academic freedom (Schleck, 2022, UCU, 2023).

However, within the UK higher education sector, fixed-term contracts are common, with HESA (2023) statistics showing that 77,475 academics — 33%, or one in three — were employed on fixed-term contracts in 2021/22. Consequently, the UCU (2022a) has made ensuring income and employment stability for fixed-term and hourly paid staff a key priority, and the UCU have made improving the working conditions of this group a key part of the Four Fights dispute. In this report, the respondent data for both fixed-term workers and non-fixed-term workers will be shown for questions for which the difference in response is statistically significant at the 5% level.

As such, this study will provide data on the extent to which being on a permanent or fixed-term contract is crucial in determining one's sense of academic freedom.

Ethics

Ethical approval was obtained from the University of Lincoln's Research Ethics Committee (UREC), following the University of Lincoln's Research Ethics Policy and Code of Practice for Research.

Ethics for the online survey were considered in detail. Participation in the study was voluntary, and this was communicated clearly to potential respondents. Informed consent was sought; respondents were free to take the time they needed to consider whether or not they wished to take part; respondents could withdraw through non-completion; and respondents could request for their data to be removed from the data set post-survey. Additionally, as the participants were all academics, they could reasonably be considered to have familiarity with research ethics over and above the average lay person.

Respondents were all informed about risks and benefits before deciding to complete the survey. The "level of agreement" Likert-style questions were also worded and ordered in a way that sought to minimise bias. Confidentiality, anonymity, and the privacy of survey respondents and their data was paramount.

Only one question required identifying data. This question asked participants to leave an email address if they wanted to be entered into a prize draw. Potential harm was also minimised, as the survey and the questions in it were not intended to mislead, nor were they designed to embarrass or humiliate the respondent, nor cause psychological discomfort. The survey was piloted beforehand to pre-emptively identify such issues, and the survey questions were also checked and approved by the University of Lincoln's Ethics committee. Additionally, best practice in Research Data Management, as recommended by the University of Lincoln policy, was adhered to closely.

4. Survey results

This section sets outs the results from each of the five sections of the survey:

- Academic freedom and digital technology (17 Questions)

- Digital governance and academic freedom in teaching (11 Questions)

- Digital governance and academic freedom in research (11 Questions)

- Trajectory of digital governance (3 Questions)

- Freedom of speech and academic freedom (4 Questions)

For each question, there is a graphical representation of the results in the form of a bar chart and a table showing the number of responses. Where there is statistical significance in the mean response between respondents employed fixed-term and respondents employed permanently, the results of the one-way analysis of variance (ANOVA) test and Tukey HSD are shown.

Prior to distribution, the survey was piloted at the University of Lincoln in order to optimise the wording of survey questions, the flow of the survey structure as well as to gather any other useful feedback that could be operationalised. The survey was distributed to all UCU members in May 2021 via dedicated email bulletins, and a link to the survey featured several times in The Friday Email – the UCU's weekly newsletter – during the month of May. The survey received over 2,100 responses over the four weeks it was open, and it generated over 242,000 words of open-text data.

Academic Freedom and Digital Technology

The 17 questions in this section are split into several sub-sections.

Current level of protection for academic freedom

Each sub-section details respondents' views on the following aspects of academic freedom:

- the overall level of protection for academic freedom

- protection for academic freedom in teaching

- protection for academic freedom in research

- individual autonomy

- institutional autonomy

- employment protection.

Some of the questions in this section are a repetition of questions deployed in an earlier survey distributed by the UCU (see Karran and Mallinson, 2017) and are repeated to enable a comparison between responses at that moment in time and responses in 2021. The comparison of responses will be detailed in an upcoming journal article.

Respondent data from this section of the survey indicates that:

- protection for academic freedom is in decline (**58.2%** agree/strongly agree)

- individual academic freedom for teaching is in decline (**56.8%** agree/strongly agree)

- individual academic freedom for research is in decline (**51.7%** agree/strongly agree)

- individual autonomy is in decline (**75.9%** agree/strongly agree)

- university self-governance is in decline (**57.7%** agree/strongly agree)

- employment protection is in decline (**72.1%** agree/strongly agree)

The current level of protection for academic freedom

The first question sought to ascertain where respondents felt the current level of protection for academic freedom in their institution was in relation to the broader UK higher education sector (Figure 9). Choosing from a nine-point scale, the biggest grouping of respondents (32.8%) felt that the level of protection in their institution for academic freedom was average. If the responses are grouped together, more respondents felt that the level of protection for academic freedom was above average (40.5%), rather than below average (26.7%). Concatenating scale points 9, 8, and 7 (high), points 4, 5, and 6 (average), and points 1, 2, and 3 (low) shows that 29.5% believed that the level of protection for academic freedom was high, 52.6% would describe the level as average, while 17.9% considered it to be low. The largest group of respondents indicated that the level of protection for academic freedom in their institution was on par with other universities.

Figure 9.The level of protection for academic freedom in respondents' institutions on a scale of 1-9.

On a scale of 1–9, what do you believe to be the level of protection for academic freedom in the institution in which you work? (n=2,095)

Selected Choice	Percent
Very high level of protection (9)	4.7%
8	8.7%
7	16.1%
6	11.0%
Average level of protection (5)	32.8%
4	8.8%
3	7.6%
2	4.2%
Low level of protection (1)	6.1%
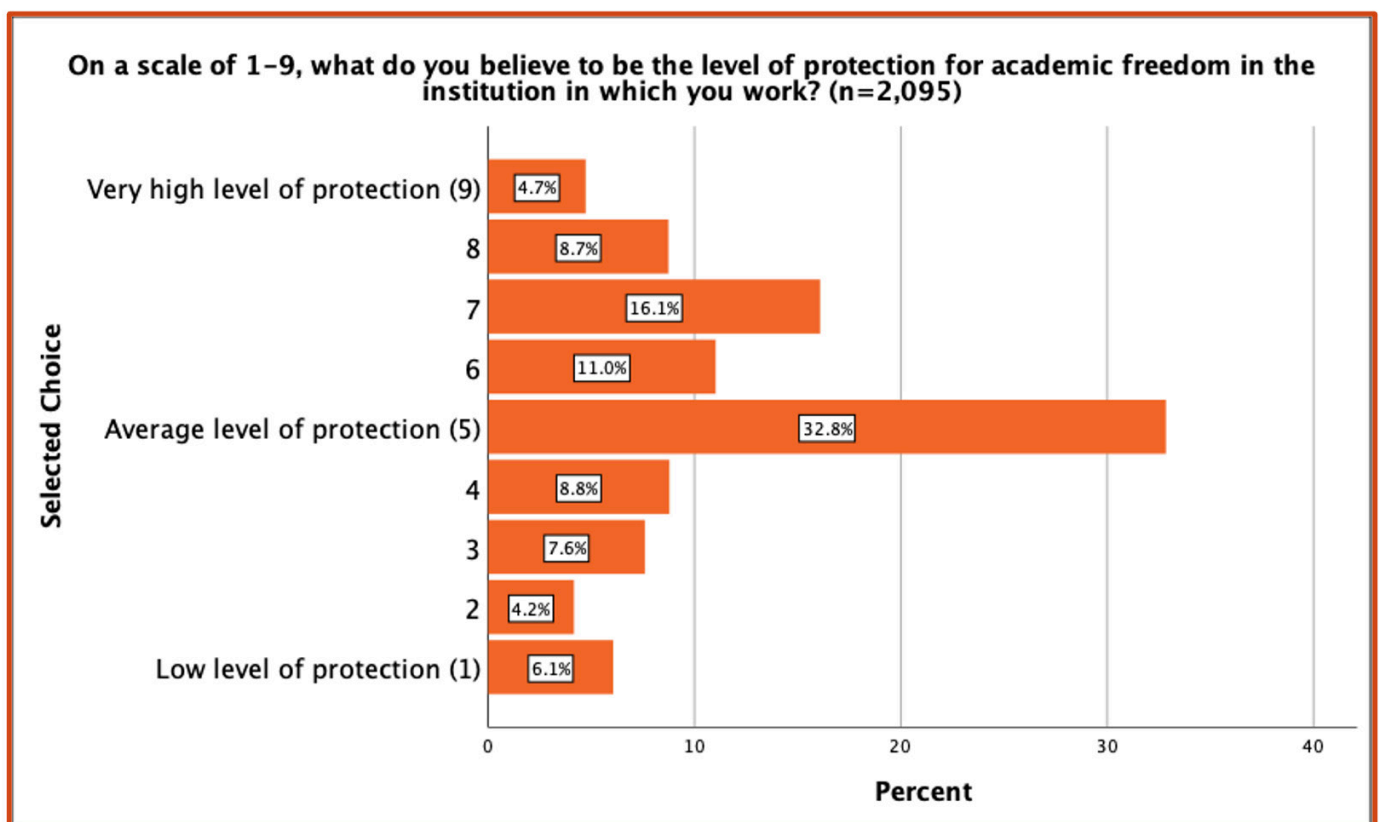
Changes in the level of protection for academic freedom

The second question sought to explore whether respondents had detected changes in the level of protection for academic freedom in their institution (Figure 10). When asked if the protection for academic freedom in their institution had changed in recent years, 41% of respondents felt it had diminished, and 17.2% felt that it had greatly diminished. Overall, 58.2% of respondents felt that protection for academic freedom had diminished in recent years, while just 2.1% suggested that protection for academic freedom had increased.

Figure 10. Changes in the level of protection for academic freedom in respondents' institutions over recent years.

In many institutions teaching higher education courses, it is argued that the protection for academic freedom has changed in recent years.

What is your view, with respect to your institution? (please select one option). (n=2,095)

- The protection for academic freedom has greatly increased in recent years. — 0.3%
- The protection for academic freedom has increased in recent years. — 1.8%
- The protection for academic freedom has remained unchanged in recent years. — 23.9%
- The protection for academic freedom has diminished in recent years. — 41.0%
- The protection for academic freedom has greatly diminished in recent years. — 17.2%
- I do not know / cannot say whether the protection for academic freedom has changed in the institution in which I work. — 15.8%

A one-way ANOVA (Table 1) showed that there was a statistically significant difference in the mean response between those on fixed-term and those on permanent contracts ($F_{(1, 2093)}$ = [15.635], p = 0.000). Surprisingly, over 60% of respondents on permanent contracts thought that the protection for academic freedom had diminished or greatly diminished, while the comparable figure for staff on fixed-term contracts was 46.6%. While this result may seem surprising and counterintuitive, the reasons for this will be discussed in the Findings chapter.

Table 1. Changes in the level of protection for academic freedom in respondents' institutions over recent years.

			In many institutions teaching higher education courses, it is argued that the protection for academic freedom has changed in recent years.						Total
			I do not know / cannot say whether the protection for academic freedom has changed in the institution in which I work.	The protection for academic freedom has greatly diminished in recent years.	The protection for academic freedom has diminished in recent years.	The protection for academic freedom has remained unchanged in recent years.	The protection for academic freedom has increased in recent years.	The protection for academic freedom has greatly increased in recent years.	
My contract is:	Permanent	Count	242	320	756	435	30	5	1788
		%	13.5%	17.9%	42.3%	24.3%	1.7%	0.3%	100.0%
	Fixed term	Count	88	41	102	66	8	2	307
		%	28.7%	13.4%	33.2%	21.5%	2.6%	0.7%	100.0%
Total		Count	330	361	858	501	38	7	2095
		%	15.8%	17.2%	41.0%	23.9%	1.8%	0.3%	100.0%

Academic freedom for teaching

The third question explored respondents' views on whether the level of protection for academic freedom in teaching had changed in their institution (Figure 11). As the figure below shows, 56.8% of respondents either strongly agreed or somewhat agreed that academic freedom in teaching had declined, while 46.6% disagreed, or disagreed strongly, with this statement.

Figure 11. Changes in the level of support for academic freedom in teaching within respondents' institutions.

Your views on the importance of academic freedom and the strength of its protection in your institution (please indicate the extent to which you agree or disagree by selecting one of the six options in each row).

Individual academic freedom for teaching has declined in my institution in recent years. (n=1,892)

- Strongly agree: 18.3%
- Somewhat agree: 38.5%
- Neither agree nor disagree: 22.6%
- Somewhat disagree: 12.5%
- Strongly disagree: 8.1%

Academic freedom for research

The fourth question (Figure 12) explored respondents' views on academic freedom for research, as the protection for research and for teaching can vary within an institution for a variety of reasons (for example, if the institutional culture prioritises research or if the institutional culture is very quality assurance minded as relates to teaching). 51.7% of respondents either strongly agreed or agreed that academic freedom for research had declined in their institution. By contrast, only 23.4% disagreed, or strongly disagreed, that their academic freedom for research had declined. Hence, these results show that respondents are more likely to believe that academic freedom has declined for teaching than for research.

Figure 12. Changes in the level of support for individual academic freedom for research in respondents' institutions.
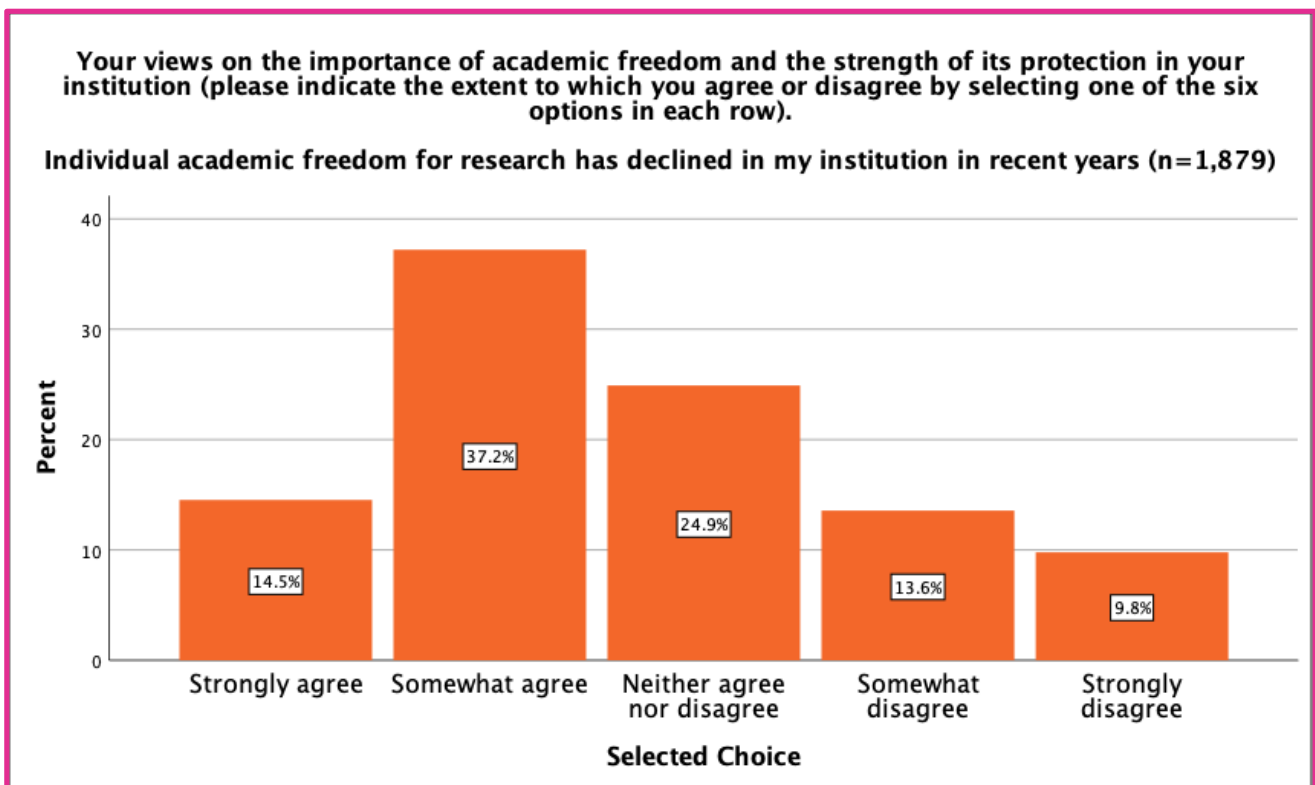
Academic freedom as individual autonomy

The next question focussed on the individual autonomy that academics felt that they had (Figure 13). 75.9% of respondents agreed or strongly agreed that individual autonomy had declined in their institution, while only 10.7% disagreed.

Figure 13. Changes in the level of support for individual autonomy in respondents' institutions.

Your views on the importance of academic freedom and the strength of its protection in your institution (please indicate the extent to which you agree or disagree by selecting one of the six options in each row).

Individual autonomy has declined in my institution in recent years (n=1,892)
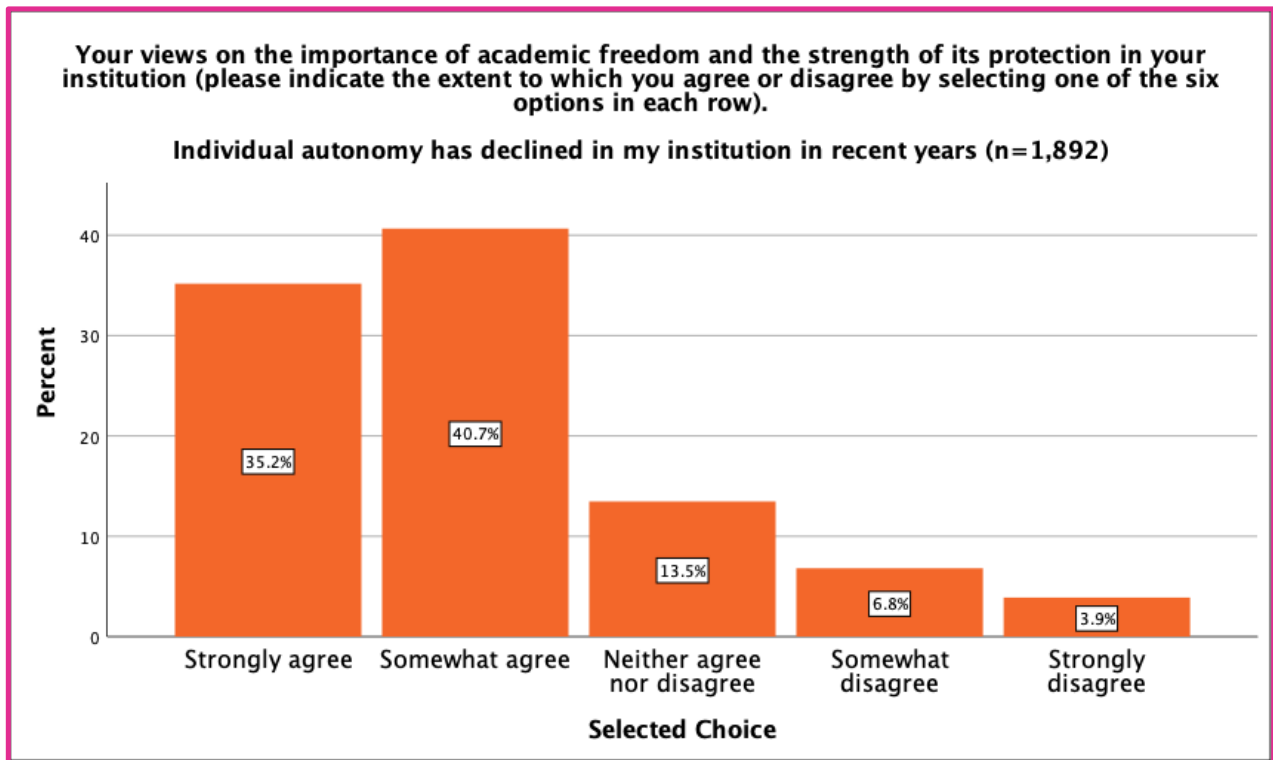
Surprisingly, a lower proportion of those on fixed-term contracts (21% to 37.4%) selected the 'Strongly Agree' option compared to those on permanent contracts (Table 2). Indeed, a one-way ANOVA revealed that there was a statistically significant difference in the mean response between those on fixed-term and those on permanent contracts ($F(1, 1980) = [21.287]$, $p = 0.000$). The reasons for this will be picked up in the Findings chapter.

Table 2. Changes in the level of individual autonomy - comparison of responses: fixed-term vs permanent.

			Individual autonomy has declined in my institution in recent years.					Total
			Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	
My contract is:	Permanent	Count	641	691	202	116	65	1715
		%	37.4%	40.3%	11.8%	6.8%	3.8%	100.0%
	Fixed term	Count	56	115	65	19	12	267
		%	21.0%	43.1%	24.3%	7.1%	4.5%	100.0%
Total		Count	697	806	267	135	77	1982
		%	35.2%	40.7%	13.5%	6.8%	3.9%	100.0%

The ways in which institutionally-implemented digital technologies and individual autonomy entwine are set out by this survey respondent. As the below open-text comment from a survey respondent shows,, significantly impact upon how academics are able to exert their individual autonomy, as this open-text response in the survey below shows:

"Increased technological systems have diminished academic autonomy and have devalued the human interactions that belong at the heart of effective learning and teaching".

Survey respondent

Academic freedom in university self-governance and decision-making

The sixth question (Figure 14) explored university self-governance and decision-making. Over half of respondents (57.7%) agreed that university self-governance and decision-making had been declining in their institution, with 27.8% of respondents strongly agreeing. On the other end of the scale, only 14.9% disagreed or strongly disagreed that self-governance had declined.

Figure 14. Changes in the level of university self-governance and decision-making in respondents' institutions.

Your views on the importance of academic freedom and the strength of its protection in your institution (please indicate the extent to which you agree or disagree by selecting one of the six options in each row).
University self–governance and decision–making (by means of senate or academic board) has declined in my institution in recent years (n=1,769)

Selected Choice	Percent
Strongly agree	27.8%
Somewhat agree	29.9%
Neither agree nor disagree	27.4%
Somewhat disagree	9.7%
Strongly disagree	5.2%

A one-way ANOVA (Table 3) revealed that there was a statistically significant difference in the mean response between those on fixed-term contracts and those on permanent contracts (F(1, 1767) = [4.138], p = 0.042. As with some of the earlier questions, the responses of those on fixed-term contracts was perhaps unexpected. While 58.9% of those on permanent contracts agreed or strongly agreed that self-governance had declined, the comparable figure for those on fixed-term contracts was — perhaps unexpectedly — lower, at 49.4%.

Table 3. University self-governance and decision-making - Comparison of responses: fixed-term vs permanent.

| | | | University self-governance and decision-making (by means of senate or academic board) has declined in my institution in recent years. | | | | | Total |
			Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	
My contract is:	Permanent	Count	451	458	399	149	85	1542
		%	29.2%	29.7%	25.9%	9.7%	5.5%	100.0%
	Fixed term	Count	41	71	85	23	7	227
		%	18.1%	31.3%	37.4%	10.1%	3.1%	100.0%
Total		Count	492	529	484	172	92	1769
		%	27.8%	29.9%	27.4%	9.7%	5.2%	100.0%

Employment protection

The next question (Figure 15) explored respondents' views as to whether the level of employment protection in their institution was changing. Although tenure has been abolished in the UK for over 30 years, employment protection is considered by many scholars (e.g. Schleck, 2022) to be a key prerequisite for academic freedom. 72.1% of respondents either strongly agreed or agreed that employment protection had declined in their institution.

Figure 15. Changes in the level of employment protection in respondents' institutions.
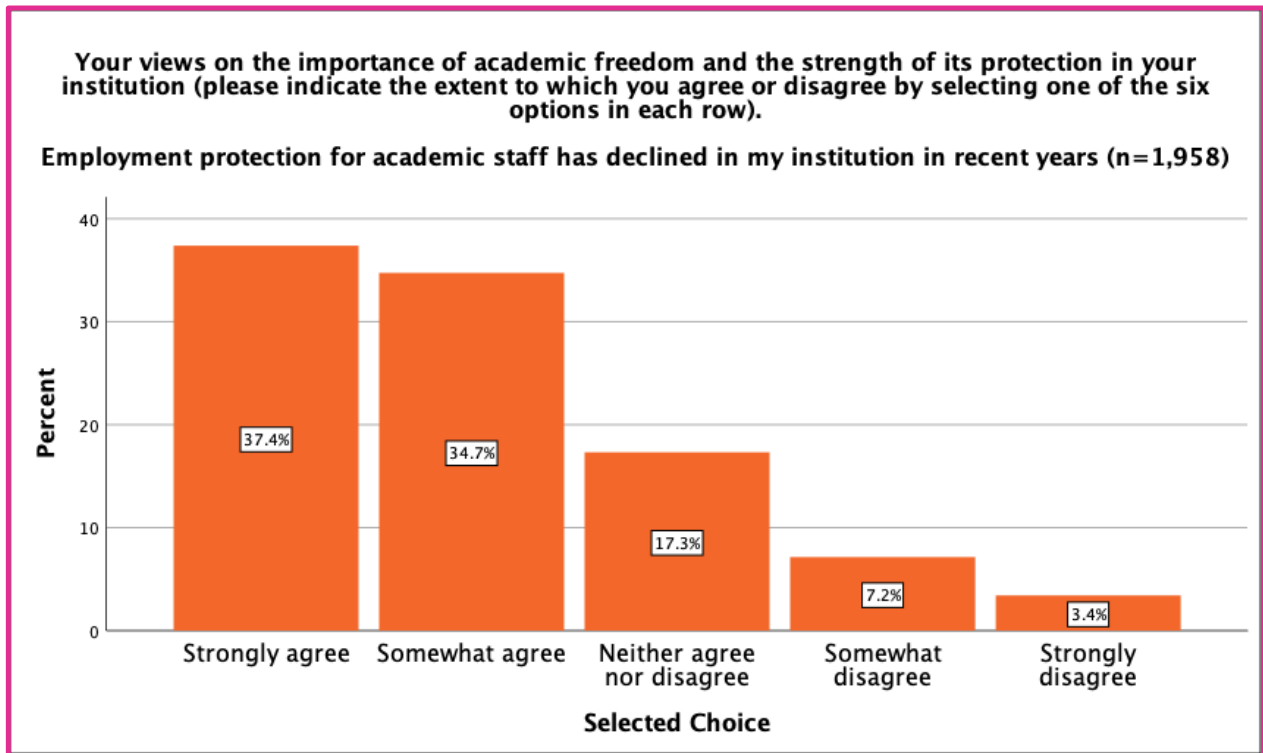
Perhaps not surprisingly, a higher proportion of respondents on fixed-term contracts (81.8%) agreed or strongly agreed that employment protection is in decline than those respondents on permanent contracts (70.5%). A one-way ANOVA (Table 4) revealed that there was a statistically significant difference in the mean response between respondents employed fixed-term and respondents employed on permanent contracts (F(1, 1956) = [9.028], p = 0.003).

Table 4. Changes in the level of employment protection in respondents' institutions.- Comparison of responses: fixed-term vs permanent.

			Employment protection for academic staff has declined in my institution in recent years.					Total
			Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	
My contract is:	Permanent	Count	616	567	310	124	61	1678
		%	36.7%	33.8%	18.5%	7.4%	3.6%	100.0%
	Fixed term	Count	116	113	29	16	6	280
		%	41.4%	40.4%	10.4%	5.7%	2.1%	100.0%
Total		Count	732	680	339	140	67	1958
		%	37.4%	34.7%	17.3%	7.2%	3.4%	100.0%

The need for positive academic freedom and the need for negative academic freedom

In the book Two Concepts of Liberty (1969), Isaiah Berlin sets out two distinct conceptualisations of freedom: negative freedom (freedom from, i.e. – 'not being prevented from choosing as I do') and positive freedom (the freedom and ability to act and be 'one's own master'). Negative liberty relates to the form of freedom that comes from the absence of constraint and a relative lack of interference.

In the UK higher education context, negative freedom would be freedom from excessive interference from managers and institutions in, for example, research topics explored, methods chosen to conduct research, and choices over how to disseminate the research. In contrast to negative liberty, positive liberty (freedom to, and the ability to act) can be understood as thus:

"[I]f negative freedom is freedom from being governed by others, positive freedom is 'freedom to' govern – a freedom that must logically define what it is to be self–governing, which must give freedom a content, a character, and make it a determinate activity rather than simply the opportunity to act" (Bowring, 2015, 156).

In the context of university employment, positive freedom would be experienced in situations where academic staff are relatively autonomous in how they choose to accomplish their tasks (see Bowring, 2015, for a sociological overview of the two concepts). For example, within certain institutions in the UK higher education sector, academics may experience higher 'freedom to' in research (where, for non-funded research, bar gaining internal ethical approval and finding an external outlet for their publication, an academic may be largely free to conduct the research they want and how they want) but experience low 'freedom from' in teaching (where, for example, what the person does is subject to a greater amount of intrusive regulation, quality checking and approval such as the institutional imposition of degree module curricula, subject learning outcomes, and calibrated assessment marking schemes).

For funded research, the amount of 'freedom to' and 'freedom from' may be different as there is a need to be accountable to the funder. In the higher education systems in other nations, it may be that 'freedom from' is generally high but 'freedom to' is low. As such, academic freedom can be seen as an enabling or, conversely as a "a defensive right, and therefore one that protects scientific and teaching activities against the interference of the state and other authorities, including university and faculty authorities" (Stachowiak-Kudła, 2021, p.1035).

Bennich-Björkman's (2004, p.23) analysis, based on interviews of academic staff in Sweden, discovered that "[t]he norm of academic freedom lives on and is significant in the research community even though there are variations in where the emphasis is placed".

Significantly, Bennich-Björkman's (2004) study found that most of the researchers interviewed enjoyed negative, rather than positive freedom, and were therefore unconstrained in the choices they made for the subject of their research, but were unable to undertake their preferred research through lack of resources.

'Freedom to' vs 'freedom from'

When respondents were asked which type of freedom they valued more (Figure 16), both 'freedom to' and 'freedom from' were found to be similarly valued (72.8%).

Figure 16. 'Freedom from' or 'freedom to'.
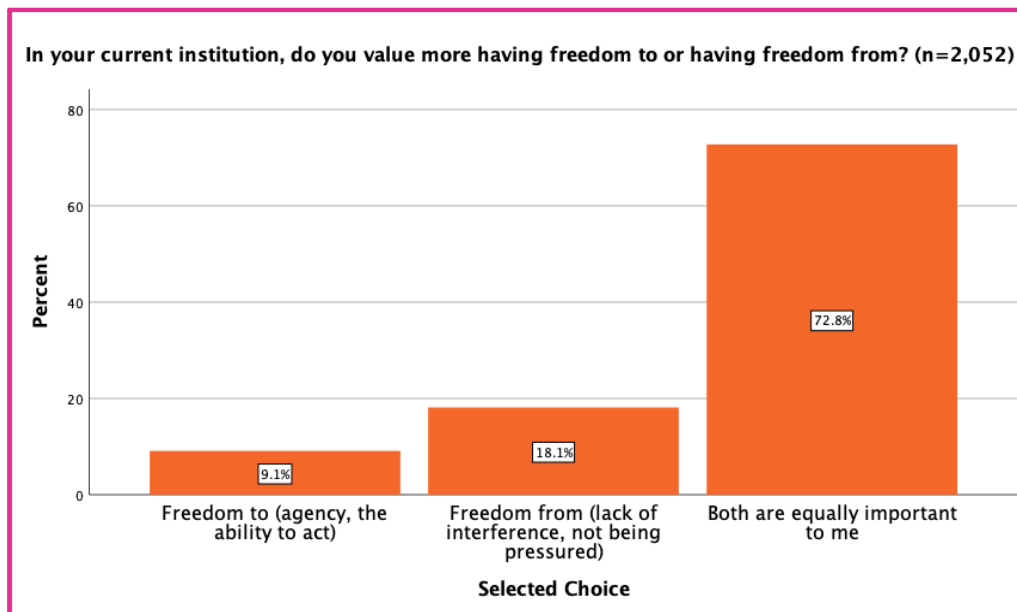
A one-way ANOVA (Table 5) revealed that there was a statistically significant difference in the mean response between respondents on fixed-term contracts and respondents on permanent contracts (F(1, 2050) = [3.837], p = 0.050). Although the highest proportion of respondents in both groups selected the option indicating that both 'freedom to' and 'freedom from' were important, a higher proportion of those on fixed-term contracts (12.9% to 8.5%) selected the 'freedom to' option.

Table 5. Freedom from and freedom to - Comparison of responses: fixed-term vs permanent.

			In your current institution, do you value more having freedom to or having freedom from?			Total
			Freedom to (agency, the ability to act)	Freedom from (lack of interference, not being pressured)	Both are equally important to me	
My contract is:	Permanent	Count	148	320	1282	1750
		%	8.5%	18.3%	73.3%	100.0%
	Fixed-term	Count	39	52	211	302
		%	12.9%	17.2%	69.9%	100.0%
Total		Count	187	372	1493	2052
		%	9.1%	18.1%	72.8%	100.0%

The relationship between professional identity and the strength of support for academic freedom

The next question explored professional identity. Ideologically, academic freedom is a special type of freedom, one reserved only for those who are academics (as, traditionally, it has been the societal role of academics to challenge normative understandings, create new knowledge and act as thought leaders).

As such, ideologically, professional identity and academic freedom are inextricably linked (Fish, 2014). Fish (2014) identifies five distinct schools of academic freedom. These are what Fish (2014, p.10-13) labels "the 'it's just a job' school", the "for the common good" school, the "academic exceptionalism or uncommon beings" school, the "academic freedom as critique" school, and the "academic freedom as revolution" school.

For Fish (2014, p.10), the 'it's just a job' school' comprises those who do not see academic work in a reified way and believe that academics should be given the necessary contextually-appropriate freedom to do their role in the same way, that any other worker in any other profession should be given the contextually-appropriate freedom to do their role (i.e. academic work is no more special than other types of work).

Those in the "for the common good" school (Fish, 2014, p.11) have a similar view to the first school but believe that academic work should serve the common good. The "academic exceptionalism

or uncommon beings" (Fish, 2014, p.11) school builds on the second school but, additionally, sees those who conduct academic work as exceptional people of superior societal status. The "academic freedom as critique school" (Fish, 2014, p. 12) considers the purpose of academic freedom as enabling critique of societal norms to drive societal progress. Finally, Fish's (2014, 13) fifth school, "academic freedom as revolution", comprises those who see the purpose of academic work to move beyond critique and to create revolutionary citizens and changes in society.

Despite years of marketisation, deprofessionalisation, and worsening pay and working conditions, 91.8% of respondents agreed or strongly agreed (65.9% strongly agreed) that their professional identity as an academic is important to them (Figure 17).

A stronger sense of professional identity can correlate with a stronger appreciation of academic freedom and, potentially, for example, a greater willingness to overwork (provide unpaid labour to the employer). However, not all academics will necessarily have a strong sense of professional identity (Fish, 2014), and the strength of one's professional identity can fluctuate over one's career span.

Figure 17. Importance of professional identity.

Please indicate your level of agreement with the following statements by ticking the appropriate boxes below.

My professional identity as an academic is important to me (n=2,085)
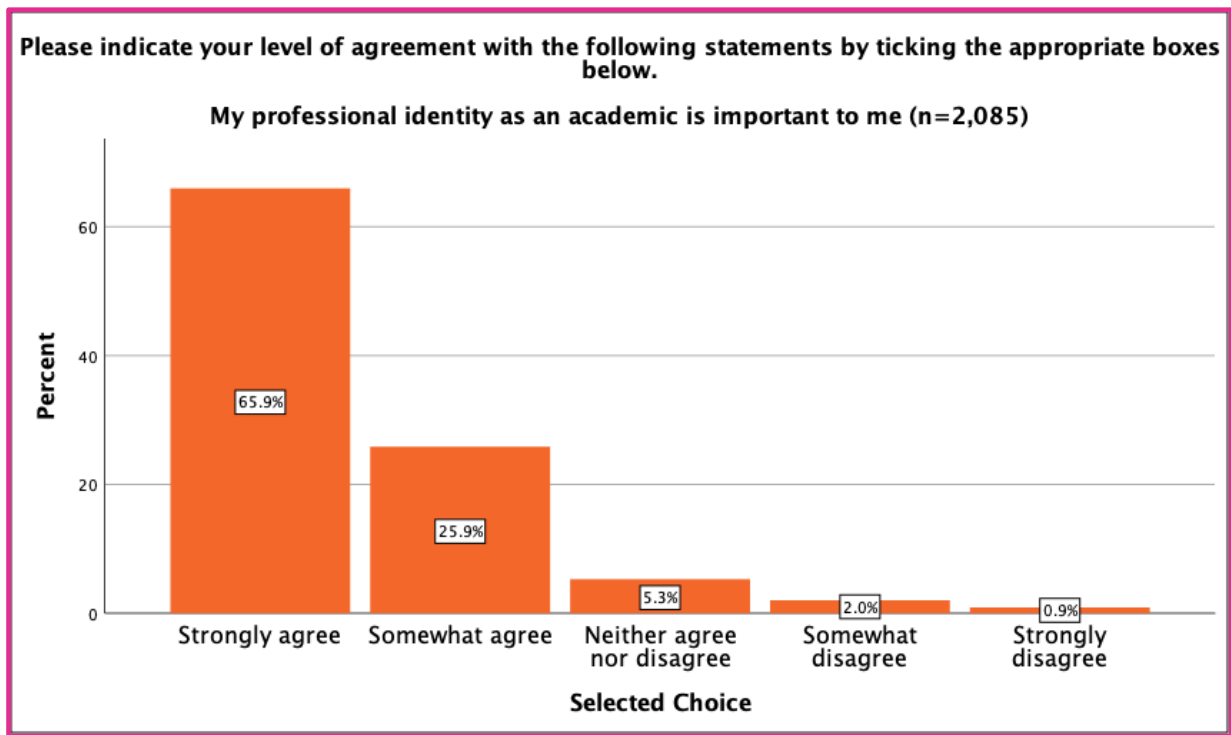
The requirement for 'freedom to'

Overall, 79.6% of respondents strongly agreed that having a sufficient degree of 'freedom to' with respect to carrying out their work was important to them (Figure 18). 'Freedom to' relates to being able to positively choose the necessary course of action to achieve a particular task or objective, rather than being micro-managed and controlled.

Figure 18. The importance of 'freedom to' for respondents in determining how they carry out their work.

Please indicate your level of agreement with the following statements by ticking the appropriate boxes below.

Having a sufficient degree of freedom to carry out my work is important to me (n=2,092)
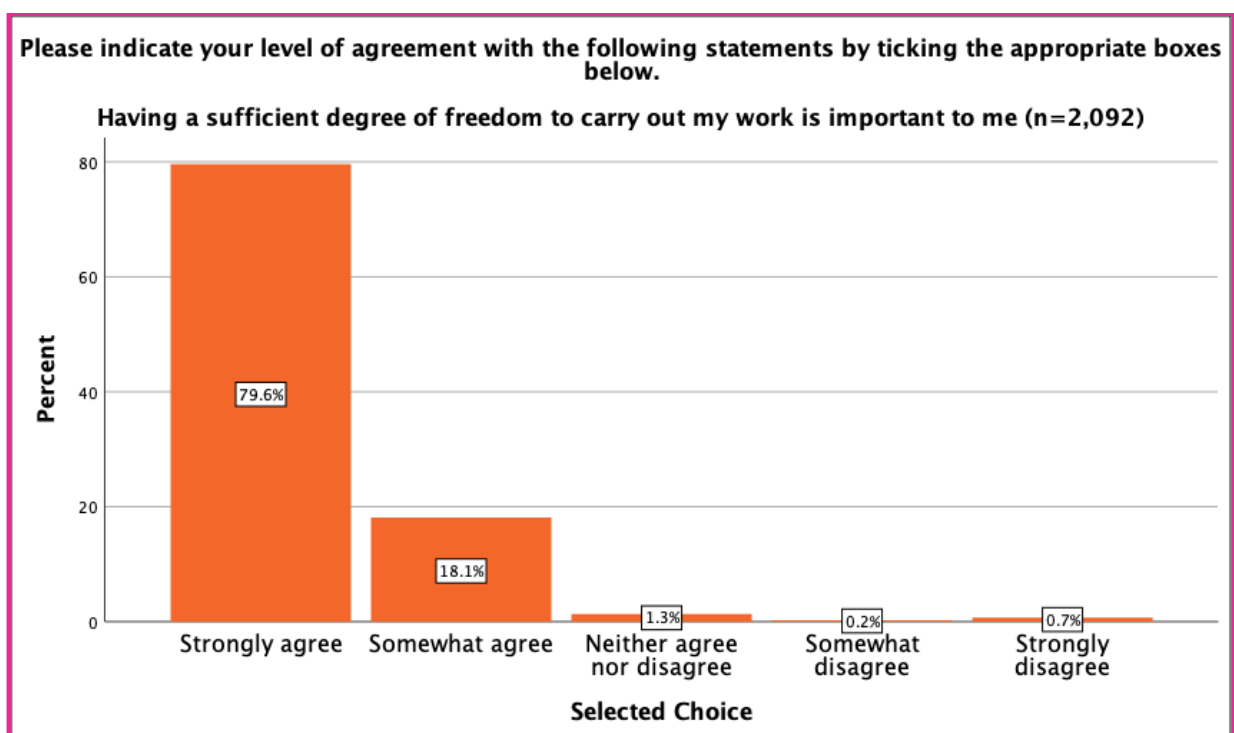
The requirement for 'freedom from'

For 78.4% of respondents, having a sufficient degree of 'freedom from' with respect to carrying out their work was considered important (Figure 19). 'Freedom from constraint' relates to the (relative) absence of interference in how respondents approach completing the different aspects that constitute their work.

Figure 19. Importance of 'freedom from' to respondents in determining how they carry out their work.

Please indicate your level of agreement with the following statements by ticking the appropriate boxes below.

Having a sufficient degree of freedom from to carry out my work is important to me (n=2,059)
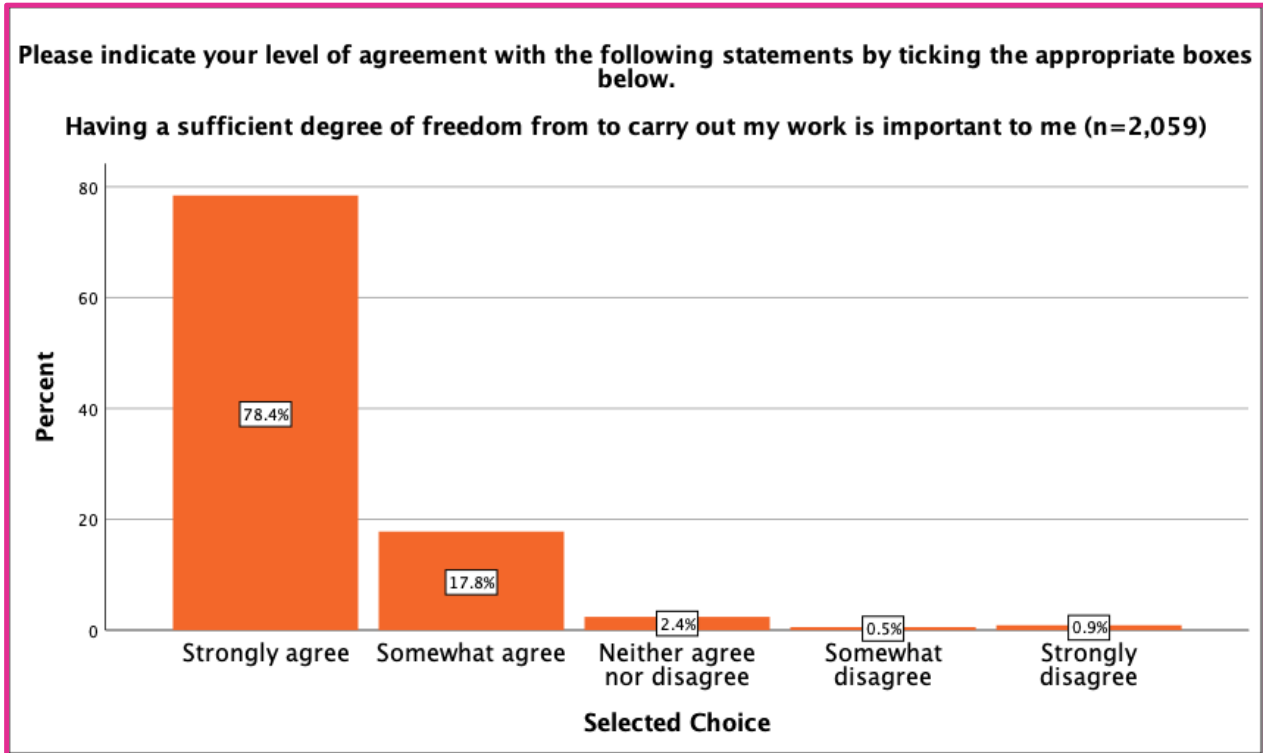
Unlike for 'freedom from', a one-way ANOVA (Table 6) revealed that there was a statistically significant difference in the mean response between the respondents on fixed-term contracts and respondents on permanent contracts ($F(1, 2057) = [10.261]$, $p = 0.001$).

Table 6 Importance of freedom from - Comparison of responses fixed-term vs permanent

			Having a sufficient degree of freedom from to carry out my work is important to me.					Total
			Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	
My contract is:	Permanent	Count	1414	281	40	10	16	1761
		%	80.3%	16.0%	2.3%	0.6%	0.9%	100.0%
	Fixed term	Count	201	85	9	1	2	298
		%	67.4%	28.5%	3.0%	0.3%	0.7%	100.0%
Total		Count	1615	366	49	11	18	2059
		%	78.4%	17.8%	2.4%	0.5%	0.9%	100.0%

Digital governance and academic freedom in teaching

The section of the survey on **digital governance and academic freedom in teaching** comprised of eleven questions and is split into several sub-sections. The concept of individual academic freedom should not be understood as an absolute freedom but as a bounded freedom balanced by other relevant factors (e.g. research-wise, research must be conducted ethically; teaching-wise, adhering to quality assurance processes is essential), and it is where these boundaries lie and how these boundaries are changing from previously established norms that are important (e.g. are digital-enabled quality assurance processes now used overbearingly by university management to stifle innovation in a way that shapes academic freedom).

Institutional digital systems and the lived experience of academic freedom

The questions in this sub-section move on to explicitly exploring the ways in which employers' use of institutional digital systems can shape the lived experience of academic freedom.

The impact of digital technology on working lives

The next question sought respondents' views in regard to the impact of digital technology on their working lives (Figure 20). When asked whether digital technology had significantly improved their working lives, 44% of respondents either strongly agreed or somewhat agreed.

Figure 20. Digital technology and improvements in the working lives of respondents.

Digital technology has significantly improved the working lives of teaching and research staff (n=2,076)
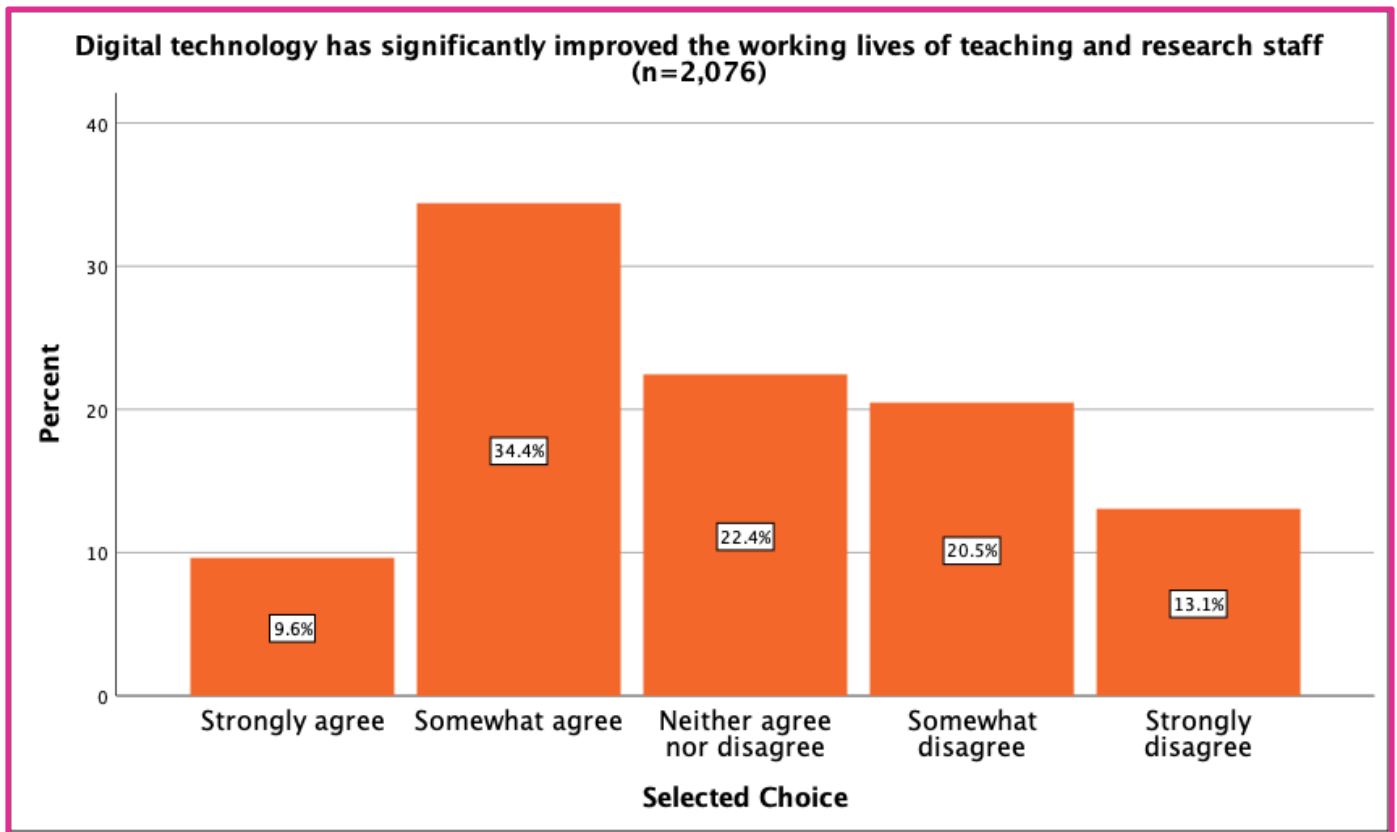
A one-way ANOVA (Table 7) revealed that there was a statistically significant difference in the mean response between the respondents' on fixed-term contracts and those on permanent contracts (F(1, 2074) = [9.798], p = 0.002). In line with the earlier questions where a statistically significant divergence has been found, the results are again perhaps counterintuitive. 42.9% of respondents with permanent contracts agreed or. strongly agreed that digital technology had improved their working lives while the comparable figure for those on fixed-term contracts was slightly higher at 50.9%. In other words, those employed on fixed-term contracts had a more positive view of technology-enabled research and technology-enabled teaching than those respondents employed permanently.

Table 7. Digital technology and improvements in the working lives of respondents - Comparison of responses: fixed-term vs permanent.

			Digital technology has significantly improved the working lives of teaching and research staff.					Total
			Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	
My contract is:	Permanent	Count	161	599	401	368	244	1773
		%	9.1%	33.8%	22.6%	20.8%	13.8%	100.0%
	Fixed term	Count	39	115	65	57	27	303
		%	12.9%	38.0%	21.5%	18.8%	8.9%	100.0%
Total		Count	200	714	466	425	271	2076
		%	9.6%	34.4%	22.4%	20.5%	13.1%	100.0%

The relationship between digital technology and the student experience

The next question explored the relationship between digital technology and the student experience (Figure 21). Taking into account both agree response options, 50% of respondents agreed that digital technology has had a significant positive impact on the quality of the student experience. 22.6% neither agreed nor disagreed, while 27.3% chose one of the disagree options.

Figure 21. The relationship between digital technology and the student experience.
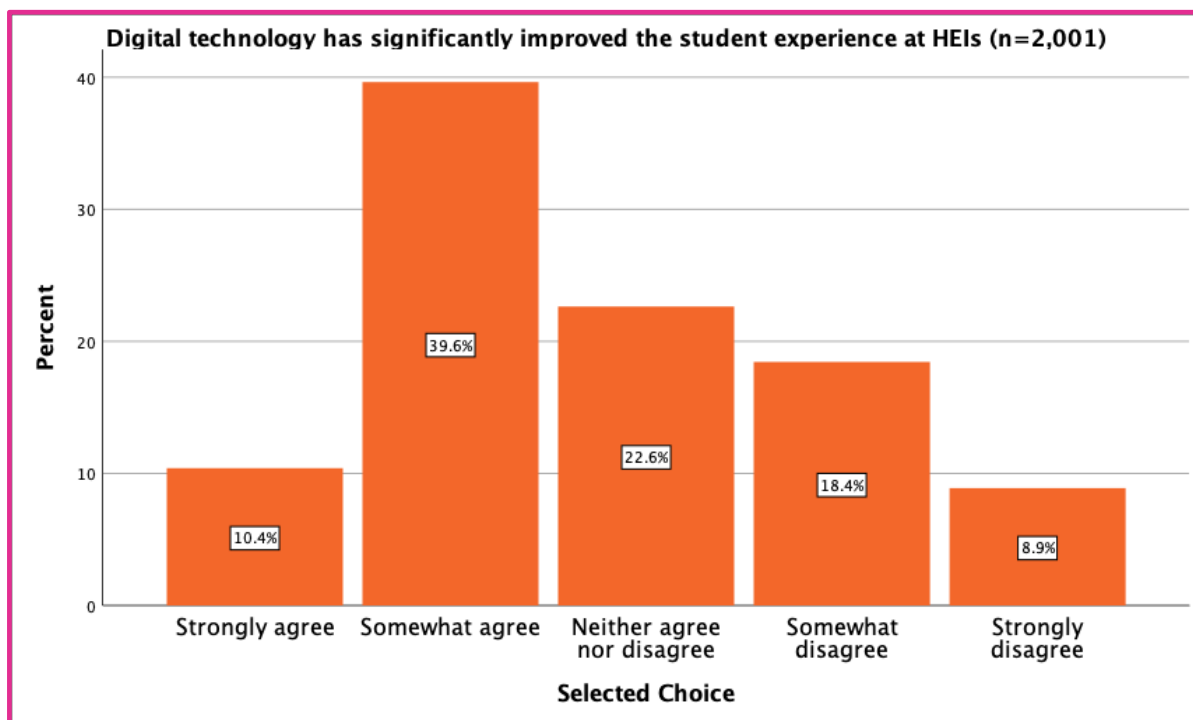
In relation to the above two questions, this open-text comment from one respondent elucidates well the multi-faceted and nuanced role of digital technologies in changing power relations at work:

"The digital stuff should be enabling and has improved the experiences of students through accessing recorded lectures, direct links to academic sources (though we are spoon feeding them here) and our ability to include more creative classroom exercises using documentaries or simulations.

However, it is also used in rather oppressing ways too. Management is able to create metrics and claim a lot of issues we experience as staff can sometimes be resolved by using more technology or tweaking systems.
It's rubbish.

Students are also encouraged to act like vampiric clients and just take and take and take and expect more and more. Technology enables this".

The relationship between performance management and academic freedom

The next question (Figure 22) explored the relationship between increased performance management and academic freedom. 82.4% of respondents felt that new forms of performance management had resulted in a lower level of academic freedom. Overall, respondents who are permanently employed felt more strongly about this than those who are employed fixed-term.

Figure 22. The relationship between performance management and academic freedom.
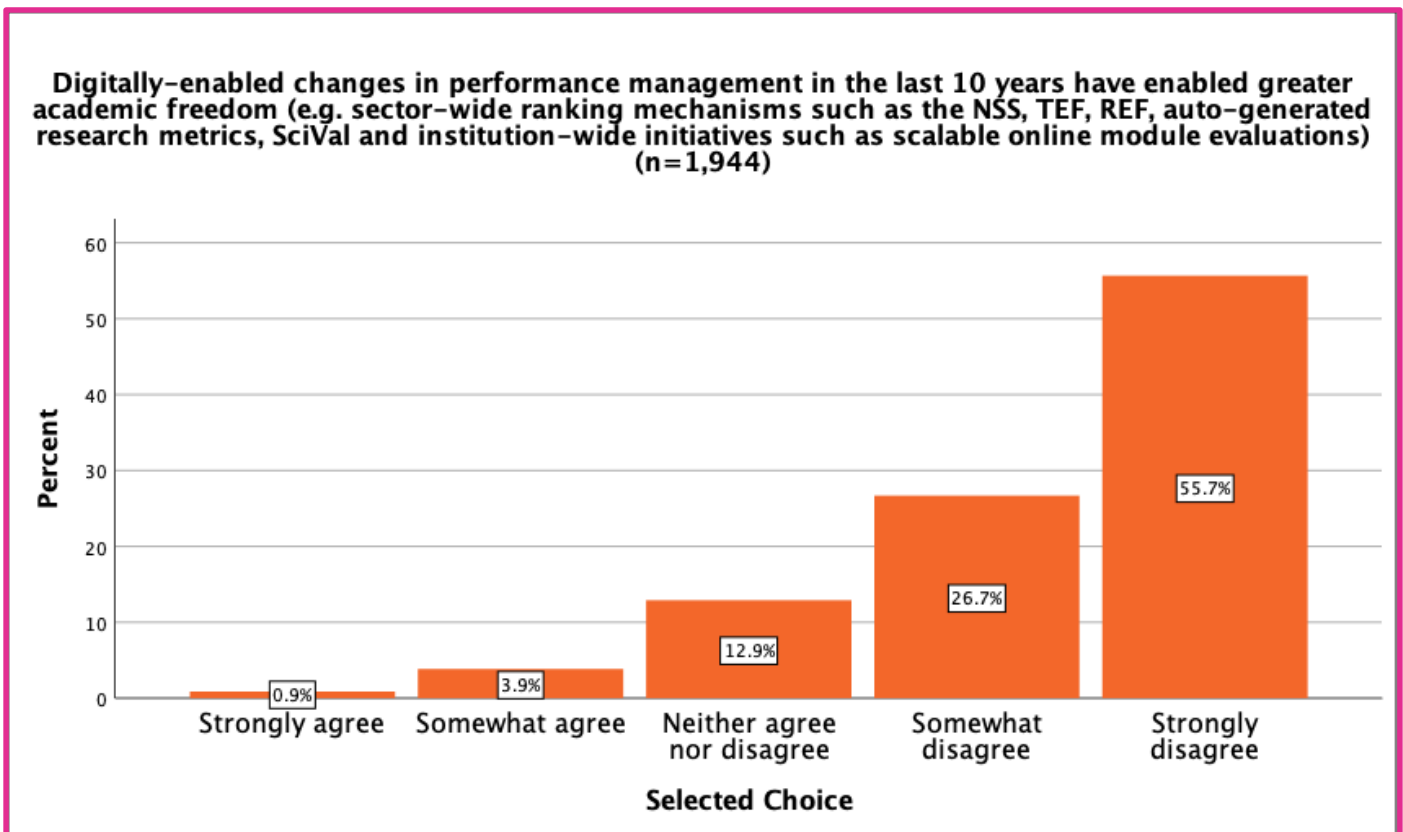
A one-way ANOVA (Table 8) revealed that there was a statistically significant difference in the mean response between respondents on fixed-term contracts and those on permanent contracts ($F(1, 1942)$ = [14.392], p = 0.000). Overall, 83.3% of those on permanent contracts disagreed or strongly disagreed that digitally-enabled changes in performance management had enabled greater academic freedom, while the comparable figures for staff on fixed-term contracts were lower, at 76.9%.

Table 8. The relationship between performance management and academic freedom - Comparison of responses: fixed-term vs permanent

			Digitally-enabled changes in performance management in the last 10 years have enabled greater academic freedom (e.g. sector-wide ranking mechanisms such as the NSS, TEF, REF, auto-generated					Total
			Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	
My contract is:	Permanent	Count	14	61	206	430	965	1676
		%	0.8%	3.6%	12.3%	25.7%	57.6%	100.0%
	Fixed term	Count	3	14	45	89	117	268
		%	1.1%	5.2%	16.8%	33.2%	43.7%	100.0%
Total		Count	17	75	251	519	1082	1944
		%	0.9%	3.9%	12.9%	26.7%	55.7%	100.0%

This respondent's open-text comment outlines the impact of performance management systems on academic staff:

"Technology has been used to measure and micromanage all staff virtually out of existence.

Students get a blander experience ...

Staff workloads look lovely on the spreadsheet, but have no bearing to the realities of teaching".

The relationship between digitally-enabled measurements of the student experience and academic freedom

Linking to the previous question, this question explored the relationship between the ways in which the student experience is measured and academic freedom (Figure 23). When asked whether the recent shifts to digitally-enabled measurements of the student experience had enabled greater academic freedom, 57.1% of respondents strongly disagreed and 26.7% somewhat disagreed. In total, 83.8% went for one of the disagree options.

Figure 23. The relationship between digitally-enabled measurements of the student experience and academic freedom.
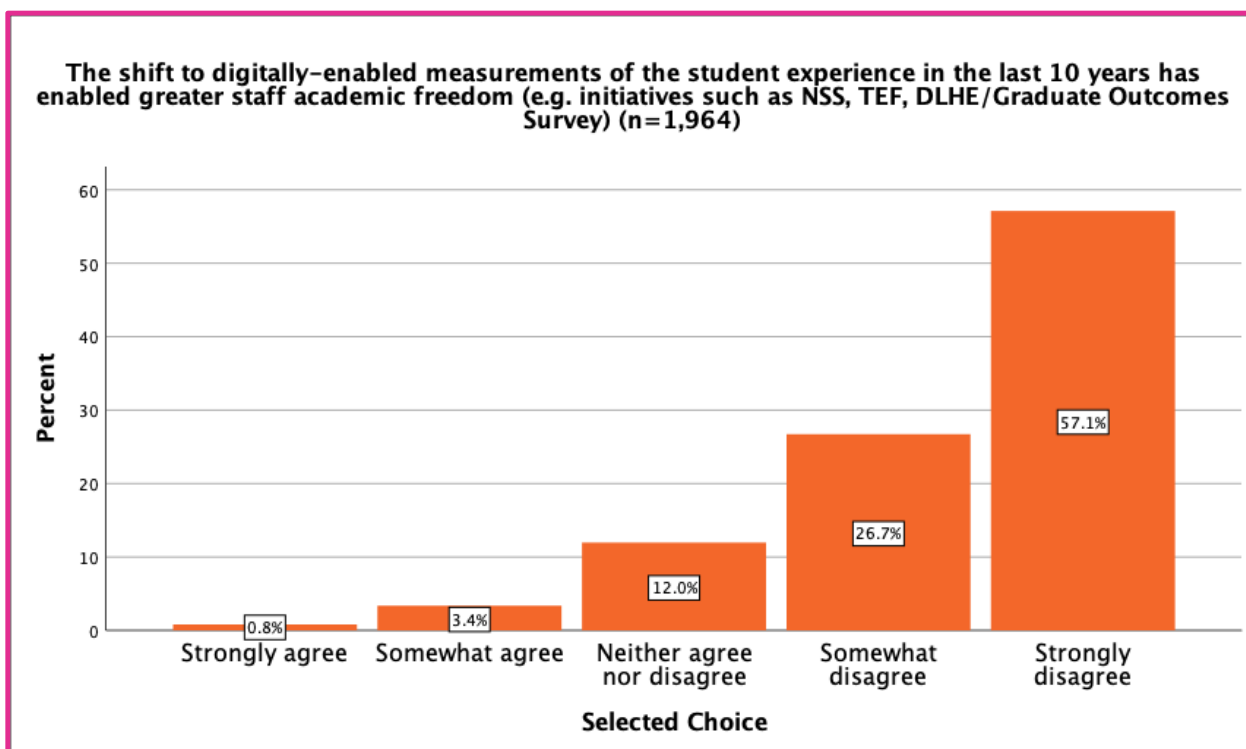
A one-way ANOVA (Table 9) revealed that there was a statistically significant difference in mean the response between respondents on fixed-term contracts and those on permanent contracts ($F(1, 1962) = [21.001]$, $p = 0.000$). Comparing the views of staff on temporary and permanent contracts, just 42.2% of fixed-term staff strongly disagreed that digitally-enabled measurements of the student experience had enabled greater academic freedom while the comparable figure for those on permanent contracts was much higher at 59.4%.

Table 9. The relationship between digitally-enabled measurements of the student experience and academic freedom - Comparison of responses: fixed-term vs permanent.

			The shift to digitally-enabled measurements of the student experience in the last 10 years has enabled greater staff academic freedom (e.g. initiatives such as NSS, TEF, DLHE/Graduate Outcomes Survey).					Total
			Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	
My contract is:	Permanent	Count	13	53	194	433	1013	1706
		%	0.8%	3.1%	11.4%	25.4%	59.4%	100.0%
	Fixed term	Count	3	13	41	92	109	258
		%	1.2%	5.0%	15.9%	35.7%	42.2%	100.0%
Total		Count	16	66	235	525	1122	1964
		%	0.8%	3.4%	12.0%	26.7%	57.1%	100.0%

The relationship between managerial use of Institutional digital systems and the lived experience of academic freedom

The questions in this sector of the survey explore the relationship between the ways in which universities use workload management systems and academic freedom. Conceptually, workload management systems can be understood as an attempt by university employers to impose worker time control on their employees, and to direct employee time to align with institutional objectives. Hence, why it is important to explore the relationship between workload systems and academic freedom. While digital workload management systems are now common in the contemporary UK higher education sector, academic worker productivity has not always been managed in this way, and the move to a workload mindset and approach is relatively new (Kernohan, 2023). Writing in 2013, before workloading systems became prevalent in the UK higher education section, Perks (2013), a consultant who works in the UK higher education sector, set out in the Guardian newspaper the positive case for why all universities should start workload modelling:

> *"One of the concerns that I hear most frequently from university senior managers is that they have no idea how members of their academic staff are spending their time. And a common complaint from academics themselves is that the 'centre' just doesn't understand the huge number of different activities that they have to contend with. Workload*

modelling provides a way to bridge this gap. A workload model identifies the different activities undertaken by members of academic staff and allocates an agreed time 'budget' to each one. This allows academics, their departments and their institutions to construct a clear and comprehensive picture of who is doing what and how much time they are dedicating to it. It covers all members of academic staff, all activities and all work-related time".

Additionally, Perks (2013) argued that engaging in workload modelling can be beneficial for both the workers and management.

"And once you have a workload model, its uses are myriad. Individual academics can use it to understand what is expected of them and to demonstrate their contribution to their department's activities. Heads of department can allocate activities equitably, ensure balanced workloads and identify capacity issues before they become critical. And university management gains an overview of what is happening on the ground".

Writing in WonkHE 10 years later, Kernohan (2023) described academic workload modelling as "a contentious but little understood process that is a very visible part of academic life", stating that "[w]hen you think of people who are expected to be accountable for every hour

of their working day, there are two groups that come to mind" which Kernohan (2023) identifies as those in unskilled (or semi-skilled) casual labour and highly skilled professionals in professions that charge by the hour; in neither group do academics fit into. While partly driven by the intensification of work and the sheer diversity of work that universities now must engage with (and that falls to the academic employees to complete), workloading can be understood from the university perspective as "an attempt to understand at an aggregate level what needs to be done and what is done, two often widely diverging ideas, and then to ensure resources are apportioned accordingly" (Kernohan, 2023, 1).

Research has long found academic workloads to be an issue, with, for example, a 2016 survey of UCU (2016b) members reporting that many respondents found the quantity of the work they were allocated to be unmanageable and unsustainable, which consequently impacted on respondents professional and career development (in part due to the ways in which managers allocate unevenly the share of non-promotable tasks between colleagues based on, for example, favouritism and unconscious or overt sexism and racism). The use of digital workload management systems by institutions can be understood as an attempt — albeit a technocratic attempt — of addressing long-standing sector-wide workload issues.

As with all digital systems, of critical importance in terms of the impact on academic freedom, is the way in which a system is used in a particular institution or faculty to enable, direct or restrict staff; this is more important than simply whether a workload management system is used or not (Kernohan, 2023).

The use of digital workload management systems by institutions can be understood as an attempt — albeit a technocratic attempt — at addressing long-standing workload issues in academic life. As with all digital systems, the ways in which a system is used in a particular institution or faculty to enable, direct, or restrict staff is of critical importance in terms of the impact on academic freedom. This is more important than simply whether a workload management system is used or not (Kernohan, 2023).

As such, the widespread use of digital workload management systems signals a change in how power is mediated between the university managers, who allocate tasks and set time allocations for their workers (in essence, time can be weaponised), and the academic staff team members who are responsible for completing the tasks.

A key affordance of digital workload systems is that university managers can now, at scale, direct (or attempt to direct) how their subordinates use their time. The use of such systems also signals a shift from what could be considered a more laissez-faire management approach, whereby academics – assumed to be highly qualified, self-motivated individuals with a strong professional identity, and for whom individual autonomy is important – would be given a high degree of individual autonomy in determining what they do and how they do it (rather than having major and, sometimes, minor, tasks itemised and time-tariffed).

While both ways of directing (or controlling) academic worker time

and outputs have advantages and disadvantages, the focus here is on the ways in which workload management systems shape academic freedom from the perspective of academic workers.

Prevalence of digital workload management systems at respondents' universities

Workload management systems were used in 82.3% of respondents' institutions (Figure 24). Workload management systems enable the institution-wide directing of academic labour and time allocation, playing a role in shaping not just how academic time is spent, but also influencing job satisfaction, wellbeing, career advancement potential and the sense of autonomy one feels.

Figure 24. Use of workload management systems in respondents' institutions.

Does your institution use a workload application system to allocate staff time? (n=1,738)
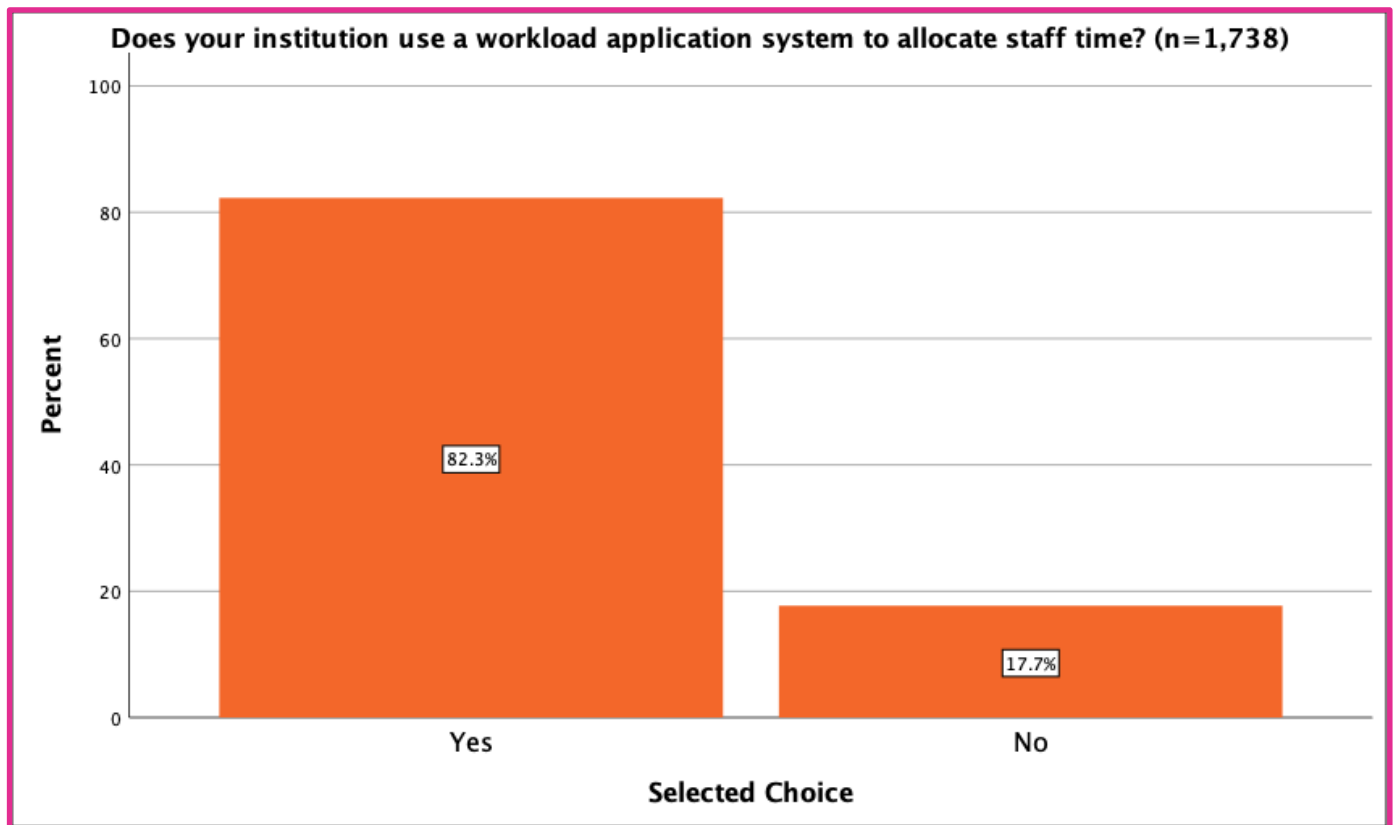
Within the free text comments, survey respondents recognised the role that workload modelling systems have on academic staff in terms of applying pressure, as the following statement demonstrates:

"University managers do not take seriously workload inequalities and staff over-working. If stuff needs to get done in how many hours necessary, that's what they will want regardless of impact on workload, wellbeing, etc".

The relationship between teaching workload allocation and the ability to exercise academic freedom in teaching

The questions in this section explored the relationship between employer-allocated workloaded teaching time and one's ability to exercise academic freedom in teaching.

The ability to negotiate teaching workload

The next question (Figure 25) explored the extent to which institutions set workloads in a collaborative way or in a unilateral way (which relates to the individual autonomy aspect of academic freedom). Overall, 57% of respondents felt that they were not able to effectively negotiate their teaching workload with university management.

Figure 25. Ability to negotiate teaching workload.

In the context of teaching work, please indicate your level of agreement with the following statements regarding your experiences with workloading:

I am able to effectively negotiate my teaching workload (n=1,392)

- Strongly agree: 3.4%
- Agree: 23.1%
- Neither agree nor disagree: 16.5%
- Disagree: 33.0%
- Strongly disagree: 24.0%

A number of respondents identified the ways in which workloading systems caused inequality and created a poor workplace culture.

"Workload systems create workload inequalities and staff over-working".

> *"Workloading systems can reward less collegial and conscientious academic staff who fight to do less, complain and interact poorly with students whilst punishing quieter more diligent staff".*

The relationship between workloaded teaching hours and overwork

Previous UCU research has indicated that many academics feel "forced to work the equivalent of two days for free each week" and that "university staff on the lowest wages and most insecure contracts are the ones forced to work longest for free", and that "employers are knowingly dining off the goodwill and dedication of staff and breaching vital safeguards (UCU, 2022). Likewise, Bothwell (2018), reporting on the Times Higher Education Work-life balance survey 2018, detailed a sector wide picture of "academics feeling stressed and underpaid, and struggling to fit time for personal relationships and family around their ever-growing workloads".

The next question (Figure 26) explored the extent to which respondents had to put in extra hours to meet their performance targets. Being overworked, or tired, can be a barrier to the ability of staff to utilise their academic freedom. 82.5% of respondents stated that they had to put in additional undocumented hours beyond their workload allocation in order to meet their teaching-related commitments.

Figure 26. Relationship between workloaded teaching hours and creating the need for undocumented working.

In the context of teaching work, please indicate your level of agreement with the following statements regarding your experiences with workloading:

The teaching hours allocated do not require me to put in additional undocumented hours (e.g. weekends, evenings, annual leave) (n=1,390)
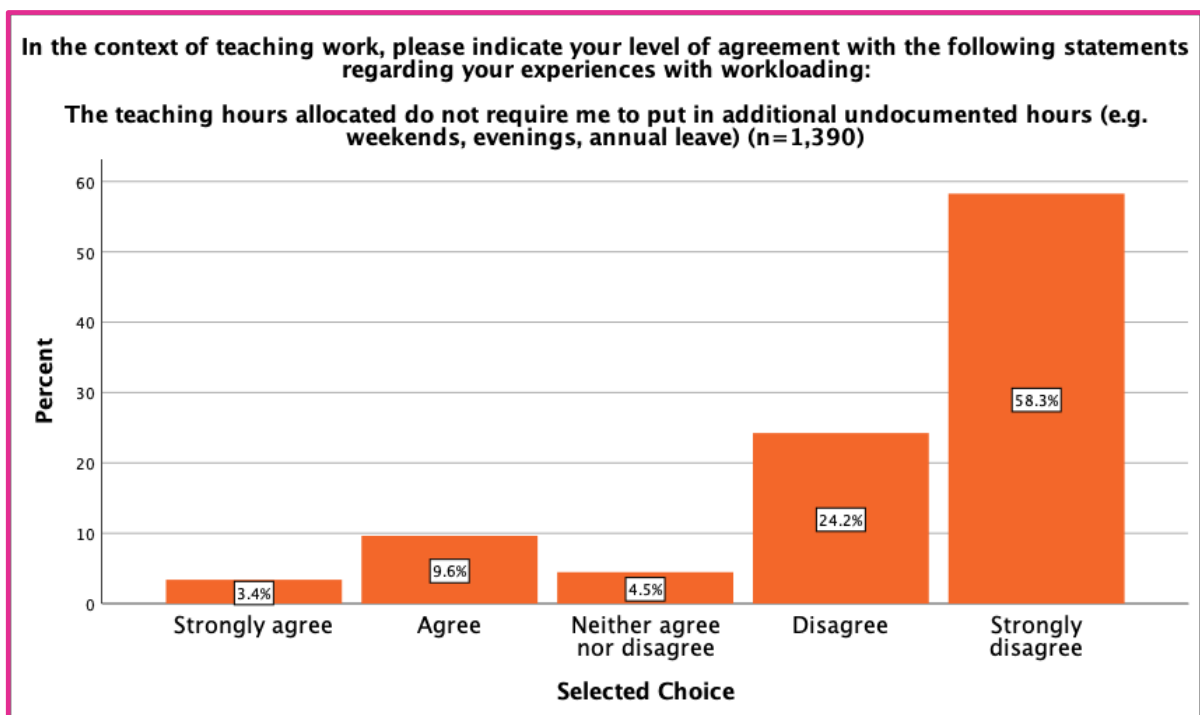
The relationship between workloaded teaching hours and pedagogic approach

In terms of academic freedom and teaching, the use of workload modelling systems — for example, through university management using task time tariffs that are too low or unrealistic — can function as a form of soft power which influences the pedagogic judgements academics make and their professional decision-making (in terms of producing a work environment where certain behaviours are incentivised and others are disincentivised) . Only 3.4% of respondents strongly agreed that the hours they were allocated for teaching allowed them the freedom to use the pedagogic approach they wanted (Figure 27).

Figure 27. The relationship between workloaded teaching hours and pedagogic approach.

The relationship between workloaded feedback time and quality of feedback provided

Additionally, only 1.3% of respondents strongly agreed that the hours they were allocated for teaching-related work allowed them sufficient time to give the quality of feedback they would like to give on student work (Figure 28). At the other end of the scale, 68.9% of respondents disagreed or strongly disagreed that the hours allocated to them allowed sufficient time to provide quality feedback to students.

Figure 28. The relationship between workloaded feedback time and quality of feedback provided.

In the context of teaching work, please indicate your level of agreement with the following statements regarding your experiences with workloading:

The hours allocated generally allow me sufficient time to feedback on student work (n=1,396)

- Strongly agree: 1.3%
- Agree: 17.3%
- Neither agree nor disagree: 12.5%
- Disagree: 33.9%
- Strongly disagree: 35.0%
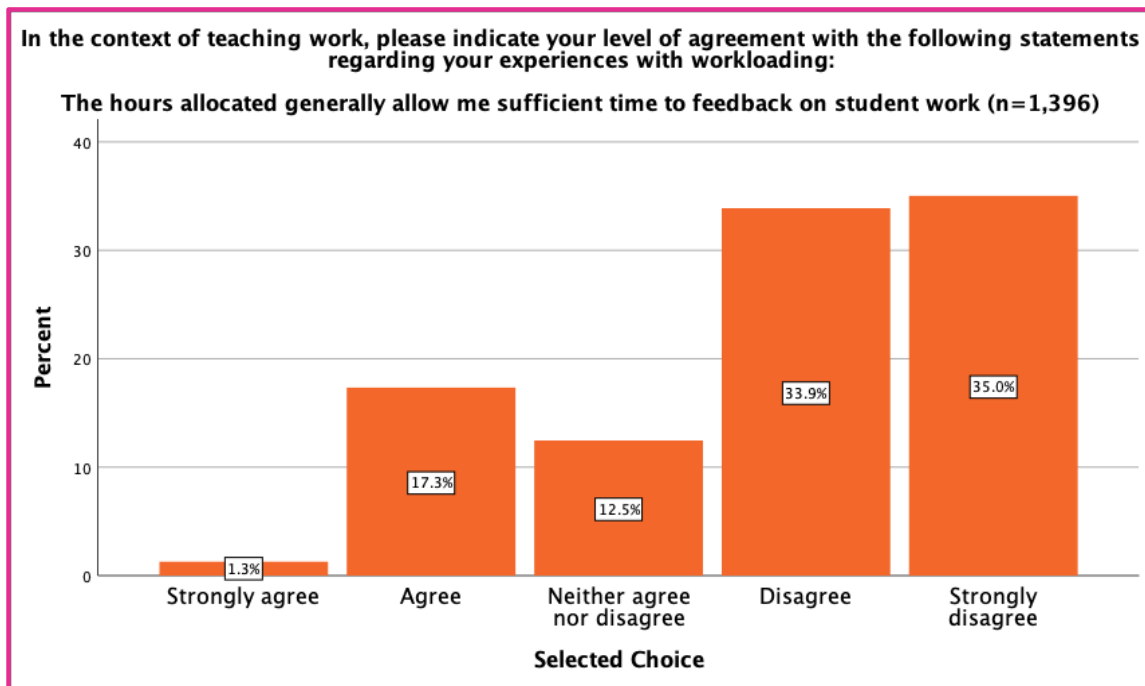
Workloaded teaching and marking time, and incentivisation

Furthermore, only 0.7% of respondents strongly agreed that the hours they were allocated for teaching-related work incentivised them to take an ambitious approach to teaching and marking. By contrast, 45.3% strongly disagreed that the time allocated to them for teaching-related work incentivised them to take an ambitious approach to teaching and marking.

Figure 29. Workloaded teaching and marking time, and incentivisation towards an ambitious approach to teaching and marking.

In the context of teaching work, please indicate your level of agreement with the following statements regarding your experiences with workloading:

The hours allocated generally incentivise me to take an ambitious approach to teaching and marking (n=1,370)

- Strongly agree: 0.7%
- Agree: 6.4%
- Neither agree nor disagree: 15.5%
- Disagree: 32.1%
- Strongly disagree: 45.3%
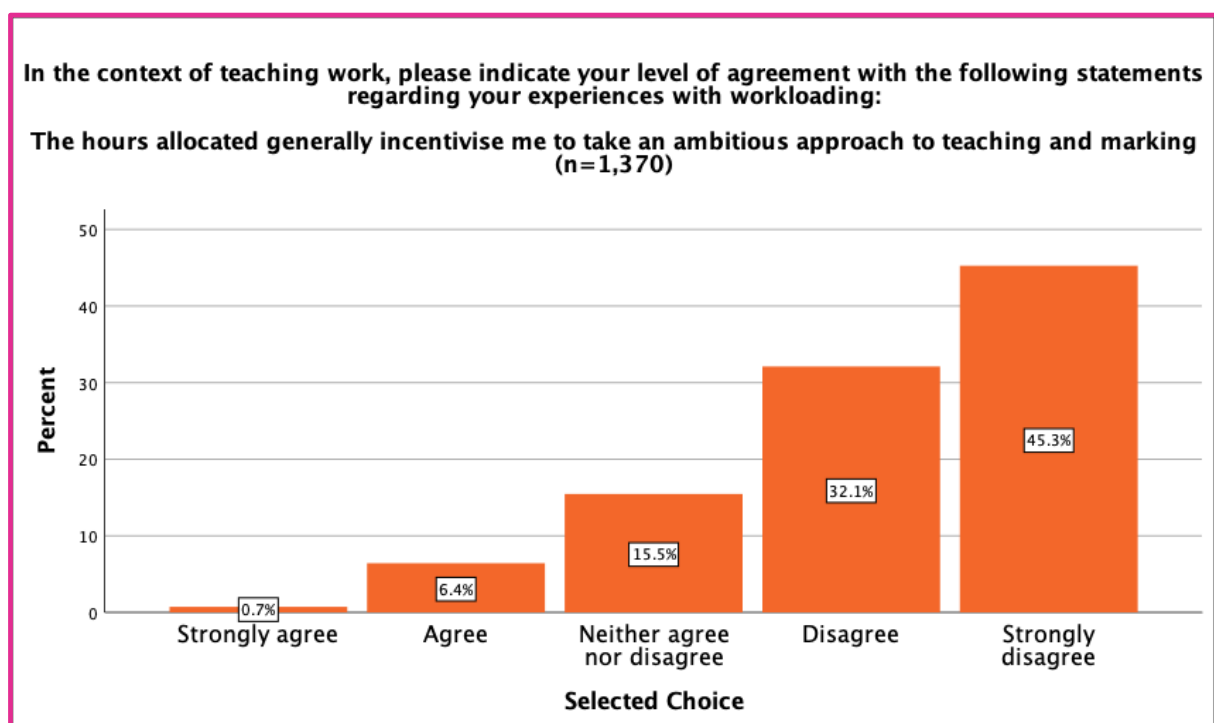
A one-way ANOVA (Table 10) revealed that there was a statistically significant difference in the mean response between respondents on fixed-term contracts and those on permanent contracts (F(1, 368) = [4.897], p = 0.027).

In general, those employed fixed-term were less troubled by workload allocation than permanently employed respondents. The below open-text comments provide insight into the impact of workloaded hours on academic practice:

"Workloaded hours rarely facilitate more creative, participatory or inclusive research endeavours or studies with disadvantaged and hard to reach groups. They can encourage mainstream, traditional research endeavors".

"In teaching the only hours assigned are contact time, so the model does not incentivise doing anything extra".

Table 10. Workloaded teaching and marking time, and incentivisation - Comparison of responses: fixed-term vs permanent.

			In the context of teaching work, please indicate your level of agreement with the following statements regarding your experiences with workloading: - The hours allocated generally incentivise me to take an ambitious approach to teaching and marking.					Total
			Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	
My contract is:	Permanent	Count	10	78	193	413	586	1280
		%	0.8%	6.1%	15.1%	32.3%	45.8%	100.0%
	Fixed term	Count	0	10	19	27	34	90
		%	0.0%	11.1%	21.1%	30.0%	37.8%	100.0%
Total		Count	10	88	212	440	620	1370
		%	0.7%	6.4%	15.5%	32.1%	45.3%	100.0%

The relationship between research workload allocation and the ability to exercise academic freedom in research

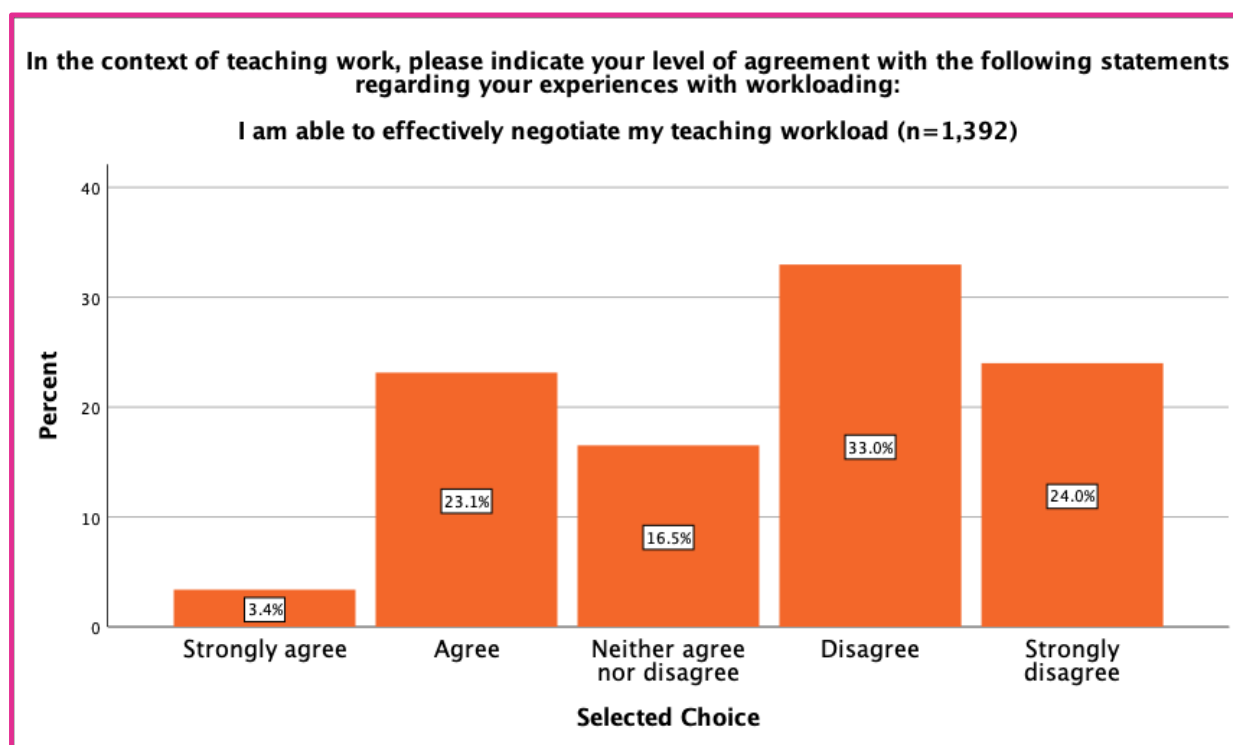The questions in this section explored the relationship between employer-allocated workloaded research time and one's ability to exercise academic freedom in research.

The ability to negotiate research workload

4.6% of respondents strongly agreed that they were able to effectively negotiate their research workloads, while 35.4% strongly disagreed (Figure 30).

Figure 30. Ability to effectively negotiate research workload.
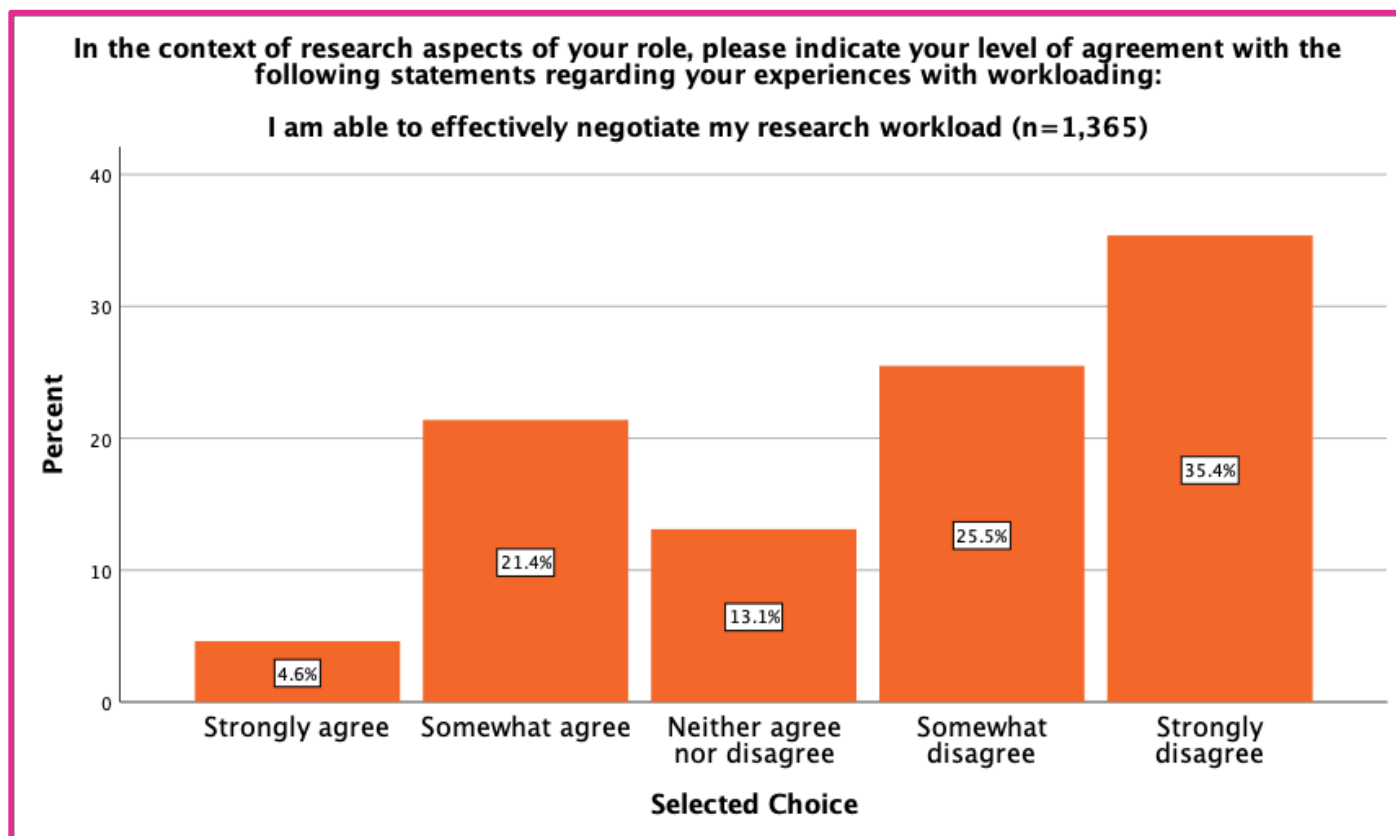
A one-way ANOVA (Figure 11) revealed that there was a statistically significant difference in the mean response between respondents on fixed-term contracts and those on permanent contracts ($F(1, 1363) = [4.617]$, $p = 0.032$). The table below shows that 61.6% of staff on permanent contracts disagreed or strongly disagreed that they were able to effectively negotiate their research workloads, while the equivalent figure for staff on fixed-term contracts was — perhaps surprisingly — lower at 52.2%.

Table 11. Ability to effectively negotiate research workload - Comparison of responses: fixed-term vs permanent.

			In the context of research aspects of your role, please indicate your level of agreement with the following statements regarding your experiences with workloading: - I am able to effectively negotiate my research					Total
			Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	
My contract is:	Permanent	Count	58	263	168	325	457	1271
		%	4.6%	20.7%	13.2%	25.6%	36.0%	100.0%
	Fixed term	Count	5	29	11	23	26	94
		%	5.3%	30.9%	11.7%	24.5%	27.7%	100.0%
Total		Count	63	292	179	348	483	1365
		%	4.6%	21.4%	13.1%	25.5%	35.4%	100.0%

Relationship between workloaded research hours and creating the need for undocumented working

Only 3.1% of respondents strongly agreed and 5.4% somewhat agreed that the research hours their institution allocated them were sufficient for them to complete their research work, and did not require them to put in additional undocumented hours (Figure 31). Perhaps due to the impossibility of setting an accurate generic time tariff for how long research-related tasks may take (gathering data, analysing data, writing up, etc.), nearly 84% of respondents (62.8% strongly disagreed and 20.8% somewhat disagreed) reported putting in unpaid research work time during what should be their non-work time.

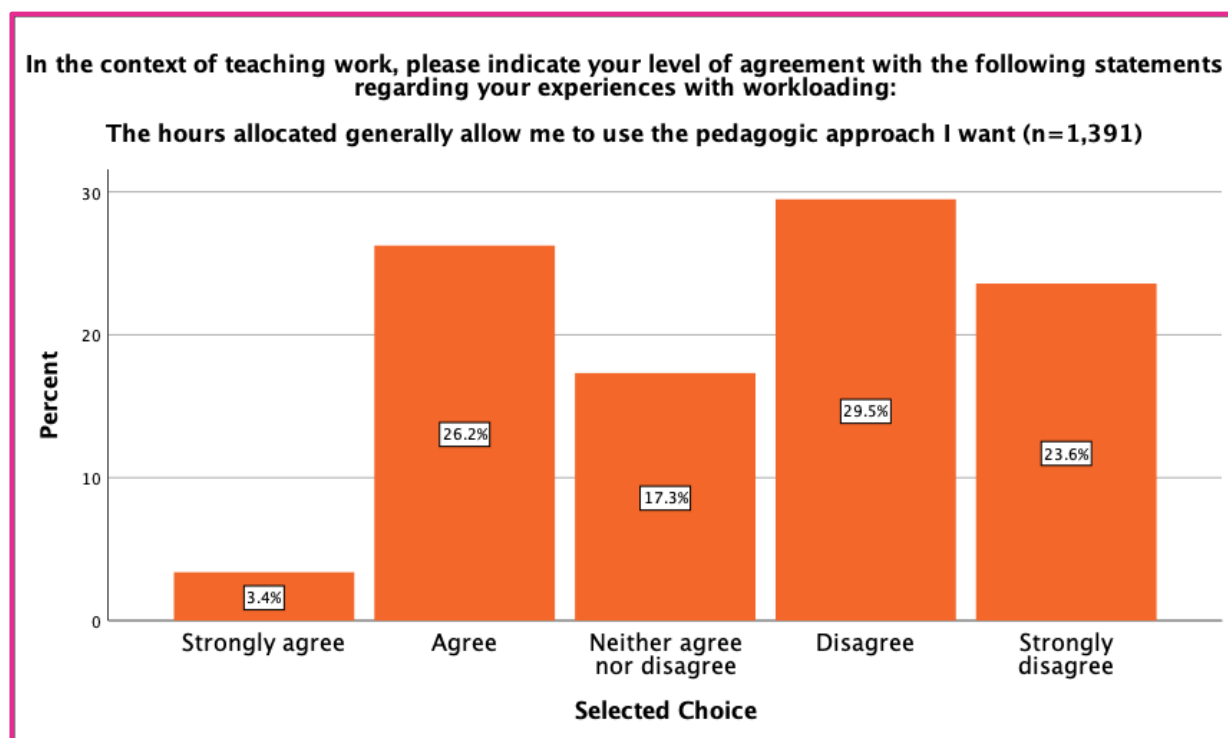*Figure 31. Relationship between workloaded teaching hours and creating the need for undocumented working.*

In the context of research aspects of your role, please indicate your level of agreement with the following statements regarding your experiences with workloading:

The research hours allocated do not require me to put in additional undocumented hours (e.g. weekends, evenings, annual leave) (n=1,349)

A one-way ANOVA (Table 12) revealed that there was a statistically significant difference in the mean response between respondents on fixed-term contracts and those on permanent contracts ($F_{(1, 1347)}$ = [16.917], p = 0.000), with 63.9% of staff on permanent contracts strongly disagreed that the research hours allocated to them did not require them to put in additional undocumented time for their research while the comparable figure for staff on fixed-term contracts was, perhaps counter intuitively lower, at 52.2%.

Table 12. Relationship between workloaded teaching hours and creating the need for undocumented working - Comparison of responses: fixed-term vs permanent

| | | | In the context of research aspects of your role, please indicate your level of agreement with the following statements regarding your experiences with workloading: - The research hours allocated do not require me to put in additional undocumented hours (e.g. weekends, evenings, annual leave). | | | | | Total |
			Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	
My contract is:	Permanent	Count	36	61	99	259	806	1261
		%	2.9%	4.8%	7.9%	20.5%	63.9%	100.0%
	Fixed term	Count	6	12	7	22	41	88
		%	6.8%	13.6%	8.0%	25.0%	46.6%	100.0%
Total		Count	42	73	106	281	847	1349
		%	3.1%	5.4%	7.9%	20.8%	62.8%	100.0%

The below open-text comment left by one respondent provides insight into how the allocation of research time is assigned in some universities (based on income generation success), and the importance of this factor in determining whether individuals are given a more generous or less generous allocation:

"Overperformance in any one area and playing to individual strengths is rarely considered. The greatest predictor of workloaded research hours is income not publications, number of grant applications, internal and external collegial academic service are all secondary. The REF is the worst thing to happen to academic freedom and endeavour. Some of our greatest historical academics would not flourish in this environment. The need for space and time to think creatively is ignored in workload planning".

The relationship between research workload allocation and research design decision-making

The survey also explored the extent to which time restrictions (due to workloading allocation) impacted upon research design decisions (for example, would being given a small allocation of research hours incentivise one to use research methods that may be less time intensive and enable a quicker turnaround of research projects?). Most respondents (51.6%) disagreed or strongly disagreed that the hours allocated to them allowed them the freedom to use the research methods they wanted to use (Figure 32).

Figure 32. The relationship between research workload allocation and research design

In the context of research aspects of your role, please indicate your level of agreement with the following statements regarding your experiences with workloading:

The hours allocated generally allow me to use the methods I want (n=1,349)
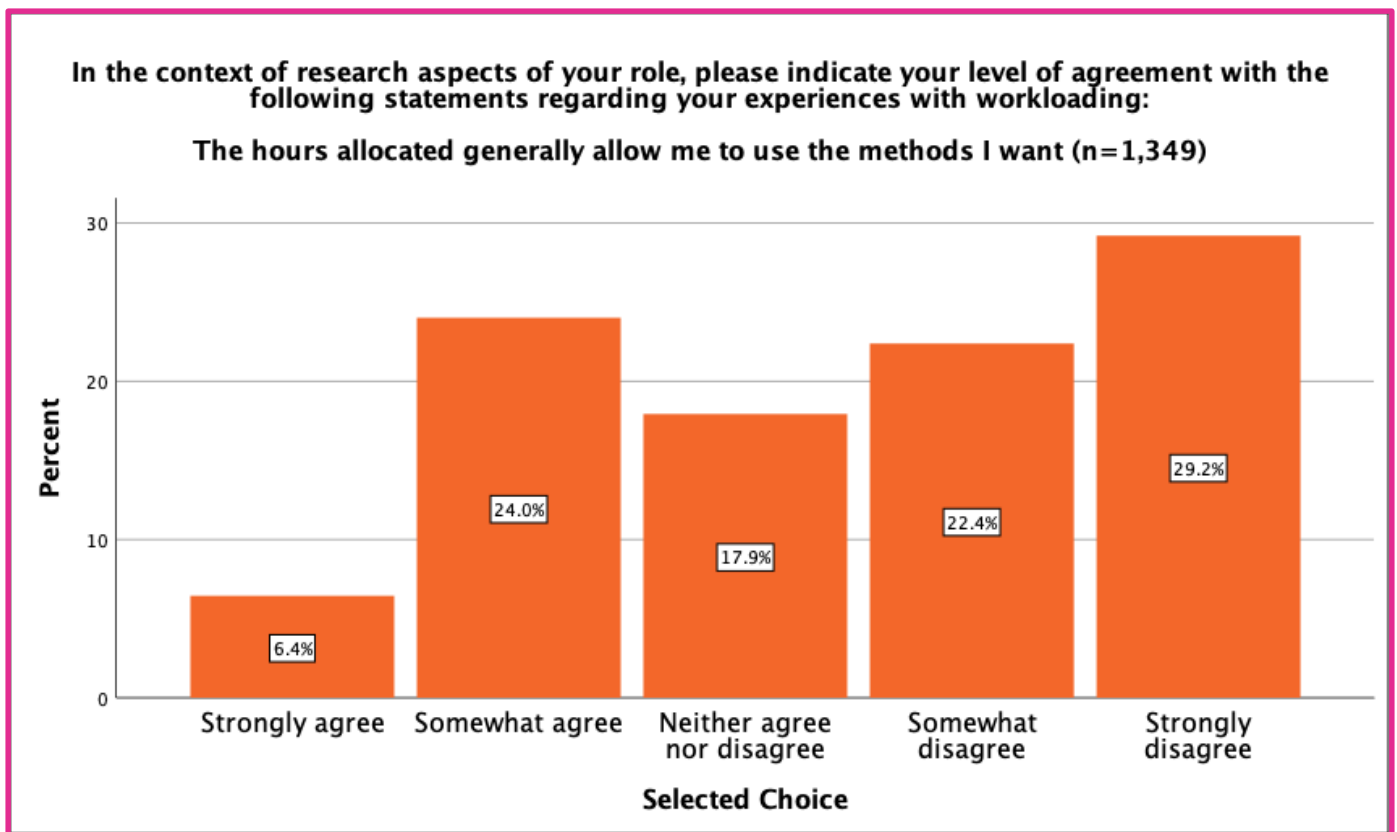
A one-way ANOVA (Table 13) revealed that there was a statistically significant difference in the mean response between respondents on fixed-term contracts and respondents on permanent contracts ($F(1, 1347) = [12.166]$, $p = 0.001$). Staff on fixed-term contracts were — perhaps surprisingly — more likely than staff on permanent contracts to agree (or strongly agree) that the hours allocated to them would enable them to use their preferred research methods.

Table 13. The relationship between research workload allocation and research design - Comparison of responses: fixed-term vs permanent
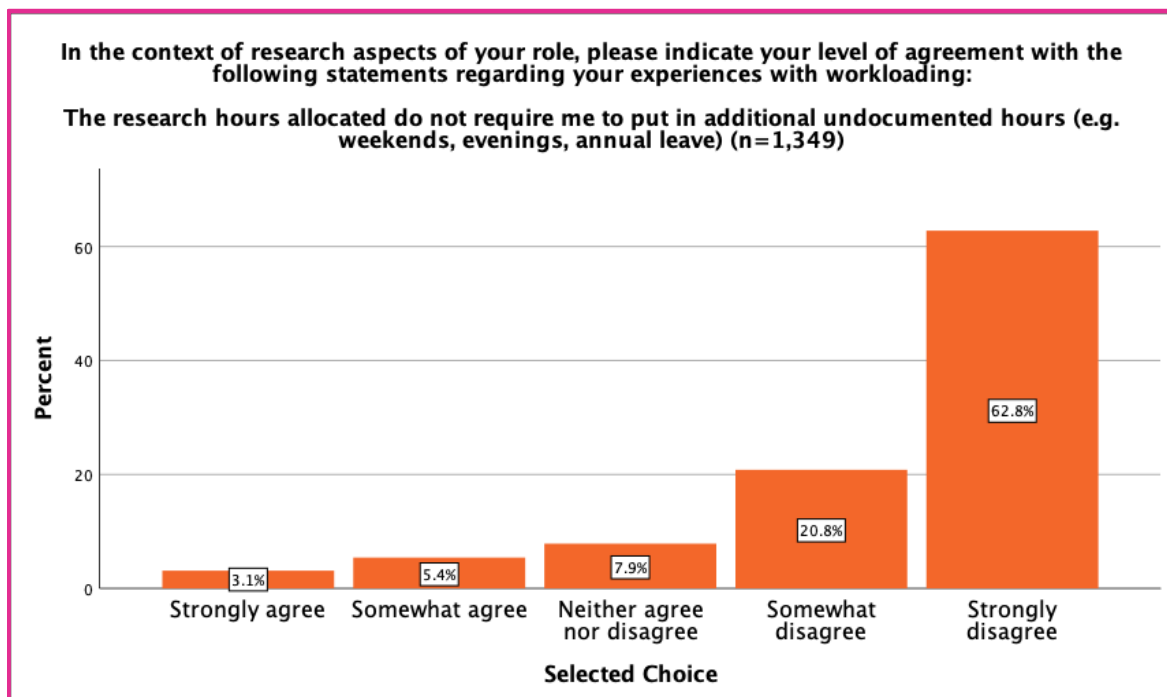
			In the context of research aspects of your role, please indicate your level of agreement with the following statements regarding your experiences with workloading: - The hours allocated generally allow me to use the methods I want.					Total
			Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	
My contract is:	Permanent	Count	77	295	222	287	378	1259
		%	6.1%	23.4%	17.6%	22.8%	30.0%	100.0%
	Fixed term	Count	10	29	20	15	16	90
		%	11.1%	32.2%	22.2%	16.7%	17.8%	100.0%
Total		Count	87	324	242	302	394	1349
		%	6.4%	24.0%	17.9%	22.4%	29.2%	100.0%

As the following open-text comment details, workloaded hours can heavily shape the research that is done and how it is done.

"Workloaded hours rarely facilitate more creative, participatory or inclusive research endeavours or studies with disadvantaged and hard-to-reach groups.

They encourage only mainstream, traditional research endeavours which sadly have, in my 20 years of experience, lead to minimal impact on the quality of lives of the groups I aim to work with on (my) research endeavours.

Workload only takes into account processes needed to build research networks, infrastructure and do the groundwork for research publications and funding. Outcomes are king and process is seldom considered. Building the research culture within my department has slid consistently due to linking performance targets to workloaded hours".

The relationship between research workload allocation and the choice of topic to research

The next question (Figure 33) sought explore the extent to which workload restrictions impacted on what researchers chose to investigate. Overall, respondents' answers were mixed, and there was no clear consensus.

Figure 33. Research workload allocation and the impact on choice of topic to research.
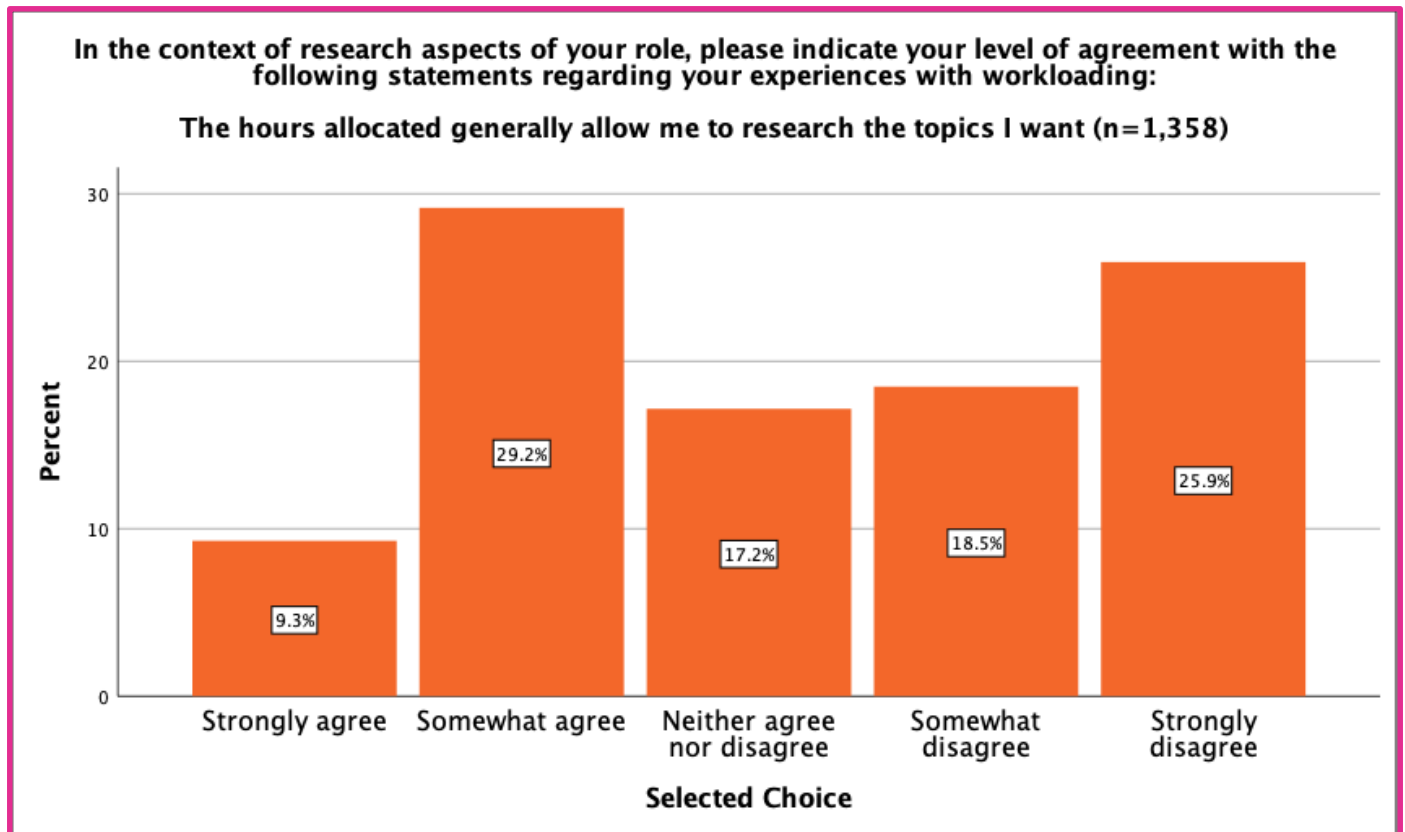
In the context of research aspects of your role, please indicate your level of agreement with the following statements regarding your experiences with workloading:

The hours allocated generally allow me to research the topics I want (n=1,358)

Selected Choice	Percent
Strongly agree	9.3%
Somewhat agree	29.2%
Neither agree nor disagree	17.2%
Somewhat disagree	18.5%
Strongly disagree	25.9%

The relationship between research workload allocation and the incentivising of certain approaches to research and dissemination

The next question (Figure 34) sought to explore the relationship between research workload allocation and the incentivising of certain approaches to research and dissemination (e.g. just conducting interviews or surveys rather than opting for mixed methods or multi-stage research projects that could potentially generate richer data and better answer the research question).

Only 4.1% of respondents strongly agreed that the hours they were allocated for research-related work incentivised them to take an ambitious approach to research and dissemination. 11.4% somewhat agreed, while 43.6% strongly disagreed and 22.7% somewhat disagreed.

Figure 34. The relationship between research workload allocation and the incentivising of certain approaches to research and dissemination
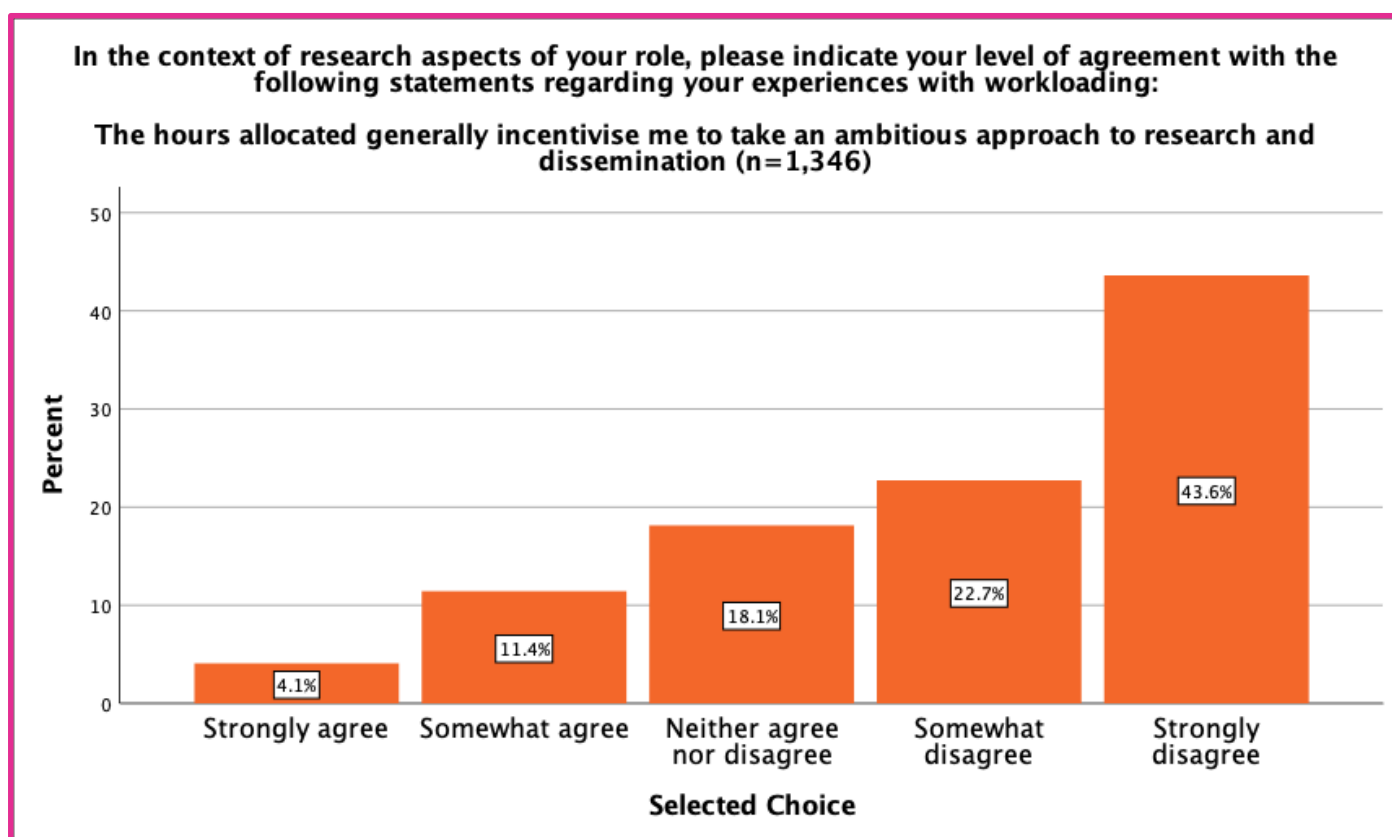
A one-way ANOVA (Table 14) revealed that there was a statistically significant difference in the mean response between respondents employed fixed-term and those on permanent contracts $(F(1, 1344) = [5.238], p = 0.022)$. Staff on fixed-term contracts — perhaps counterintuitively, were more likely than staff on permanent contracts to agree (or strongly agree) that the hours allocated to them would incentivise them to take an ambitious approach to research and dissemination.

Table 14. The relationship between research workload allocation and the incentivising of certain approaches to research and dissemination - Comparison of responses: fixed-term vs permanent.

			In the context of research aspects of your role, please indicate your level of agreement with the following statements regarding your experiences with workloading: - The hours allocated generally incentivise me to take an ambitious approach to research and dissemination.					Total
			Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	
My contract is:	Permanent	Count	50	141	221	286	557	1255
		%	4.0%	11.2%	17.6%	22.8%	44.4%	100.0%
	Fixed term	Count	5	13	23	20	30	91
		%	5.5%	14.3%	25.3%	22.0%	33.0%	100.0%
Total		Count	55	154	244	306	587	1346
		%	4.1%	11.4%	18.1%	22.7%	43.6%	100.0%

The relationship between the surveillance of academic work that digital technologies facilitate and academic freedom in teaching

The next series of questions explored different aspects of the surveillance of academic work that digital technologies facilitate, and the relationship of this to academic freedom.

This section begins with an exploration of the relationship between academic freedom in teaching and academic worker wellbeing, job performance, and job satisfaction.

The relationship between academic freedom in teaching, the level of wellbeing and the level of performance

Autonomy at work is correlated to both improved wellbeing and, therefore, better performance (Reisinger and Fetterer, 2022). More than two-thirds of respondents (70.8%) strongly agreed that academic freedom in teaching was important for wellbeing and performance. In total, 94.9% of respondents chose one of the agree statements (Figure 35).

Figure 35. The relationship between academic freedom in teaching, the level of wellbeing and the level of performance

I believe that staff academic freedom – as defined above – in teaching–related processes is important to ensure high levels of staff wellbeing and performance? (n=2,000)
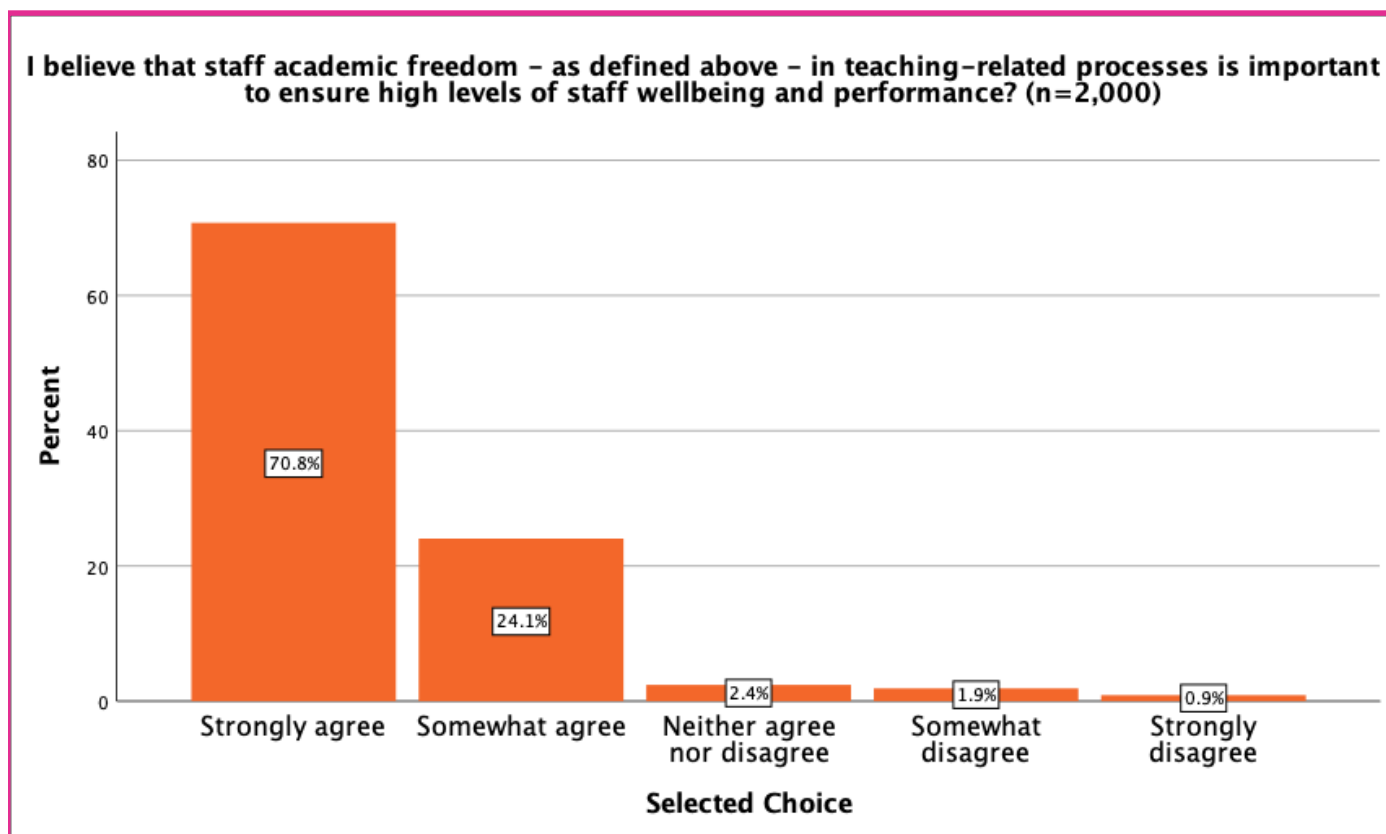
The relationship between academic freedom in teaching and work satisfaction

71.8% of respondents strongly agreed that academic freedom in teaching was very important to their sense of satisfaction at work (Figure 36).

Figure 36. The relationship between academic freedom in teaching and sense of satisfaction at work
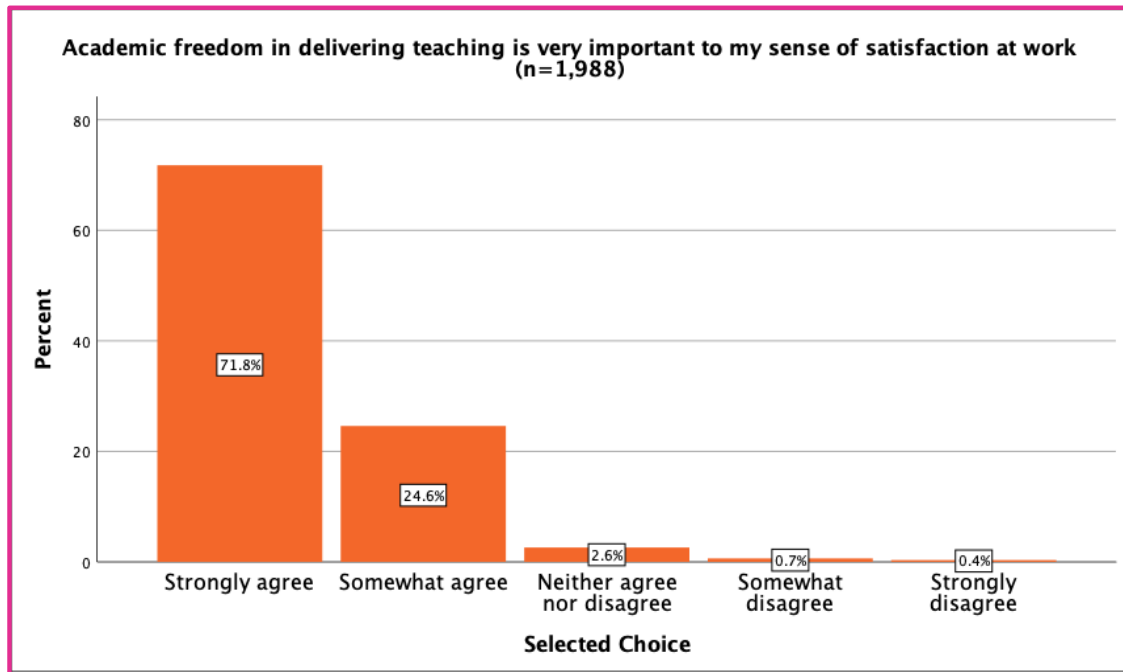
A one-way ANOVA revealed that there was a statistically significant difference in the mean response between those on fixed-term and those on permanent contracts ($F_{(1, 1986)} = [24.208]$, $p = 0.000$). Perhaps counterintuitively, respondents on fixed-term contracts were less likely than staff on permanent contracts to agree (or strongly agree) that academic freedom for teaching was very important to their sense of satisfaction at work (Table 15).

Table 15. The relationship between academic freedom in teaching and sense of satisfaction at work - Comparison of responses: fixed-term vs permanent.

| | | | Academic freedom in delivering teaching is very important to my sense of satisfaction at work. | | | | | Total |
			Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	
My contract is:	Permanent	Count	1269	399	37	10	6	1721
		%	73.7%	23.2%	2.1%	0.6%	0.3%	100.0%
	Fixed term	Count	158	90	15	3	1	267
		%	59.2%	33.7%	5.6%	1.1%	0.4%	100.0%
Total		Count	1427	489	52	13	7	1988
		%	71.8%	24.6%	2.6%	0.7%	0.4%	100.0%

The relationship between one's awareness of the employer's ability to monitor teaching performance and one's sense of academic freedom in teaching

The first five questions in this section sought to ascertain respondents' awareness of the extent to which their institution could monitor elements of their teaching performance through the digital systems used for teaching and learning. The questions following these then explore the relationship between awareness of monitoring potential and perceptions of academic freedom. While, for some academics, greater awareness of employer monitoring potential can lead to greater feelings of empowerment, for others, greater awareness may be disempowering. As the responses show, for another group, greater awareness led to neither greater or reduced feelings of empowerment, as they felt that their institutions either did not use the monitoring data in a punitive way or that their institutions currently lacked the capability and competency to make use of the collected data.

Awareness of the employer's ability to monitor teaching performance via the Virtual Learning Environment (e.g. Blackboard, Moodle, Canvas) (generating engagement with students outside of the classroom)

The next question (Figure 37) explored respondents' awareness of the digital monitoring potential of systems. 82.4% of respondents recognised (strongly agreed or somewhat agreed) that their institution had the potential to digitally monitor elements of staff teaching performance via their university's virtual learning environment (VLE) (e.g. how often they loged in to the VLE, the time they spent in the VLE, and how they engaged with students digitally).

Figure 37. Awareness of the institutional ability to use the VLE for surveillance of academic work.

All digital learning systems can capture data for analysis but the level and nature of analysis varies, in accordance with institutional culture, management approach and organisational capability. Depending on the aspect, the monitoring may be done by peers, professional services or those with leadership roles (programme leaders, research directors) and may be active or passive.

Please indicate your level of agreement with the following statements.

I believe that my institution has the ability to digitally monitor my teaching performance via the following online systems: – A VLE (e.g. Blackboard, Canvas, Moodle)
(n=1,845)

Selected Choice	Percent
Strongly agree	41.6%
Somewhat agree	40.8%
Neither agree nor disagree	7.6%
Somewhat disagree	5.1%
Strongly disagree	4.8%

Awareness of the employer's ability to monitor marking, assessment and feedback performance via assessment systems (e.g. Turnitin) (feedback approach)

71% of respondents (Figure 38) strongly agreed or somewhat agreed that their institution had the potential to digitally monitor elements of staff performance via student assessment tools (e.g. that their institution could use tools like Turnitin to surveil how many scripts they had looked at, how many they had marked, etc.).

Figure 38 Awareness of the institutional ability to use Turnitin for surveillance of academic work.

All digital learning systems can capture data for analysis but the level and nature of analysis varies, in accordance with institutional culture, management approach and organisational capability. Depending on the aspect, the monitoring may be done by peers, professional services or those with leadership roles (programme leaders, research directors) and may be active or passive.

Please indicate your level of agreement with the following statements.

I believe that my institution has the ability to digitally monitor my teaching performance via the following online systems: – A student assessment similarity checking system (e.g. Turnitin)
(n=1,832)

Selected Choice	Percent
Strongly agree	36.8%
Somewhat agree	34.2%
Neither agree nor disagree	14.4%
Somewhat disagree	7.7%
Strongly disagree	6.8%

Awareness of institutional ability to use lecture recording system for surveillance of academic work (pedagogic approach)

77.9% of respondents were aware (strongly agreed or somewhat agreed) of the institutional ability to use the lecture recording system for surveillance of academic work (e.g. monitoring of how staff delivered sessions and if they recorded their sessions).

Figure 39. Awareness of the institutional ability to use the lecture recording system for surveillance of academic work.

All digital learning systems can capture data for analysis but the level and nature of analysis varies, in accordance with institutional culture, management approach and organisational capability. Depending on the aspect, the monitoring may be done by peers, professional services or those with leadership roles (programme leaders, research directors) and may be active or passive.

Please indicate your level of agreement with the following statements.

I believe that my institution has the ability to digitally monitor my teaching performance via the following online systems: – A lecture recording system (e.g. Panopto, Echo360)

Awareness of the institutional ability to use a curriculum management system for surveillance of academic work (curriculum design)

49% of respondents were aware (strongly agreed or somewhat agreed) of the digital monitoring potential of curriculum management systems (how they designed their module in relation to the norm).

Figure 40. Awareness of the institutional ability to use a curriculum management system for surveillance of academic work.

All digital learning systems can capture data for analysis but the level and nature of analysis varies, in accordance with institutional culture, management approach and organisational capability. Depending on the aspect, the monitoring may be done by peers, professional services or those with leadership roles (programme leaders, research directors) and may be active or passive.

Please indicate your level of agreement with the following statements.

I believe that my institution has the ability to digitally monitor my teaching performance via the following online systems: – A curriculum management system (e.g. APMS, Tribal SITS)

Awareness of the institutional ability to monitor the level of student satisfaction via digital module evaluation systems

78.4% of respondents (Figure 41) were aware of the use of online module evaluation systems (e.g. to enable comparisons in the level of student satisfaction between academics, programmes and faculties across a range of parameters, as well as year-on-year trends and between years).

Figure 41. Awareness of the institutional ability to monitor the level of student satisfaction via digital module evaluation systems

All digital learning systems can capture data for analysis but the level and nature of analysis varies, in accordance with institutional culture, management approach and organisational capability. Depending on the aspect, the monitoring may be done by peers, professional services or those with leadership roles (programme leaders, research directors) and may be active or passive.

Please indicate your level of agreement with the following statements.

I believe that my institution has the ability to digitally monitor my teaching performance via the following online systems: – An electronic module evaluation system

The below open-text comments provide further insight into the role that module evaluation systems play in shaping power relations (i.e. the affordances come not from just evaluating an individual module but come from enabling comparisons):

"Because student and peer monitoring is conducted often through a numerical based survey ("rate your satisfaction on a scale of 1-5"), the quality of teaching can be assessed as a quantity. This means you are at the mercy of a number: if your average satisfaction level falls below a certain value, then what? This can make us wary not to present material that might seem overly difficult or challenging, for fear of a poor performance rating".

"Digital module evaluation generates poor quality data on my performance, which the institution uses without ever acknowledging its considerable limitations, and shares (in ways I can't see or control) this data with many of my colleagues and managers. This creates an environment where, instead of using my time and energy to explore what would be effective or necessary, I am forced into a defensive position of explaining why some aspect of my performance was deficient or how scores can be improved"

The relationship between awareness of the institutional ability to digitally monitor teaching content and academic freedom

Moving on from exploring the extent to which respondents were aware of the monitoring potential that their employers had over them via digital tools, the next section of the survey explored whether the awareness they had shaped the ways in which they experienced academic freedom. The managerial nature of the UK higher education sector has been well documented. West (2016, 1) details the shift in thinking that led to the old norms being replaced by a new set of norms:

> *"the old idea of the university as a community of self-governing scholars dedicated to humanist values of truth and learning was all very well in theory but never entirely realistic … universities invariably fell short in practice. Scholars with guaranteed tenure became lazy. Teachers neglected their students and researchers rested on their laurels. These failings were allowed to persist, according to this story, because self-interested academics were also self-governing. These assumptions set the scene for root-and-branch reform".*

Similarly, Deem (1998, 47), writing in 1998, argued that

> *"[U]ntil quite recently, the notion that the activities and cultures of universities either required managing or were, in any meaningful sense, 'managed', would have been regarded as*

heretical. Universities were perceived as communities of scholars researching and teaching together in collegial ways; those running universities were regarded as academic leaders rather than as managers or chief executives".

West (2016, 1) characterises the new norms as follows in this extended quote:

> *"At the heart of the new model is the belief in the need for incentives, both positive and negative. The importance of incentives is at the heart of liberal and neoliberal convictions about the virtues of capitalism. Enterprises and workers within them are spurred to industry and innovation by rewards for success and punishment for failure. So academics must also be rewarded for their achievements and punished for their failures.*
>
> *Assessments of academic performance are translated into a schedule of rewards and punishments. Rewards or 'carrots' take the form of promotions, pay increases and 'relief' from teaching as well as more symbolic awards for varieties of 'excellence'. Punishments consist in the absence of these rewards together with additional teaching*

loads, which are openly treated by managers and academic peers as penalties for failing to meet imposed research targets ... Additionally, academics' increasing administrative and teaching loads, the abolition of tenure, the phasing out of automatic salary increments and the tying of research funds to successful grant applications, mean that a successful academic career is almost impossible without the rewards".

While acknowledging that "managers have a right to manage and that senior managers in many universities are innovating and changing their institutions in response to external conditions changing", Erickson, Hanna and Walker's (2021, p.2148) study on managerialism found that many academic staff were in "very difficult, stressful, upsetting and sometimes demeaning situations" with "considerable human health consequences – both physical and mental".

The relationship between respondents' awareness of their institution's ability to digitally monitor their teaching content and academic freedom

58.8% of respondents either strongly agreed or somewhat agreed that the current extent of institutional oversight enabled by VLE systems had reduced their sense of academic freedom (Figure 42).

Figure 42. The relationship between one's awareness of the employers' ability to use the VLE for worker surveillance and the impact of on one's sense of academic freedom.
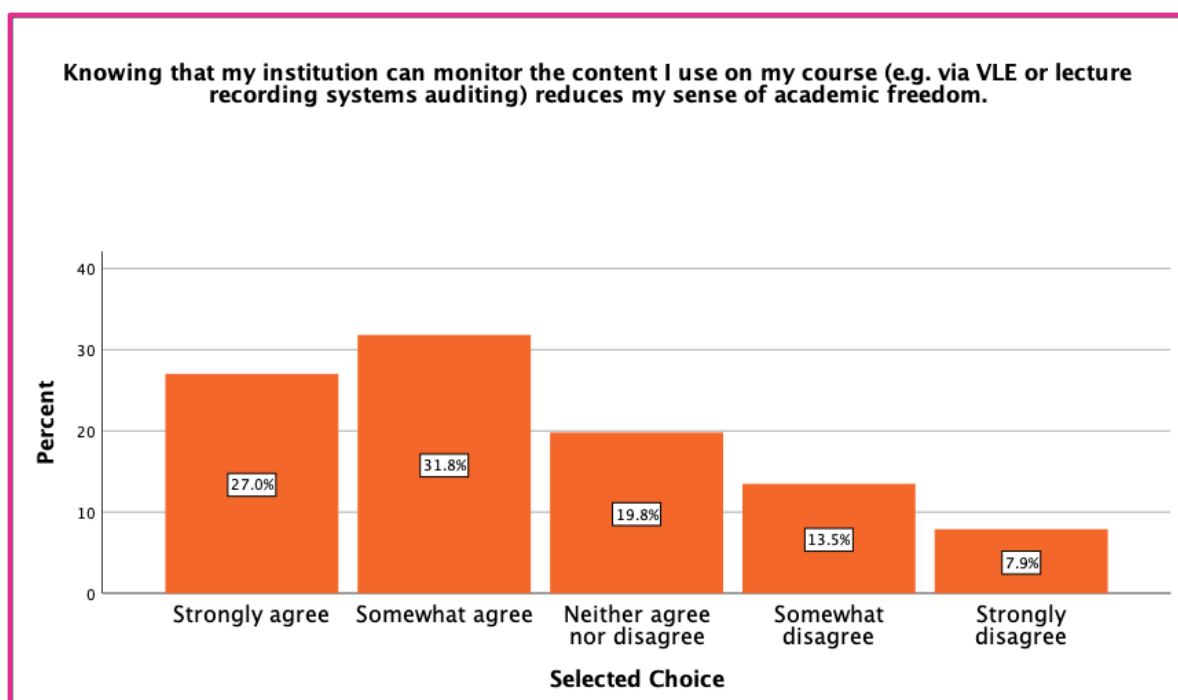
Knowing that my institution can monitor the content I use on my course (e.g. via VLE or lecture recording systems auditing) reduces my sense of academic freedom.

75.3% of respondents either strongly agreed or somewhat agreed that being subject to a continuous programme of performance assessment of their teaching (enabled by digital systems) reduced their sense of academic freedom (Figure 43).

Figure 43. Relationship between being subject to continuous teaching performance assessment and academic freedom.
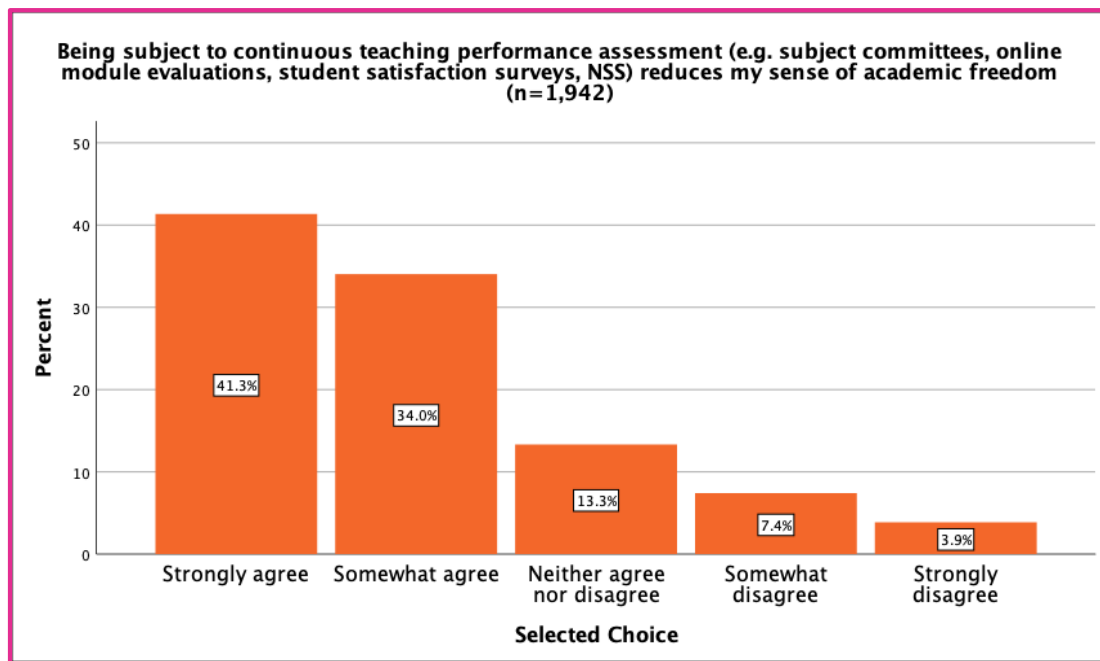
A one-way ANOVA revealed that there was a statistically significant difference in the mean response between respondents on fixed-term contracts and those on permanent contracts ($F(1, 1940) = [7.849]$, $p = 0.005$). Staff on fixed-term contracts felt less strongly than staff on permanent contracts that being subject to teaching performance assessment reduced their sense of academic freedom for teaching (Table 16).

Table 16. Relationship between being subject to continuous teaching performance assessment and academic freedom - Comparison of responses: fixed-term vs permanent.

| | | | Being subject to continuous teaching performance assessment (e.g. subject committees, online module evaluations, student satisfaction surveys, NSS) reduces my sense of academic freedom. | | | | | Total |
			Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	
My contract is:	Permanent	Count	725	569	212	120	67	1693
		%	42.8%	33.6%	12.5%	7.1%	4.0%	100.0%
	Fixed term	Count	78	92	47	24	8	249
		%	31.3%	36.9%	18.9%	9.6%	3.2%	100.0%
Total		Count	803	661	259	144	75	1942
		%	41.3%	34.0%	13.3%	7.4%	3.9%	100.0%

The relationship between respondents' awareness of institutional monitoring of assessment design and their sense of academic freedom

The next question (Figure 44) explored the institutional monitoring of assessment design. This question links to broader debates, especially post-pandemic, on the need to embrace technology-based forms of assessment (Mckie, 2021) and also the relationship between assessment design and the grades students achieve (Lambert, 2019). 64.5% of respondents either strongly agreed or somewhat agreed that their awareness of institutional oversight with regard to assessment design reduced their sense of academic freedom.

Figure 44. The relationship between respondents' awareness of institutional monitoring of assessment design and their sense of academic freedom.

Knowing that my institution can monitor my assessment design (e.g. through central curriculum database systems) reduces my academic freedom in assessment design (e.g. it makes me more likely to go for standardised design rather than be innovative) (n=1,809)
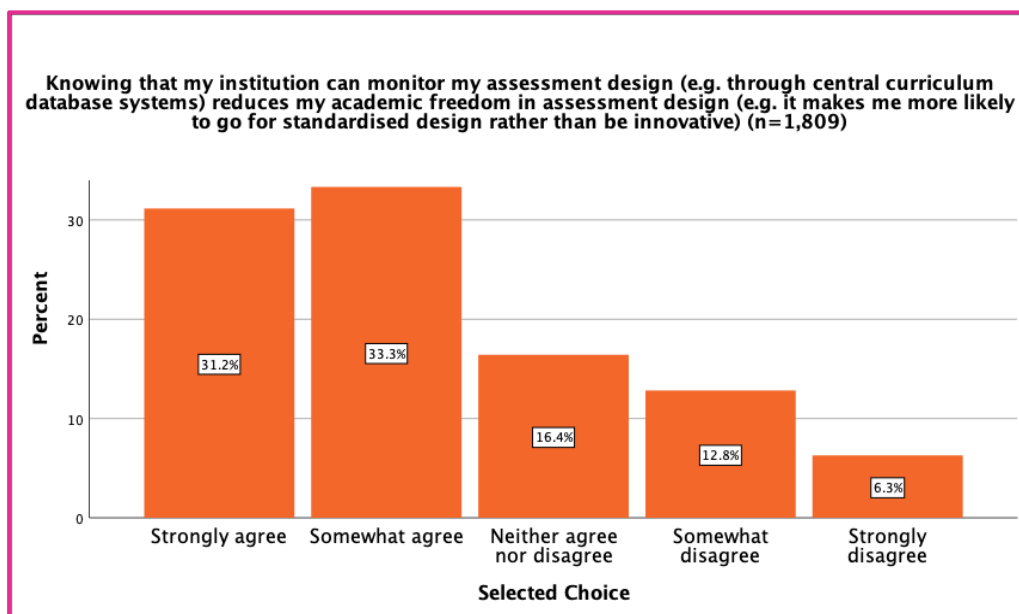
This open-text comment from one respondent illustrates the relationship between the institutional monitoring of assessment design and academic freedom:

"Assessments have to conform to what the University's management want and expect, and not as is standard within my subject area (e.g. exams are seen as a no-no by management, yet all the evidence suggests students perform better and are more likely to pass exams). We also have to 'fudge' our marking to ensure we meet the institutional demand that the average mark on any given module is at least 60 and that at least 90% of students pass. Student work that 8-9 years ago would have failed is now being given a bare pass mark. Essentially, we're pressured to not mark ourselves out of our jobs".
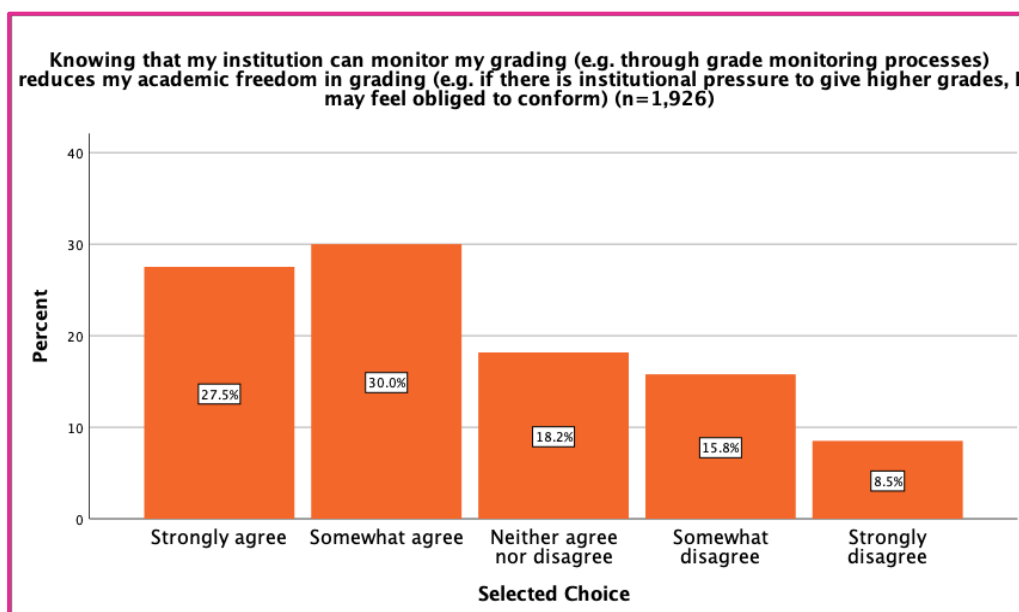
> *"The expectation to change good pedagogic practice to accommodate poorly implemented digital tools that the IT department have purchased affects the teaching of myself and my colleagues. The biggest challenge is the extremely poor quality of the tools (blackboard, sharepoint, panopto, office 365 and also the very poor home made additions to these by the internal [redacted university name] development team). The explosion of digital process and associated administration is swamping colleagues in deluge of new, broken process-tasks to manually fill in and cut and paste around widely deployed, in adequate, unintegrated digital tools".*

The relationship between respondents' awareness of institutional monitoring of their grading and their sense of academic freedom

The next question (Figure 45) explored institutional oversight of grading and feedback. In the context of this study, this is important as it links to broader higher education workplace issues such as institutions pressuring staff to either inflate or deflate grades (Office for Students, 2022) and the trend of providing student feedback in certain highly prescribed ways for purposes of time efficiency and equality (e.g. to prevent students complaining that they received less quantity of feedback than their peers). 57.5% of respondents either strongly agreed or somewhat agreed that the current extent of institutional oversight of grading and feedback enabled by digital systems reduced their sense of academic freedom (Figure 45).

Figure 45. The relationship between respondents' awareness of institutional monitoring of their grading and their sense of academic freedom.

Knowing that my institution can monitor my grading (e.g. through grade monitoring processes) reduces my academic freedom in grading (e.g. if there is institutional pressure to give higher grades, I may feel obliged to conform) (n=1,926)

Strongly agree: 27.5%
Somewhat agree: 30.0%
Neither agree nor disagree: 18.2%
Somewhat disagree: 15.8%
Strongly disagree: 8.5%

This open-text comment from one respondent depicts what the lived experience of grade monitoring surveillance can be like for academic staff:

"I feel we are pressured to have particular pass rates, irrespective of student performance, and that student poor performance is viewed as a failing on our part, rather than a joint failure. I personally try to ignore this pressure and maintain good pedagogic practice, standards and mark fairly and to criteria in learning rather than to the organisational goals of the University.

I have noticed grade inflation in colleagues and a preponderance to pass students on the borderline of failing, because it creates less hassle ultimately, and the University will find a way to pass students.

Also, because fee-paying students can now see pass rates, they will opt for higher ones. This provides an external driver to pass more students, so courses are maintained rather than shut down. This is another form of monitoring and interacting with students becoming fee paying. Fees are one of the worst things to happen to universities".

Voices of " academics

"*I am less likely to raise contentious social policy issues & would not engage (in any recorded format) in highly contentious issues*".

"*I am monitored in all areas of teaching and marking through digital platforms. This restricts what I can and cannot do in terms of academic freedom*".

"*Yes, I feel pressured to confirm to a singular, vague notion of quality*".

"*The student feedback forms are anonymous and so students can make rude, insulting and untrue comments. Academic staff are given no opportunities to defend these types of comments. Feels like bullying/harassment*".

Voices of " *academics*

"I have a feeling that my every word is monitored. I feel stuck between the students and the management who always seem to side with students no matter how irrational they are and very often students disagree between them, so there is no way to please every single one. Yet, the management does not see that as a problem".

"It is digital monitoring, but it is also managerialism. In a bid to standardize everything (reading lengths, assessment lengths, diversity of assessments and due dates) power has been handed to managers with no sense of the pedagogical design of learning materials".

"Digital monitoring has promoted a practice of central management evaluating teaching by criteria unrelated to both education and the particular specific circumstances of the teacher and students".

"There is a general confusion in the institution between monitoring (neutral) and conclusions (mostly in the form of numerical 'norms' or targets) derived from monitoring and a general failure to show statistical literacy. This is partly a cause and partly a consequence of the fact that bald statistics do not bear out the assumed 'right outcomes' that the institution is pressurised to attain".

Overall cumulative impact of employer monitoring and one's sense of academic freedom

The next question (Figure 46) explored the overall impact of being constantly monitored to one's sense of academic freedom (as being monitored, even if passively, can shape the level of inhibition one has). 64% of respondents agreed or strongly agreed that, overall, how their institution captures and monitors various elements of their teaching work reduces their sense of academic freedom. Only 6.1% strongly disagreed that this was the case.

Figure 46. Overall cumulative impact of employer monitoring and one's sense of academic freedom.
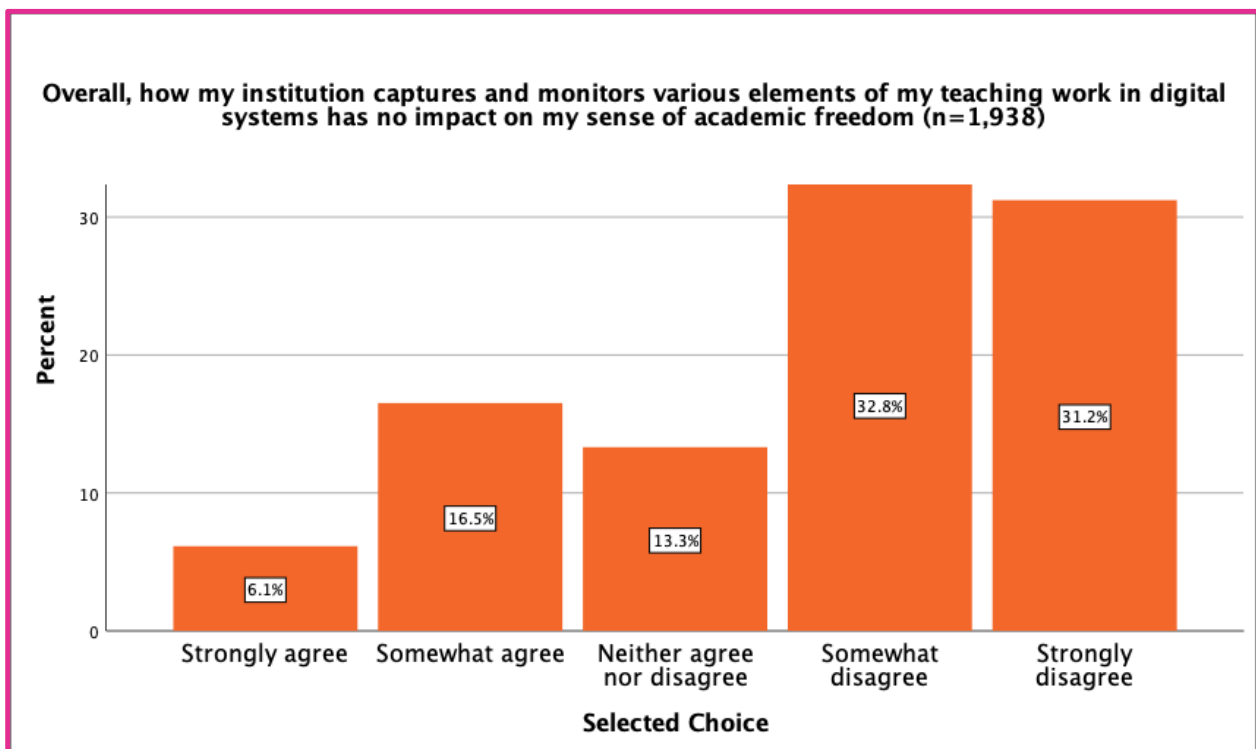
Overall, how my institution captures and monitors various elements of my teaching work in digital systems has no impact on my sense of academic freedom (n=1,938)

The relationship between the surveillance of academic work that digital technologies facilitate and academic freedom in research

The next series of questions explore different aspects of the relationship between the surveillance of academic work that digital technologies facilitate and academic freedom in research. The first few questions in this sub-section explore the relationship between managerial oversight in research aspects of academic work and the ways in which academics experience academic freedom when conducting, writing up, and disseminating research.

The relationship between academic freedom in research, the level of wellbeing and the level of performance

81.3% of respondents strongly agreed that academic freedom in research was important for wellbeing and performance (Figure 47).

Figure 47. The relationship between academic freedom in research, the level of wellbeing and the level of performance.

Academic freedom – as defined above – in carrying out research aspects of their role is important for ensuring high levels of staff wellbeing and performance (n=1,958)
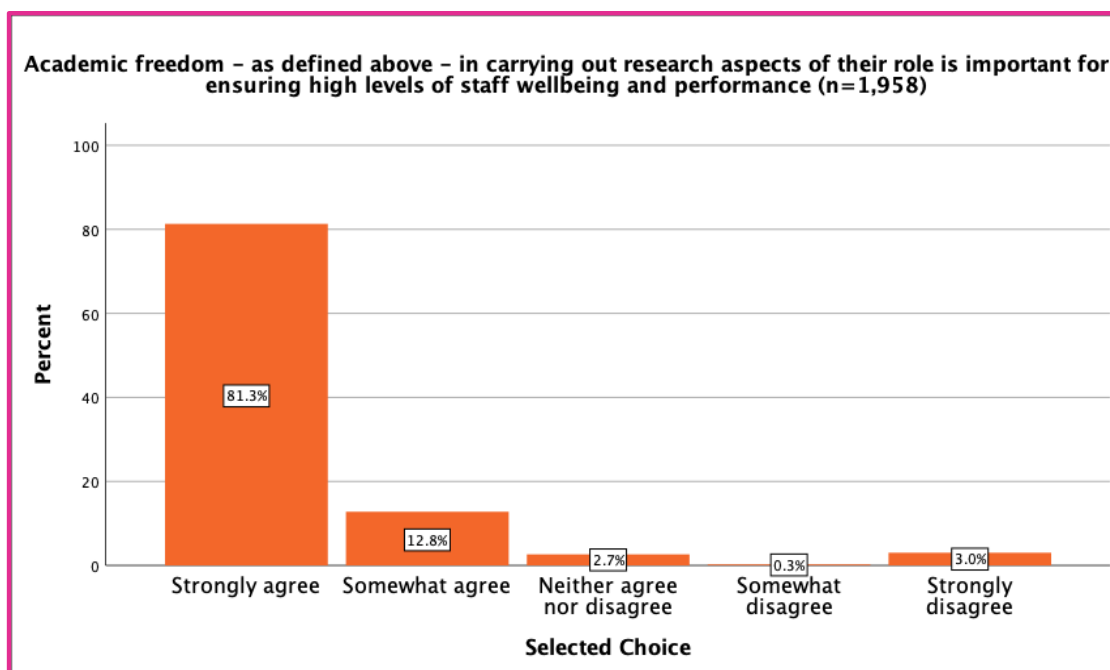
A one-way ANOVA revealed that there was a statistically significant difference in the mean response between those on fixed-term and those on permanent contracts (F(1, 1956) = [21.116], p = 0.000). Interestingly, staff on fixed-term contracts had less strong feelings that academic freedom in connection with research activities was important in relation to wellbeing and performance (Table 17).

Table 17. The relationship between academic freedom in research, the level of wellbeing and the level of performance - Comparison of responses: fixed-term vs. permanent.

| | | | Academic freedom - as defined above - in carrying out research aspects of their role is important for ensuring high levels of staff wellbeing and performance. | | | | | Total |
			Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	
Please indicate the nature of your work contract: - Contract-type - My contract is:	Permanent	Count	1395	209	39	5	41	1689
		%	82.6%	12.4%	2.3%	0.3%	2.4%	100.0%
	Fixed term	Count	197	41	13	0	18	269
		%	73.2%	15.2%	4.8%	0.0%	6.7%	100.0%
Total		Count	1592	250	52	5	59	1958
		%	81.3%	12.8%	2.7%	0.3%	3.0%	100.0%

Academic freedom in research and work satisfaction

81% of respondents strongly agreed that having academic freedom in relation to the research aspects of one's role was important for their sense of satisfaction at work (Figure 48).

Figure 48. The relationship between academic freedom in research and sense of satisfaction at work.
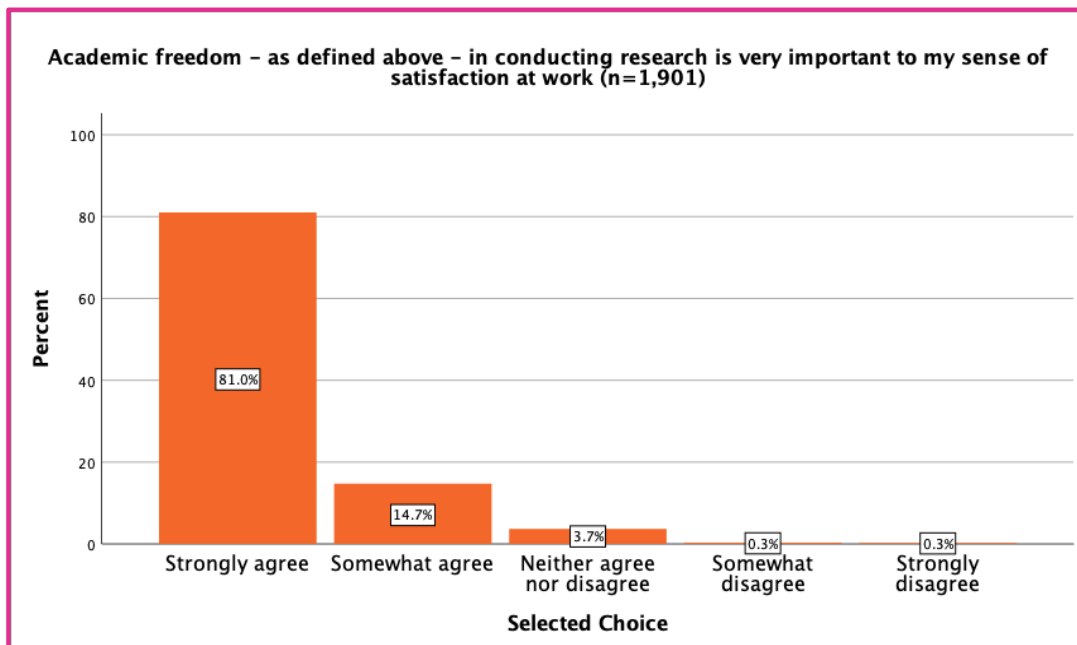
A one-way ANOVA revealed that there was a statistically significant difference in the mean response between those respondents employed fixed-term and those on permanent contracts (F(1, 1899) = [34.873], p = 0.000). Staff on permanent contracts had stronger feelings towards the need for academic freedom as relates to conducting research (Table 18).

Table 18. The relationship between academic freedom in research and sense of satisfaction at work - Comparison of responses: fixed-term vs permanent.

| | | | Academic freedom - as defined above - in conducting research is very important to my sense of satisfaction at work. | | | | | Total |
			Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	
My contract is:	Permanent	Count	1369	220	51	5	3	1648
		%	83.1%	13.3%	3.1%	0.3%	0.2%	100.0%
	Fixed term	Count	171	60	19	1	2	253
		%	67.6%	23.7%	7.5%	0.4%	0.8%	100.0%
Total		Count	1540	280	70	6	5	1901
		%	81.0%	14.7%	3.7%	0.3%	0.3%	100.0%

The relationship between increased managerial oversight of research performance and academic freedom in research

This sub-section explores the current state of academic freedom for research in the context of the increased managerial oversight of research activity that institutional technology enables. The first five questions in this section sought to ascertain respondents' awareness of the extent to which their institution could monitor elements of their research performance through digital systems. The questions following these then explore the relationship between monitoring the potential of academic freedom and its perceptions. As detailed earlier in the report, part of the reason for the increased oversight is due to the importance for universities of doing well in the REF, and institutions perceiving having increased oversight as important in predicting likely REF performance. The open-text comment below reveals the impact of the REF on the academic labour market:

"The REF has been hugely damaging – As an ECR, its impact is definitely felt in the job market as it has precluded ECR entry at lower levels of publication. (I have one book out already, articles in a prior field, and one article out in my current one, with one forthcoming.

But without a novel or creative work under contract, I cannot get a post.) This was not true say 5 years ago. And it is down to the REF".

The next question (Figure 49) explored academic appraisal systems. In the context of this study, what is important is how academic appraisal systems are used to shape managerial decision making by enabling comparison-informed performance management (e.g. one staff member to another, one faculty to another, one professor to another).

76.9% of respondents were aware (strongly agreed or somewhat agreed) of the institutional potential to use digital academic appraisal systems to monitor an individual's research performance via

a one-way ANOVA revealed that there was a statistically significant difference in the mean response between those respondents on fixed-term contracts and those on permanent contracts $F(1, 1717) = [4.011]$, $p = 0.045$). Respondents on fixed-term contracts had a lower awareness than staff on permanent contracts` of their institution having the ability to monitor research performance by means of an academic appraisal system (perhaps due to not being entitled to the same annual appraisal processes as permanently employed staff).

Figure 49. Awareness of the institutional ability to monitor research performance via digital academic appraisal systems.

Please indicate your level of agreement with the following statements.

I believe that my institution has the ability to digitally monitor my research performance via the following online systems:

An academic Appraisal system (for general performance management) (n=1,719)

- Strongly agree: 41.8%
- Somewhat agree: 35.1%
- Neither agree nor disagree: 11.2%
- Somewhat disagree: 6.8%
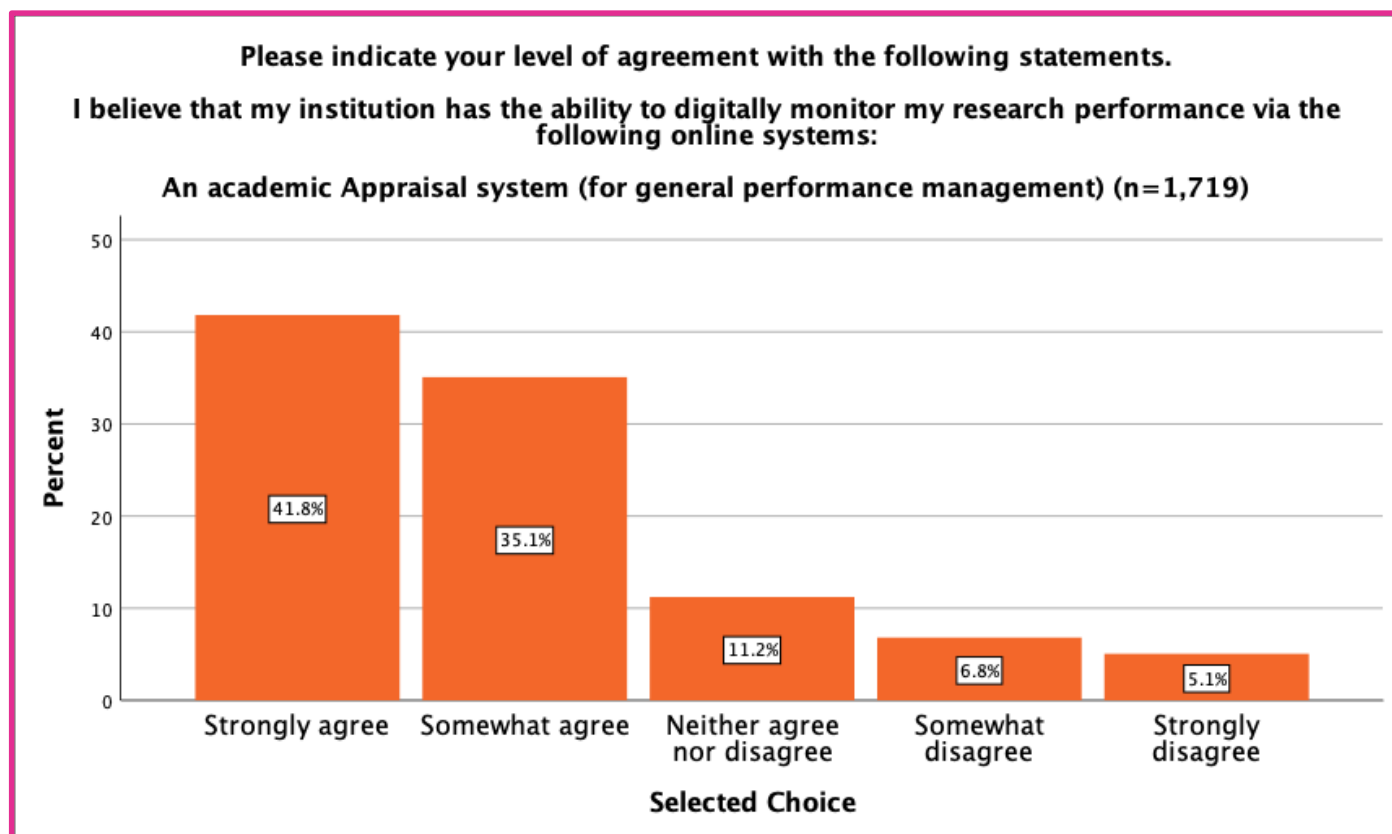- Strongly disagree: 5.1%

Table 19. Awareness of the institutional ability to monitor research performance via digital academic appraisal systems - Comparison of responses: fixed-term vs permanent.

| | | | I believe that my institution has the ability to digitally monitor my research performance via the following online systems: - An academic Appraisal system (for general performance management) | | | | | Total |
			Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	
My contract is:	Permanent	Count	661	522	158	103	80	1524
		%	43.4%	34.3%	10.4%	6.8%	5.2%	100.0%
	Fixed term	Count	58	81	35	14	7	195
		%	29.7%	41.5%	17.9%	7.2%	3.6%	100.0%
Total		Count	719	603	193	117	87	1719
		%	41.8%	35.1%	11.2%	6.8%	5.1%	100.0%

"Research and teaching have been separated. To be allowed to do research you have to fit in with the objectives of a research centre whose remit is set by the University. If one is allowed to do research then you are required to attempt two negotiations simultaneously with your teaching and research line managers (and often with their line managers, as many do not have the authority to negotiate workload)".

Awareness of institutional ability to research performance via digital researcher development plan systems

While, on the one hand, researcher development plan systems are about the development of the individual researcher, on the other hand, the use of these systems is very much about performance management and data from these systems can inform career progression and enable staff-to-staff comparison.

50.1% of respondents were aware (strongly agreed or somewhat agreed) of their institution's potential to digitally monitor elements of their research performance via online staff development planning systems (Figure 50).

Figure 50. Awareness of employers' ability to use a researcher development plan system for performance management.

Please indicate your level of agreement with the following statements.

I believe that my institution has the ability to digitally monitor my research performance via the following online systems.

An online researcher development plan system (for research performance management) (n=1,418)
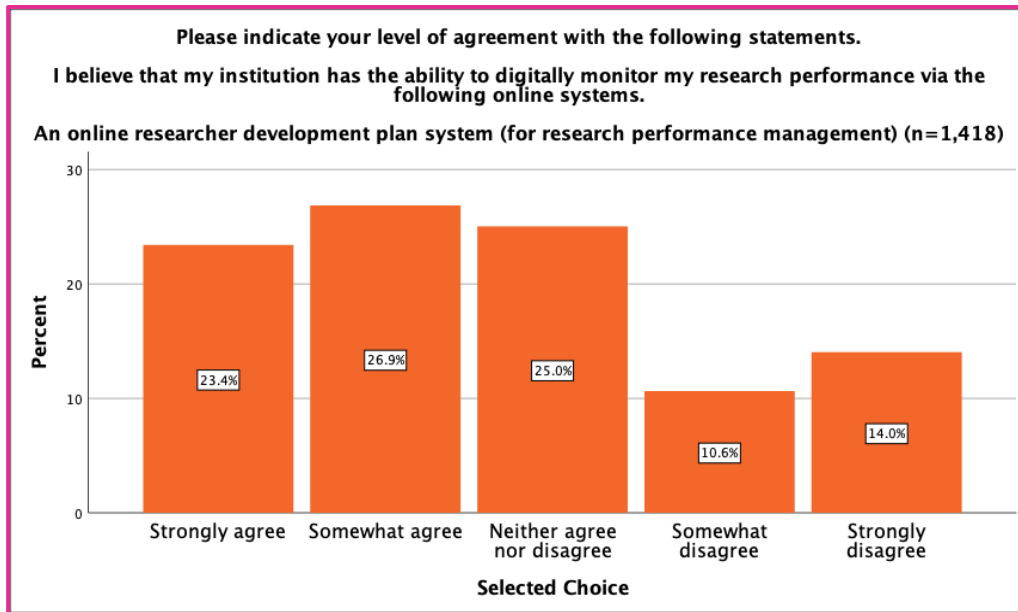
With respect to academic freedom, the current role in one's career, and the level of seniority can be crucial, as the below participant's open-text response indicates:
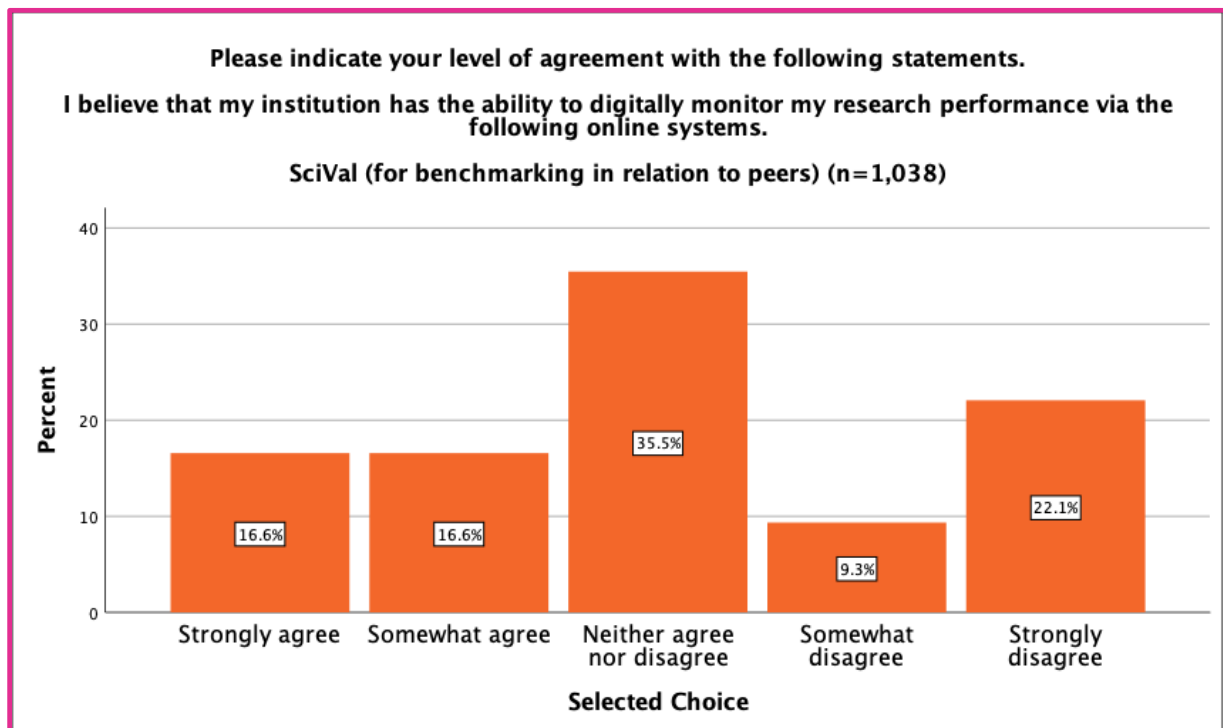
> *"Professors, like myself, have some freedom. Junior staff do not".*

Respondents' awareness of their institution's ability use SciVal to monitor research performance (a digital system for benchmarking staff)

Awareness of the influential and widely-used SciVal tool and its monitoring and benchmarking potential for institutions was low among respondents, with only 33.2% either choosing strongly agreeing, or somewhat agreeing, in relation to SciVal's digital monitoring potential. A similar proportion of respondents (31.4%) somewhat or strongly disagreed that their institution could monitor their research performance by online systems (Figure 51). SciVal is a research analytics tool "for measuring metrics gathered from the Scopus dataset" and provides "access to the research performance of over 8,500 research institutions and 220 nations worldwide" (University of Galway, 2023, 1). Additionally, "SciVal provides metrics from a top-level country level to an individual researcher level spreading across all subject areas or at a more granular subject area/ to sub-category subject area" and enables institutional research performance benchmarking (University of Galway, 2023, 1) .

Figure 51. Respondents' awareness of their institution's ability use SciVal to monitor research performance (a digital system for benchmarking staff).

Please indicate your level of agreement with the following statements.

I believe that my institution has the ability to digitally monitor my research performance via the following online systems.

SciVal (for benchmarking in relation to peers) (n=1,038)

- Strongly agree: 16.6%
- Somewhat agree: 16.6%
- Neither agree nor disagree: 35.5%
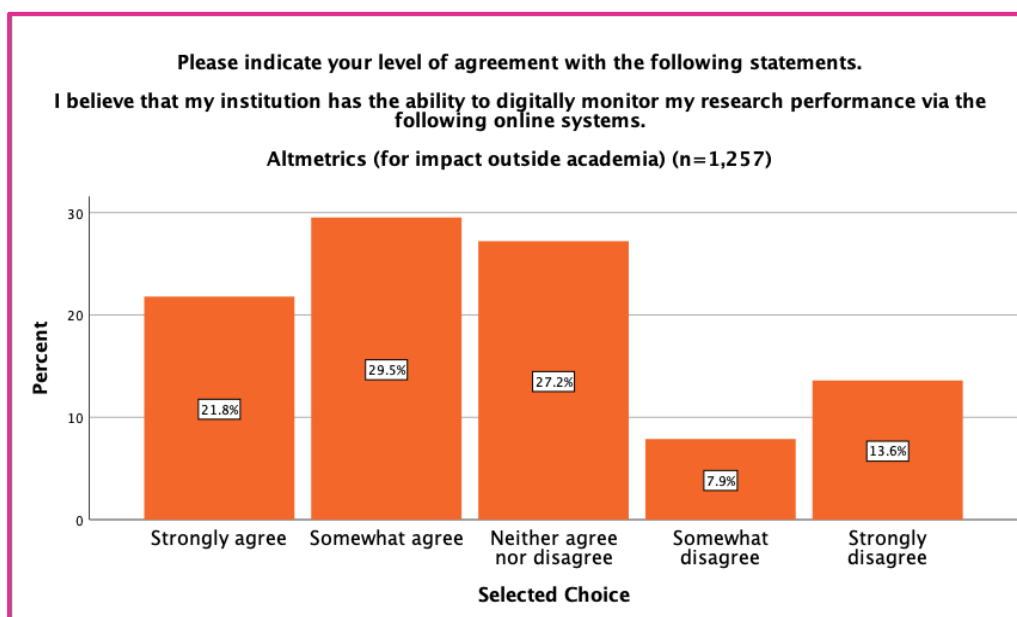- Somewhat disagree: 9.3%
- Strongly disagree: 22.1%

Respondents' awareness of their institution's ability to monitor research performance via Altmetric (digital system for measuring impact outside academia)

Awareness of the institutional use of Altmetric (Figure 52) varied among survey participants across all the Likert response options, with most choosing Somewhat Agree (29.5%) but a slightly smaller percentage choosing neither agree nor disagree (27.2%). AltMetric (which is short for alternative metrics) is another system which quantifies researcher performance. AltMetric is designed to "work alongside traditional metrics such as number of documents, number of citations, category normalised citation impact, open access status, etc., to produce a comprehensive picture of how research is being received around the world" and measures use of research in "news outlets, policy documents … and social media attention" (University of Aberdeen, 2022). While access to this data can indeed be beneficial for an individual researcher, what is of interested in this study are the ways in which this tool can be used for managing and shaping worker autonomy.

Figure 52. Respondents' awareness of their institution's ability to monitor research performance via Altmetric.

Please indicate your level of agreement with the following statements.

I believe that my institution has the ability to digitally monitor my research performance via the following online systems.

Altmetrics (for impact outside academia) (n=1,257)

Strongly agree: 21.8%
Somewhat agree: 29.5%
Neither agree nor disagree: 27.2%
Somewhat disagree: 7.9%
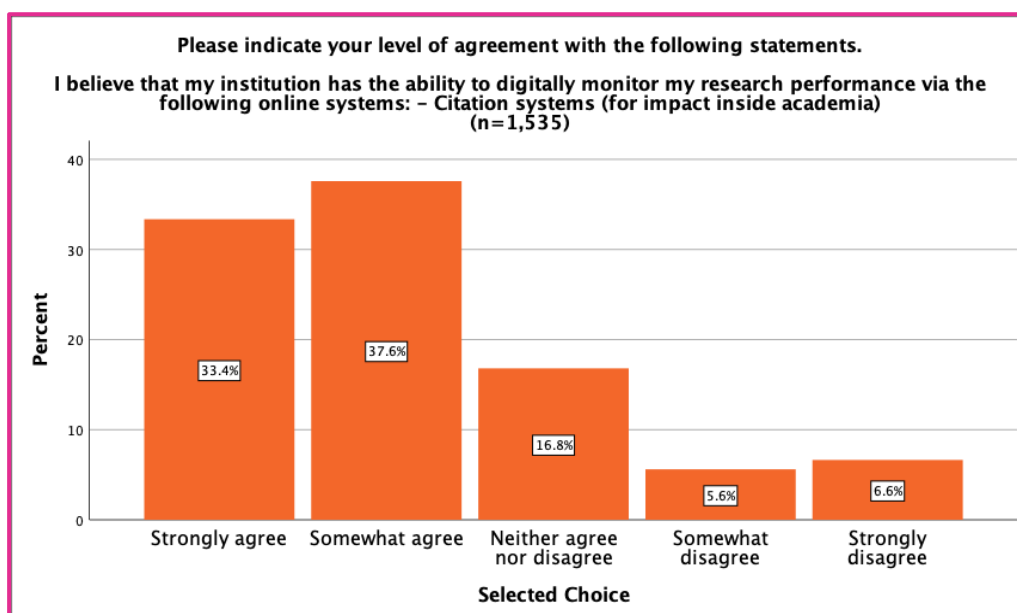Strongly disagree: 13.6%

Respondents' awareness of their institution's ability to use digital citation count systems to monitor research performance

Awareness of the monitoring and benchmarking potential of citation systems was strong, with over two-thirds (71%) either somewhat, or strongly, agreeing that their institution had the ability to use citation software analysis to monitor their research performance (Figure 53).

Figure 53. Respondents' awareness of their institution's ability to use digital citation count systems to monitor research performance.

Please indicate your level of agreement with the following statements.

I believe that my institution has the ability to digitally monitor my research performance via the following online systems: – Citation systems (for impact inside academia) (n=1,535)

Strongly agree: 33.4%
Somewhat agree: 37.6%
Neither agree nor disagree: 16.8%
Somewhat disagree: 5.6%
Strongly disagree: 6.6%

Respondents' awareness of their institution's ability to monitor their research performance via digital repository management systems (e.g. number of outputs)

Awareness of the monitoring and benchmarking potential of repository systems was high, with 41.9% of respondents strongly agreeing and 38.2% somewhat agreeing that their institutions were able to digitally monitor research performance through online repository systems, such as ePrints and Figshare (Figure 54). Systems like Figshare and ePrints, while mainly providing a repository functions that enabled open access practices, also provide institutions with rich statistical reporting (Figshare, 2023).

Figure 54. Respondents' awareness of their institution's ability to monitor their research performance via digital repository management systems.
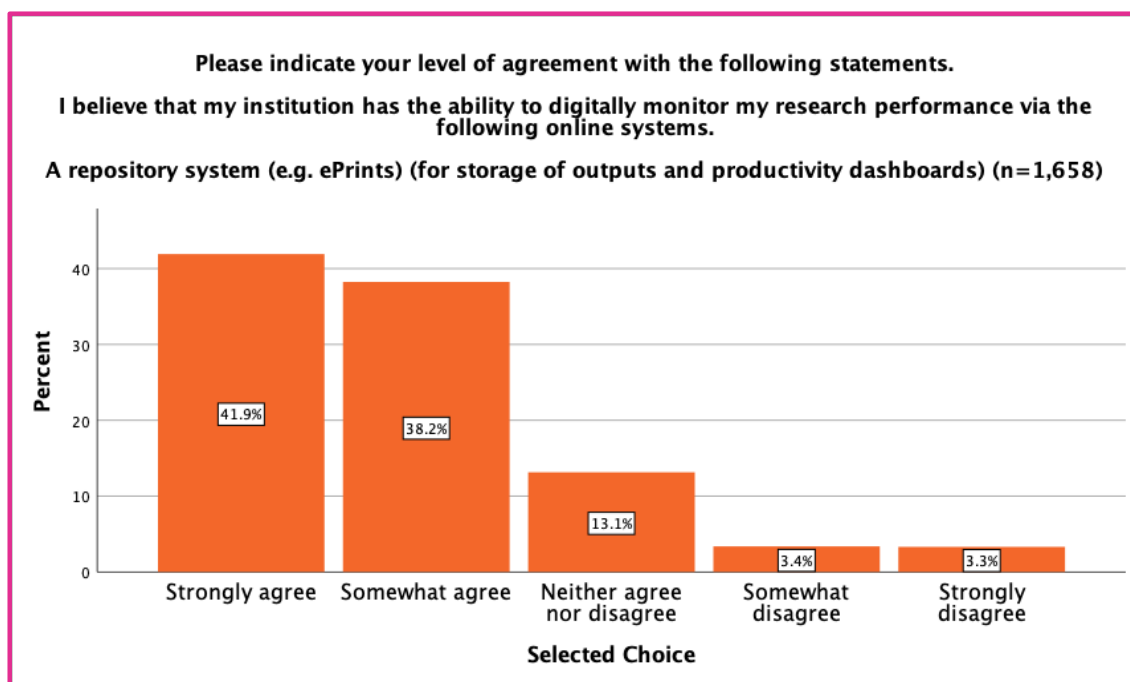
Awareness of the institutional ability to monitor the public profile of academics via online reputation management tools

Awareness of the digital monitoring potential that institutions have, through the use of social media monitoring tools, was very high, with 43.9% of respondents choosing 'strongly agree' and 38.3% choosing 'somewhat agree'.

Voices of " *academics*

"*A few years ago, I would have said yes, due to a particular member of the senior management in the Faculty, who was not supportive of my research institute's area of research. This often led to internal money to support research development being diverted away from us. Now this individual is gone, I would say no*".

"*There is pressure in university research monitoring to focus on creating outputs that are likely to produce 4* outputs. These outputs have certain criteria that do not necessarily reflect the academic values and needs of a particular field at a given time*".

"*There is a lot of control over what I research and a lot more emphasis on practice based and applied research*".

"*I can't do what I want to do, which I feel is relevant to real world needs.*"

Voices of " *academics*

"It makes me hesitate to research topics that interest me but that are not within a UoA descriptor that my institution is likely to submit to the REF".

"I have to force my research into boxes applicable for research council funding, rather than pursuing research that does not need additional funds".

Voices of " *academics*

"Makes me reluctant to do things that won't be favourable to the narrow interests of the short sighted 'leadership' team".

"This aligns with broader shifts in HE - the push towards 'impact' driven research drives research towards policy-oriented research (which isn't necessarily what you'd want to do and is often less radical than other forms of research as it aligns with dominant neoliberal norms)".

"Self-censoring. I am looking forward to retirement to research what want to study without institutional oversight and excellence committee's grading my work according its own understanding of permissible excellence".

"There is a tendency of research being instrumental to monitoring practices, hence reducing academic freedom".

Figure 55. Awareness of the institutional ability to monitor the public profile of academics via online reputation management tools.
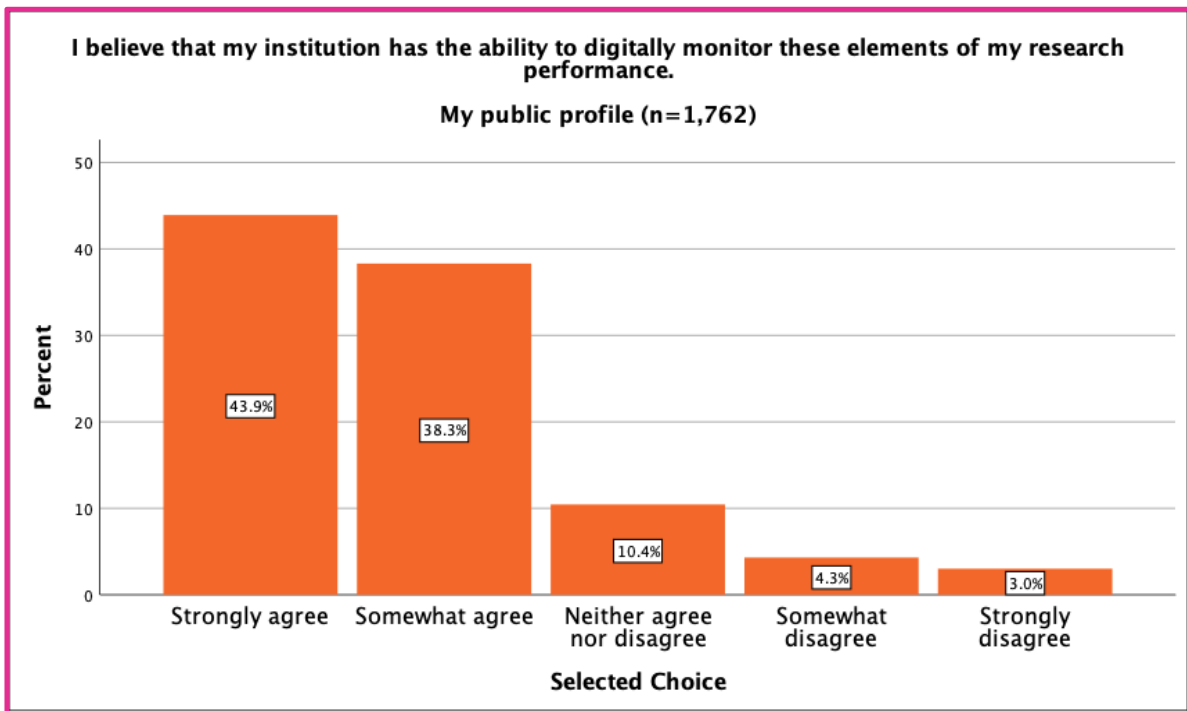
A one-way ANOVA revealed that there was a statistically significant difference in the mean response between those on fixed-term and those on permanent contracts (F(1, 1760) = [4.879], p = 0.027). Respondents on fixed-term contracts were less likely (37.4%) than respondents on permanent contracts (44.9%) to strongly agree that their institution could digitally monitor their public profile (Table 20).

Table 20. Awareness of the institutional ability to monitor the public profile of academics via online reputation management tools - Comparison of responses: fixed-term vs permanent.

			I believe that my institution has the ability to digitally monitor these elements of my research performance: - My public profile					Total
			Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	
My contract is:	Permanent	Count	691	585	154	67	43	1540
		%	44.9%	38.0%	10.0%	4.4%	2.8%	100.0%
	Fixed term	Count	83	90	30	9	10	222
		%	37.4%	40.5%	13.5%	4.1%	4.5%	100.0%
Total		Count	774	675	184	76	53	1762
		%	43.9%	38.3%	10.4%	4.3%	3.0%	100.0%

Awareness of the institutional ability to monitor grant applications

The monitoring of grant income performance (income generated, and grants applied) can be one of the biggest stressors in contemporary academic work (Parr, 2014). While the creation and submission of a grant application is an activity within the control of the individual academic, the winning of grant income is not, with success rates low (Kamerlin, Yates, Kell, Donald, McCoy and Tregoning, 2019), in part, due to the high number of applications (UKRI, 2023).

The Times Higher Education reports the average success rate for grants — in general — as one in six (Kamerlin, Yates, Kell, Donald, McCoy and Tregoning, 2019), while for the BA/Leverhulme Small Grants, even back in 2016, only 20% of applications were funded (University of Kent, 2016). UKRI (2023) reports an average 20% institutional success rate for their ESRC early career researcher schemes; although there can be significant variation in which regions get the most UKRI funding — London-based institutions won 20-30% of the 21/22 funding, while certain other regions received closer to 5% — as well as differences in institutional performance (e.g. the University of Manchester had a 41% success rate). As such, for a particular university and for an individual academic at a particular university, many factors can come into play. For example, Bournemouth University (2022) reported that, in 20/21, "86 applications were submitted to the UKRI and it's [sic.]

research councils, at a value of £18.4M. To date, ten (12%) have been awarded at a total value of £1.5M (8%)".

In 2015, in response to Freedom of Information requests made by the Times Higher Education (Jump, 2015), one in six institutions confirmed that they set individuals grant income targets and that, in some institutions, academics "were identified for potential redundancy if their grant income fell below a certain threshold". In 2014, grant income targets set by Imperial University were implicated in the suicide of Professor Stefan Grimm, who received an email from university management stating that he was "struggling to fulfil the metrics of a Professorial post at Imperial College which includes maintaining established funding in a programme of research with an attributable share of research spend of £200k [per annum]" (Parr, 2014).

Within this context, awareness of the monitoring potential institutions have with respect to the grants respondents applied for was very strong, with 64.8% of respondents choosing 'strongly agree' and 24.4% choosing 'somewhat agree' (Figure 56).

Figure 56. Awareness of the institutional ability to monitor grant applications.
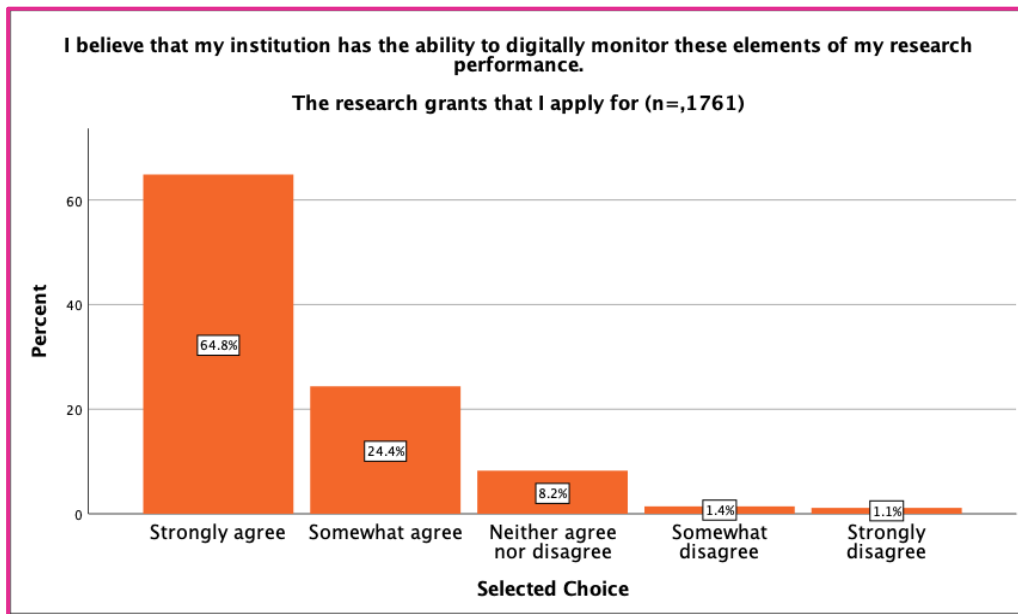
"*Academic freedom in research can be constrained by multiple actors including the employer and funding bodies*".

Survey respondent

A one-way ANOVA (Table 21) revealed that there was a statistically significant difference in the mean response between respondents on fixed-term contracts and those on permanent contracts ($F_{(1, 1759)}$ = [16.734], p = 0.000). Staff on fixed-term contracts were less likely (52.6%) than staff on permanent contracts (66.5%) to strongly agree that their institution could digitally monitor their research performance by analysing the research grants that they applied for. This, in part, could be due to those employed fixed-term (due to contractual status) not having income generation targets to meet.

Table 21. Awareness of institutional ability to monitor grant applications - Comparison of responses: fixed-term vs permanent.
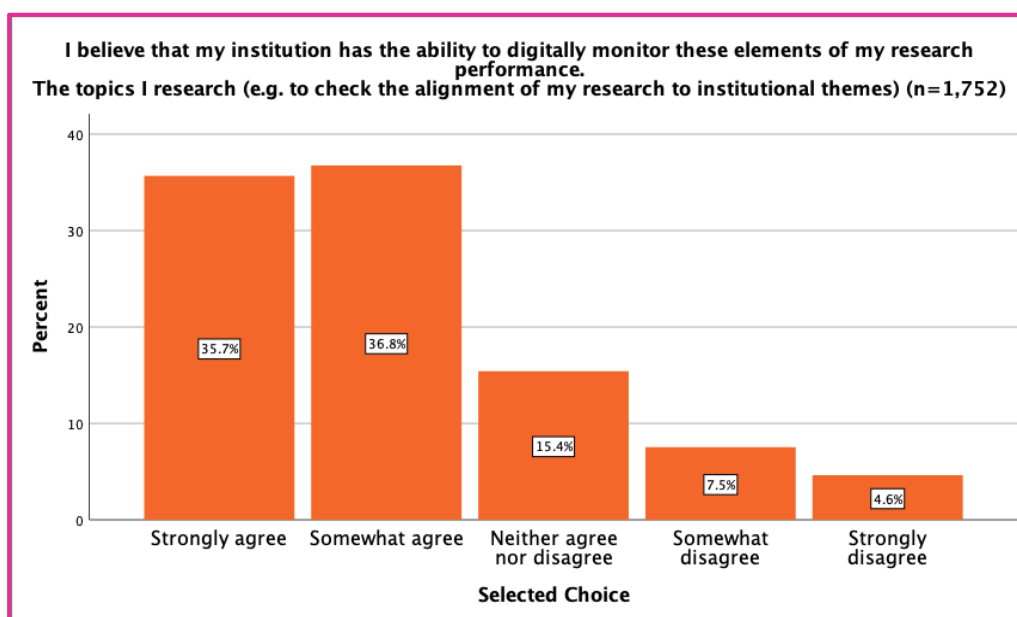
| | | | I believe that my institution has the ability to digitally monitor these elements of my research performance: - The research grants that I apply for | | | | | Total |
			Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	
My contract is:	Permanent	Count	1031	367	115	20	17	1550
		%	66.5%	23.7%	7.4%	1.3%	1.1%	100.0%
	Fixed term	Count	111	62	30	5	3	211
		%	52.6%	29.4%	14.2%	2.4%	1.4%	100.0%
Total		Count	1142	429	145	25	20	1761
		%	64.8%	24.4%	8.2%	1.4%	1.1%	100.0%

Awareness of the institutional ability to monitor the public profile of academics via online reputation management tools

In 2019, 15.4% of respondents to the Real Time REF Review study indicated they had been asked to change the focus of their research to suit the REF requirements (Pells, 2019). Since then, there has been a trend towards universities setting priority research themes which academic staff are — to varying extents— encouraged to align their research to (see University of Central Lancashire, 2023; University of Hertfordshire, 2023; University of Liverpool, 2023; and University of Portsmouth, 2023). Awareness of the monitoring potential that institutions have, with regard to the extent to which respondents aligned their individual research activities to institutional research themes was also high, with 72.5% of respondents either somewhat agreeing or strongly agreeing that their institutions were able to monitor individuals' research activities to assess alignment with institutional research themes (Figure 57).

Figure 57. Awareness of institutional ability to monitor alignment of research to institutional research themes or institutional research priorities.

I believe that my institution has the ability to digitally monitor these elements of my research performance.
The topics I research (e.g. to check the alignment of my research to institutional themes) (n=1,752)

- Strongly agree: 35.7%
- Somewhat agree: 36.8%
- Neither agree nor disagree: 15.4%
- Somewhat disagree: 7.5%
- Strongly disagree: 4.6%

"I am currently being made redundant because apparently my previous research and publications are 'primarily' in areas the University has decided to disinvest from".
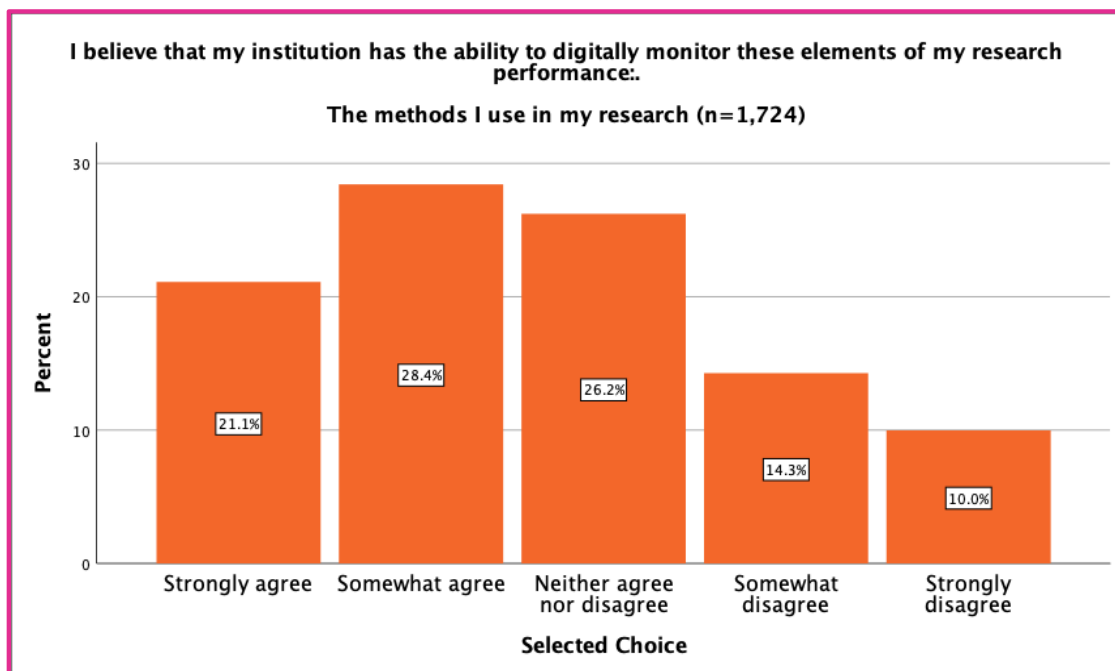
Survey respondent

Awareness of institutional ability to monitor research methods

Respondents' awareness of whether or not their institutions could digitally monitor the methods they were using for their research (e.g. through institutional digital ethics application systems) was high, with 49.5% either somewhat agreeing or strongly agreeing, while less than half of this proportion (24.3%) somewhat disagreed or strongly disagreed.

Figure 58. Awareness of institutional ability to monitor research methods.

I believe that my institution has the ability to digitally monitor these elements of my research performance:.

The methods I use in my research (n=1,724)

- Strongly agree: 21.1%
- Somewhat agree: 28.4%
- Neither agree nor disagree: 26.2%
- Somewhat disagree: 14.3%
- Strongly disagree: 10.0%

"Although my institution is supportive of research (far more than my previous institution), the systems for ethical approval, which are controlled by the Business School are obstructive in relation to ambitious or innovative social research".
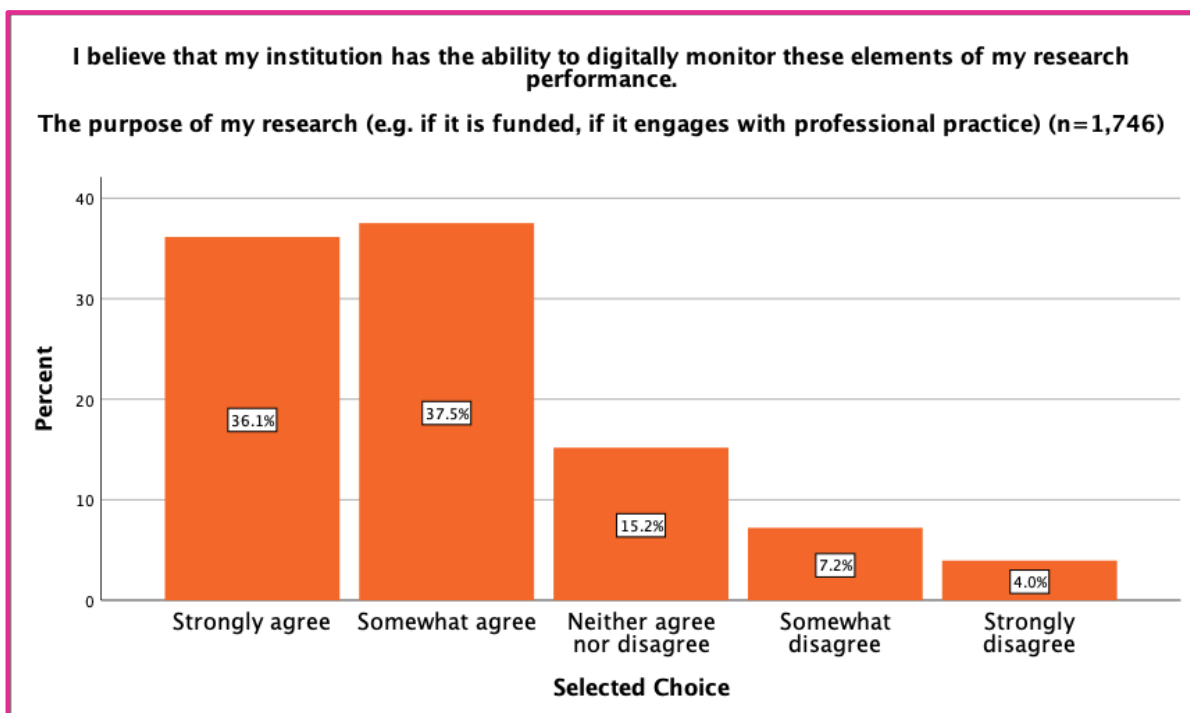
Survey respondent

Awareness of the institutional ability to monitor the purpose of research (if it is funded, if it engages with professional practice)

A key aspect of academic freedom is one's freedom to determine the purpose of the research one undertakes (i.e. that it is intrinsically driven) In terms of whether institutions could digitally monitor the this aspect of research (whether it was funded, how it engaged with professional practice, etc.), there was widespread recognition among respondents that institutions could do this. 73.6% of respondents selected one of the agree options, while only 11.2% chose a disagree option (Figure 59).

Figure 59. Awareness of the institutional ability to monitor the purpose of research.

I believe that my institution has the ability to digitally monitor these elements of my research performance.

The purpose of my research (e.g. if it is funded, if it engages with professional practice) (n=1,746)

| Selected Choice	Percent
Strongly agree	36.1%
Somewhat agree	37.5%
Neither agree nor disagree	15.2%
Somewhat disagree	7.2%
Strongly disagree	4.0%

Awareness of institutional ability to monitor research dissemination activities

72.8% of respondents (Figure 60) either strongly agreed or somewhat agreed that their institutions had the ability to digitally monitor how their research was disseminated (in terms of the choice of journals for the submission of articles, choice of conferences to attend, etc.).

Figure 60. Awareness of institutional ability to monitor research dissemination activities.
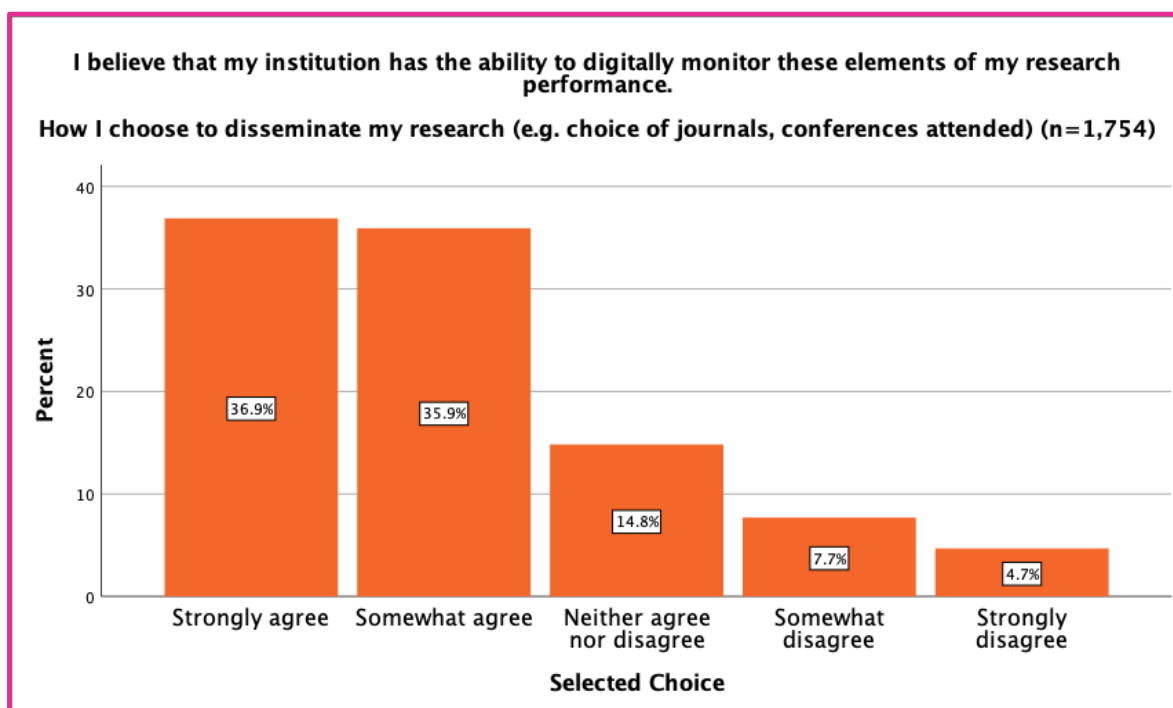
Awareness of institutional ability to monitor the extent to which research is generating impact

81% of respondents either somewhat or strongly agreed that they believed that their institutions had the ability to digitally monitor whether or not they were generating impact (Figure 61).

Figure 61. Awareness of institutional ability to monitor the extent to which research is generating impact.
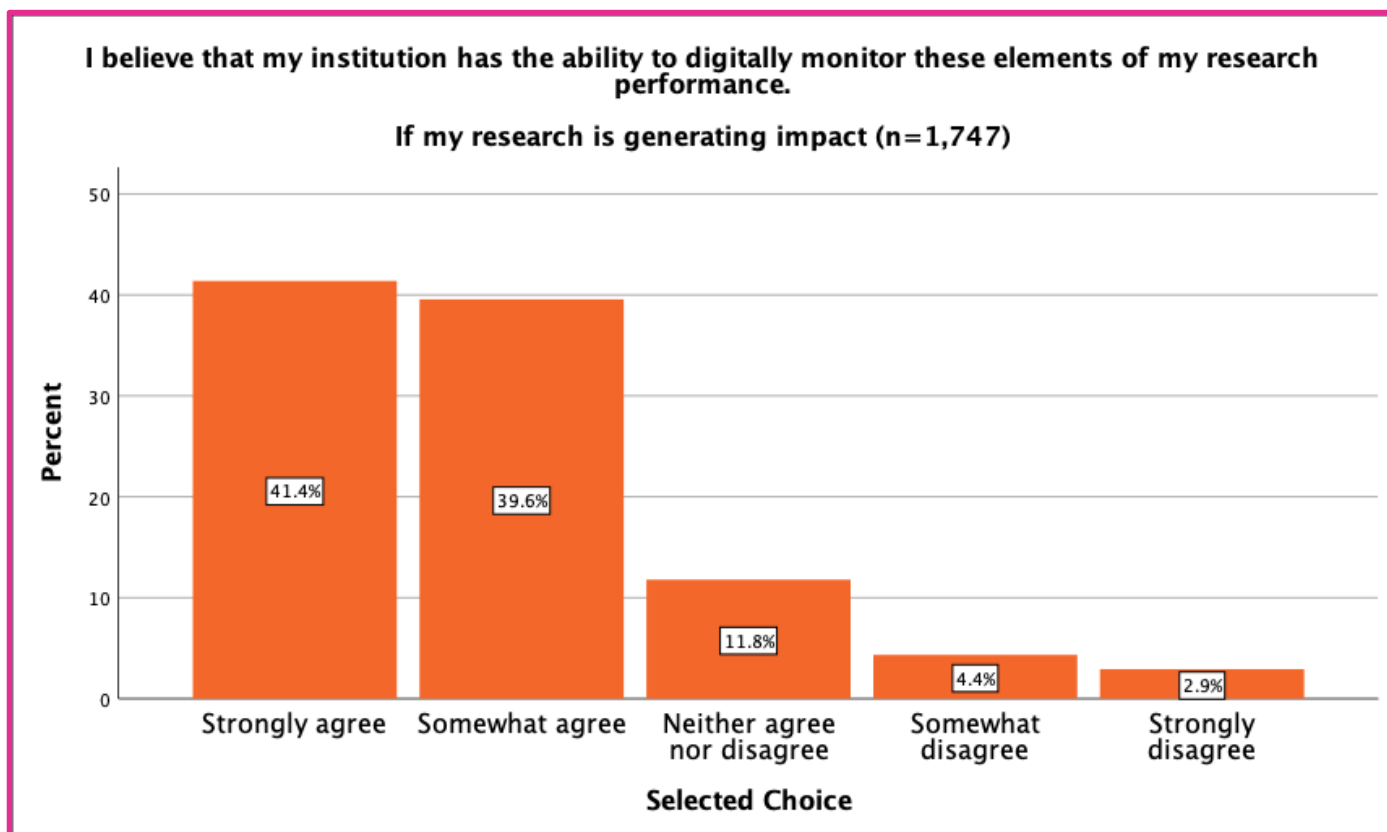

Where are we now? The current state of digital governance and academic freedom

The next series of survey questions sought to establish respondents' views on the state of digital governance in their institution.

The relationship between monitoring through digital systems and academic freedom

Respondents overwhelmingly felt that monitoring through digital systems as leading to decreased academic freedom (Figure 62).

Figure 62. The relationship between monitoring through digital systems and academic freedom.
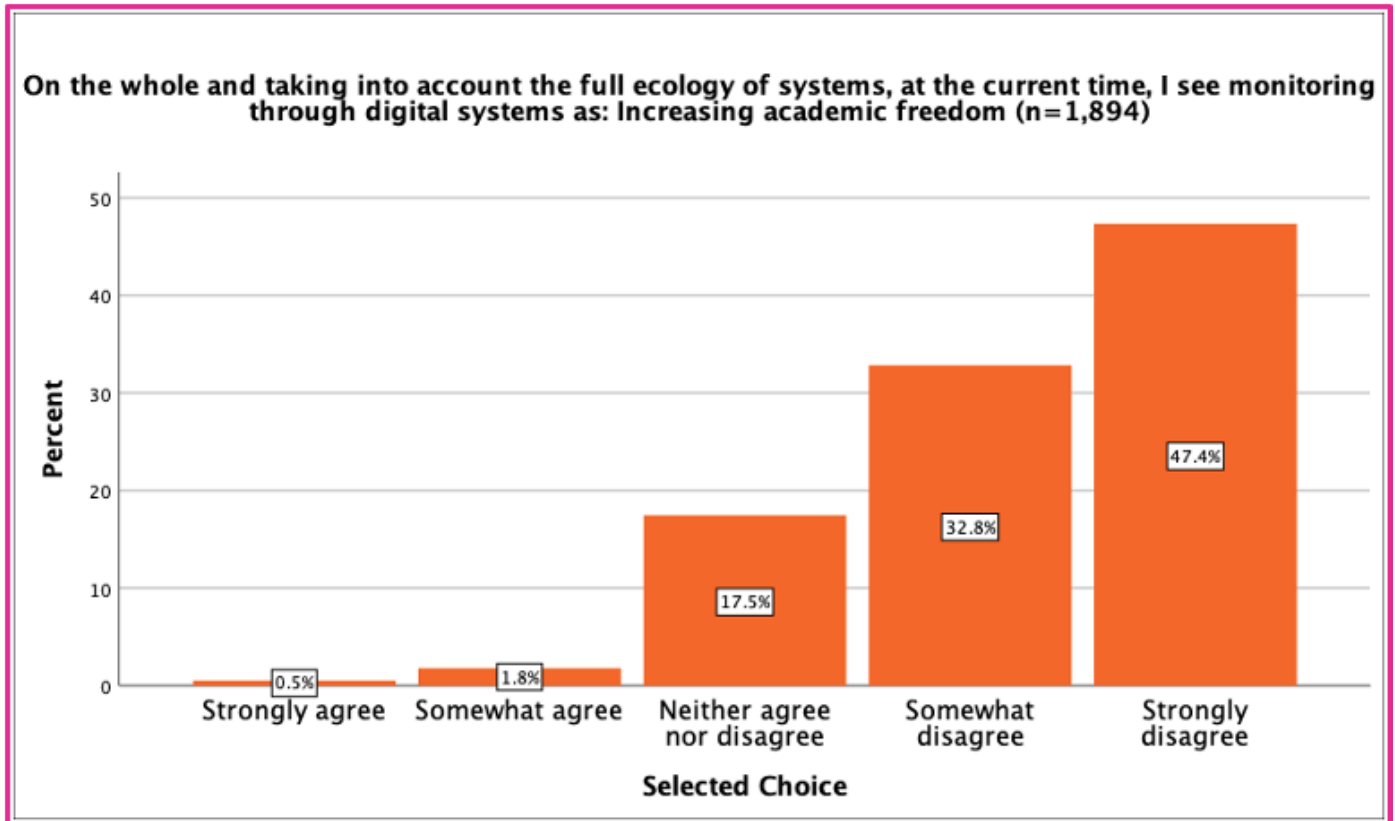
A one-way ANOVA revealed that there was a statistically significant difference in the mean response between respondents on fixed-term contracts and those on permanent contracts ($F_{(1, 1892)}$ = [6.338], p = 0.012). Respondents on permanent contracts felt more strongly than staff on fixed-term contracts that institutional monitoring via the use of digital systems led to increased academic freedom (Table 22).

Table 22. The relationship between monitoring through digital systems and academic freedom - Comparison of responses: fixed-term vs permanent.
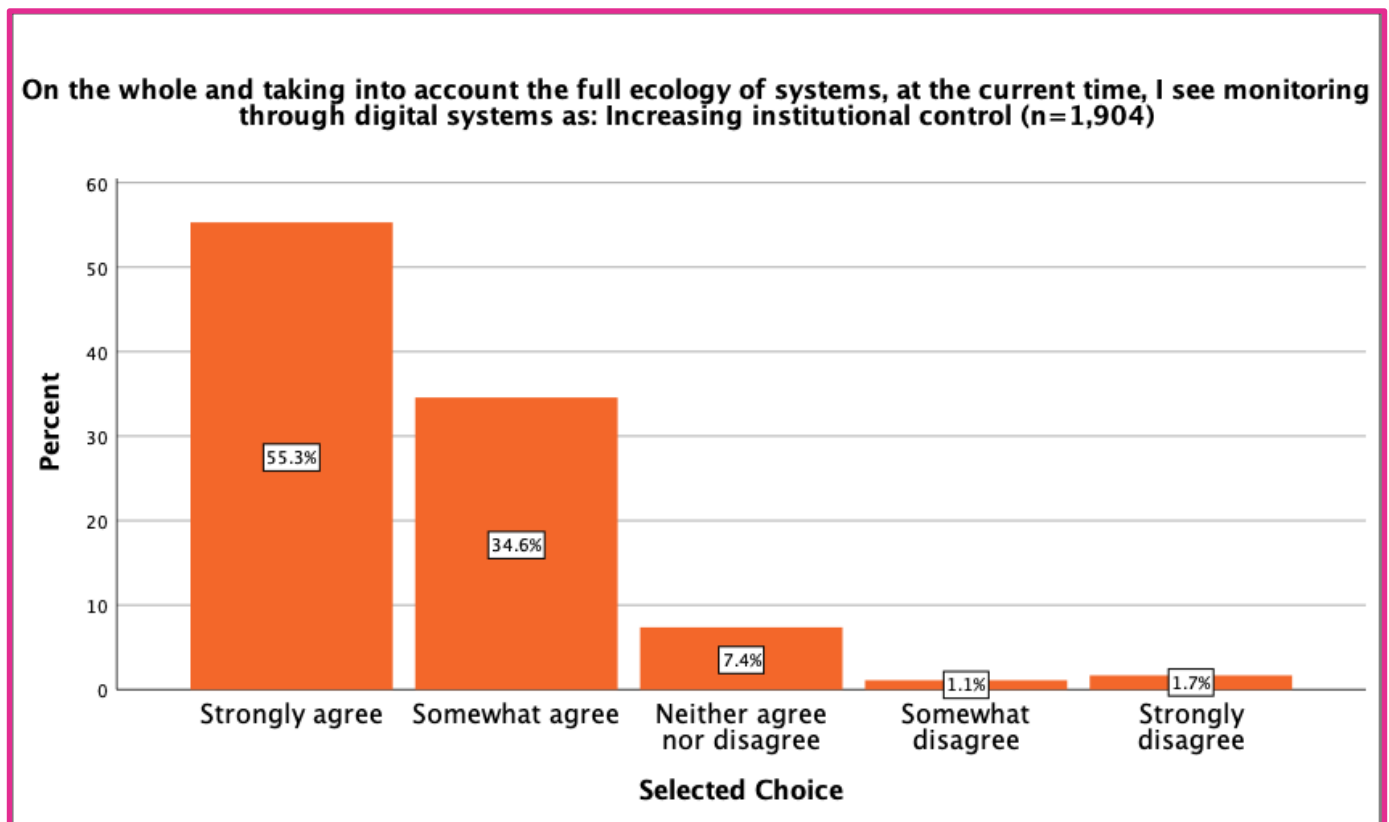
			On the whole and taking into account the full ecology of systems, at the current time, I see monitoring through digital systems as: - Increasing academic freedom					Total
			Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	
My contract is:	Permanent	Count	10	25	277	532	793	1637
		%	0.6%	1.5%	16.9%	32.5%	48.4%	100.0%
	Fixed term	Count	0	9	54	90	104	257
		%	0.0%	3.5%	21.0%	35.0%	40.5%	100.0%
Total		Count	10	34	331	622	897	1894
		%	0.5%	1.8%	17.5%	32.8%	47.4%	100.0%

The relationship between monitoring through digital systems and institutional control

Respondents overwhelmingly felt that monitoring by their institution, by means of digital systems, had led to an increase in institutional control. 55.3% of respondents chose 'strongly agree' and 34.6% selected 'somewhat agree' for this statement (Figure 63).

Figure 63. The relationship between monitoring through digital systems and institutional control.

On the whole and taking into account the full ecology of systems, at the current time, I see monitoring through digital systems as: Increasing institutional control (n=1,904)
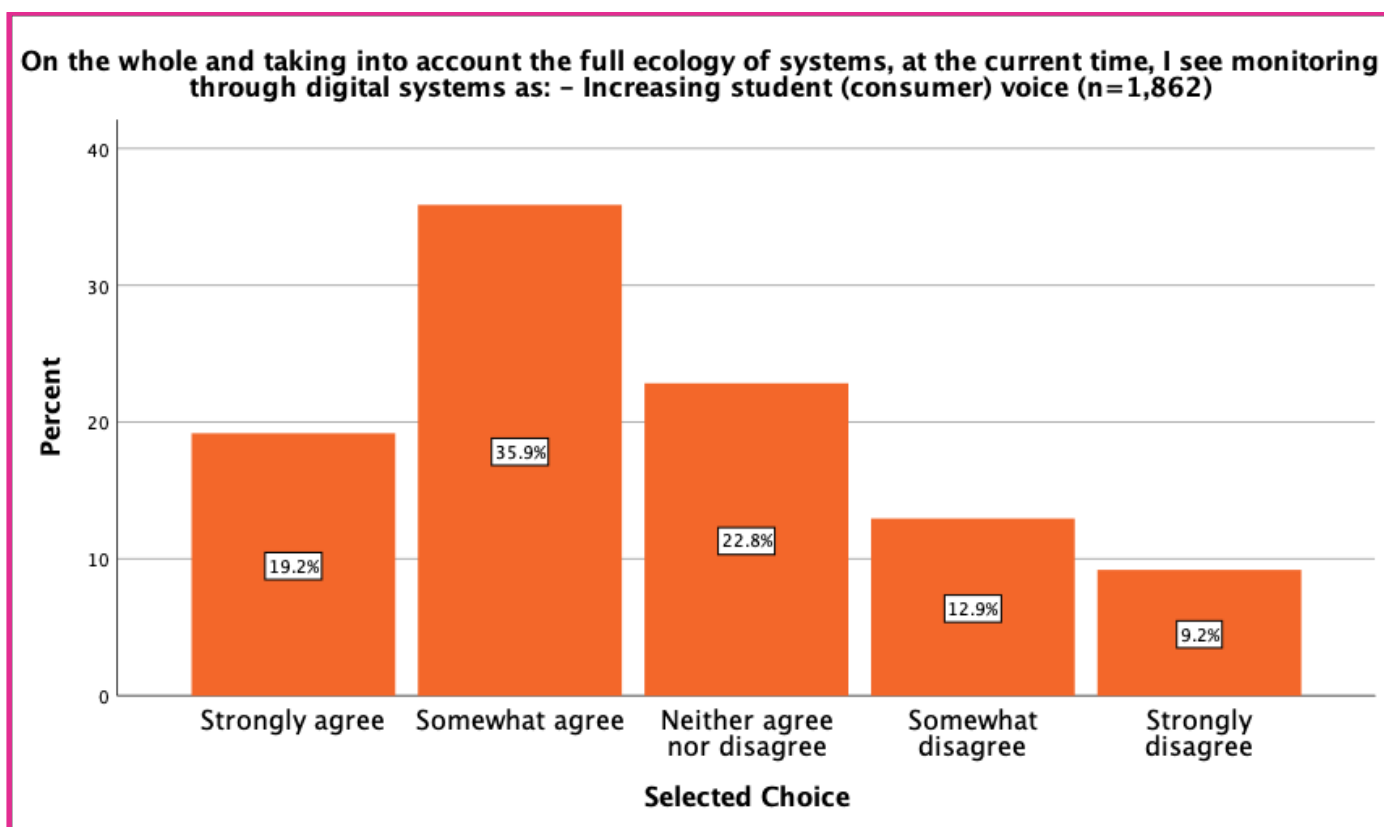
Awareness of the institutional ability to monitor the purpose of research (if it is funded, if it engages with professional practice)

Over half of all respondents felt that another key impact of monitoring through digital systems — in addition to reducing academic freedom and increasing institutional oversight — was to increase the strength of student (consumer) voice. 35.9% of respondents somewhat agreed and 19.2% strongly agreed that digital monitoring systems would increase student voice (Figure 64).

Figure 64. The relationship between monitoring through digital systems and the strength of student (consumer) voice.

On the whole and taking into account the full ecology of systems, at the current time, I see monitoring through digital systems as: – Increasing student (consumer) voice (n=1,862)


Where are we heading? The trajectory of digital governance and the future of academic freedom

Three questions in the survey asked respondents to anticipate what the UK higher education sector would look like in five years, if the current trajectory of digital monitoring were to continue.

The trajectory of digital monitoring and the direction of academic freedom

The overwhelmingly majority of respondents indicated that they thought that the current trajectory of digital monitoring would lead to reductions in academic freedom. 87.2% of participants chose either the 'somewhat disagree' or 'strongly disagree' response options (Figure 65).
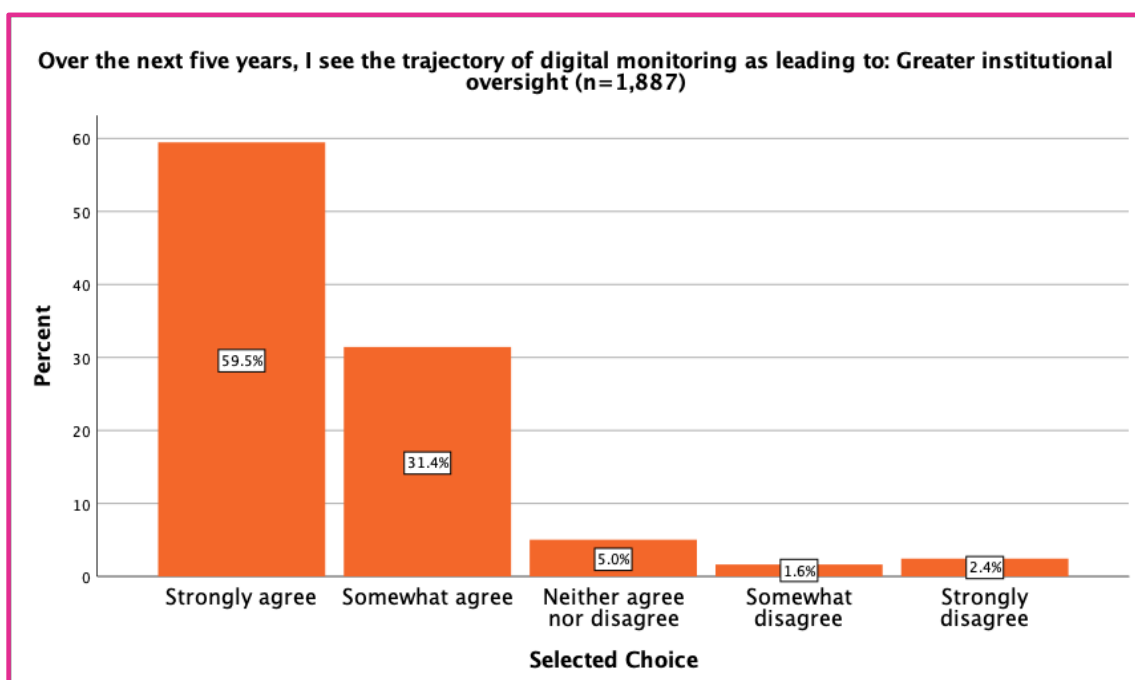
Figure 65. The trajectory of digital monitoring and the direction of academic freedom.
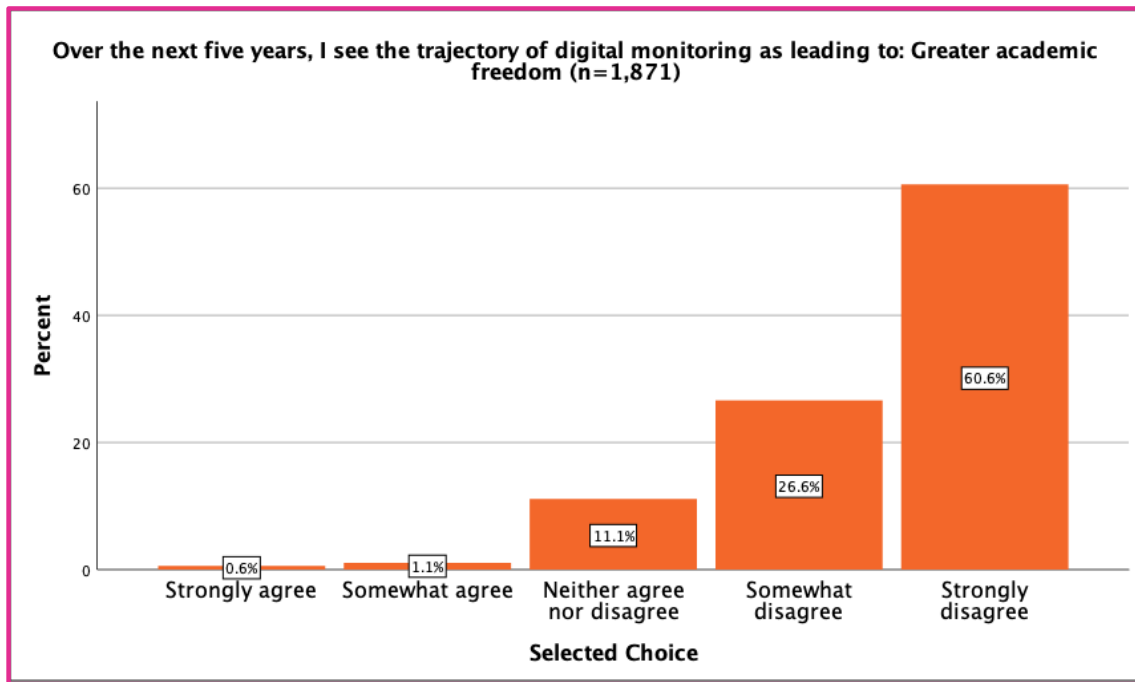
The trajectory of digital monitoring and the direction of institutional oversight

Most respondents anticipated that the trajectory of digital monitoring would lead to even greater institutional oversight, with 90.9% selecting 'somewhat agree' or 'strongly agree' (Figure 66).

Figure 66. The trajectory of digital monitoring and the direction of institutional oversight.

A one-way ANOVA revealed that there was a statistically significant difference in the mean response between those respondents on fixed-term contracts and those on permanent contracts (F(1, 1885) = [6.861], p = 0.009). Respondents on permanent contracts were more likely than staff on fixed-term contracts to believe that the trajectory of digital monitoring would lead to greater institutional oversight (Table 23).
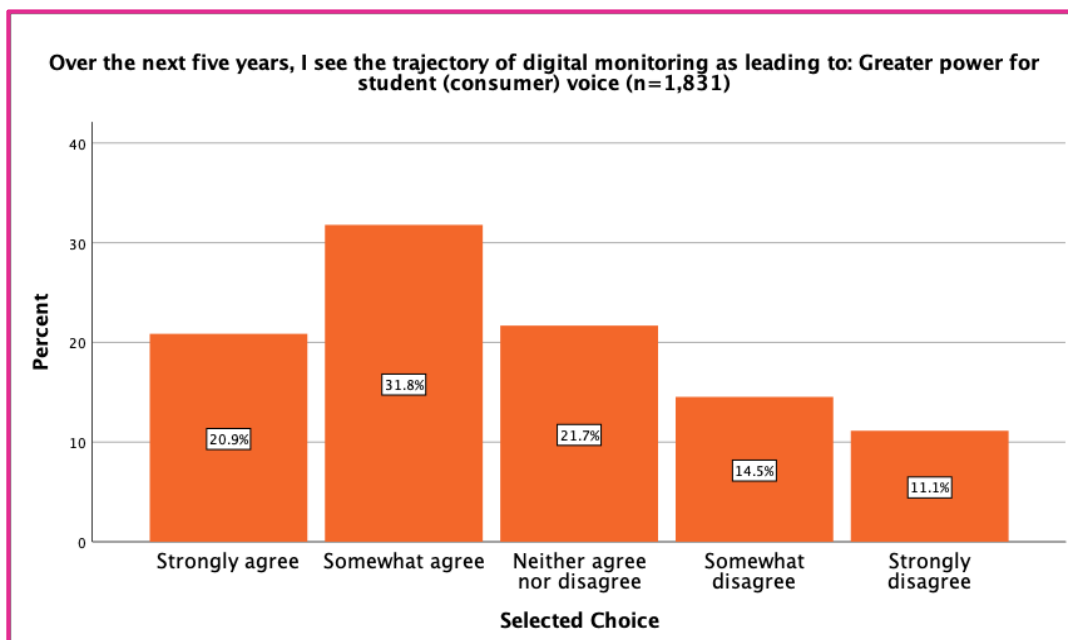
Table 23. The trajectory of digital monitoring and the direction of institutional oversight - Comparison of responses: fixed-term vs permanent.

			Over the next five years, I see the trajectory of digital monitoring as leading to: - Greater institutional oversight					Total
			Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	
My contract is:	Permanent	Count	993	498	78	26	38	1633
		%	60.8%	30.5%	4.8%	1.6%	2.3%	100.0%
	Fixed term	Count	129	95	17	5	8	254
		%	50.8%	37.4%	6.7%	2.0%	3.1%	100.0%
Total		Count	1122	593	95	31	46	1887
		%	59.5%	31.4%	5.0%	1.6%	2.4%	100.0%

The trajectory of digital monitoring and the direction of the power of student (consumer) voice

52.7% of respondents anticipated that the trajectory of digital monitoring would lead to a stronger student (consumer) voice (Figure 67).

Figure 67. The trajectory of digital monitoring and the direction of the power of student (consumer) voice.

A one-way ANOVA revealed that there was a statistically significant difference in the mean response between those respondents on fixed-term contracts and those on permanent contracts ($F(1, 1829) = [6.113]$, $p = 0.014$).

Respondents on permanent contracts (53.8%) were more likely than staff on fixed-term contracts (45.4%) to believe that digital monitoring would increase the power of student voice (Table 24).

Table 24. The trajectory of digital monitoring and the direction of the power of student (consumer) voice - Comparison of responses: fixed-term vs permanent.

| | | | Over the next five years, I see the trajectory of digital monitoring as leading to: - Greater power for student (consumer) voice | | | | | Total |
			Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	
My contract is:	Permanent	Count	347	506	337	222	175	1587
		%	21.9%	31.9%	21.2%	14.0%	11.0%	100.0%
	Fixed term	Count	35	76	60	44	29	244
		%	14.3%	31.1%	24.6%	18.0%	11.9%	100.0%
Total		Count	382	582	397	266	204	1831
		%	20.9%	31.8%	21.7%	14.5%	11.1%	100.0%

# Freedom of speech on campuses and academic freedom

The final set of questions explored respondents' views on the – at the time – proposed Higher Education (Freedom of Speech) Bill that the UK government was legislating for.

Familiarity with the Higher Education (Freedom of Speech) Bill

Respondents' degree of familiarity with the bill was mixed, with the biggest grouping of respondents (34.2%) opting for 'somewhat familiar'.

Figure 68. Familiarity with the Higher Education (Freedom of Speech) Bill.
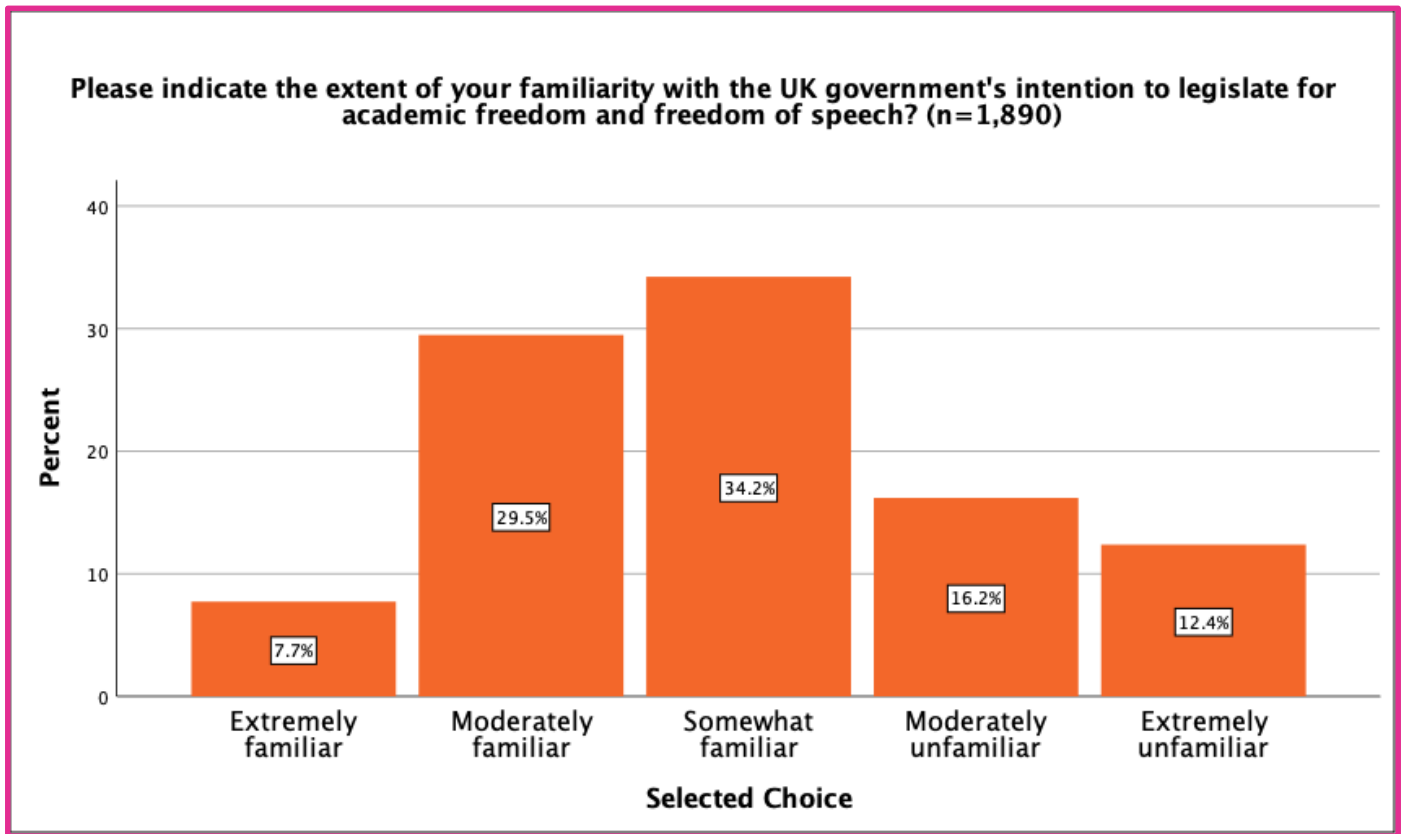
A one-way ANOVA revealed that there was a statistically significant difference in the mean response between those respondents on fixed-term contracts and those on permanent contracts ($F(1, 1888) = [5.744]$, $p = 0.017$). Perhaps not surprisingly, respondents on permanent contracts (38.4%) were more likely than staff on fixed-term contracts (30.2%) to be extremely or moderately familiar with the U.K. government's intention to legislate on academic freedom and freedom of speech.

Table 25. Familiarity with the Higher Education (Freedom of Speech) Bill - Comparison of responses: fixed-term vs permanent.
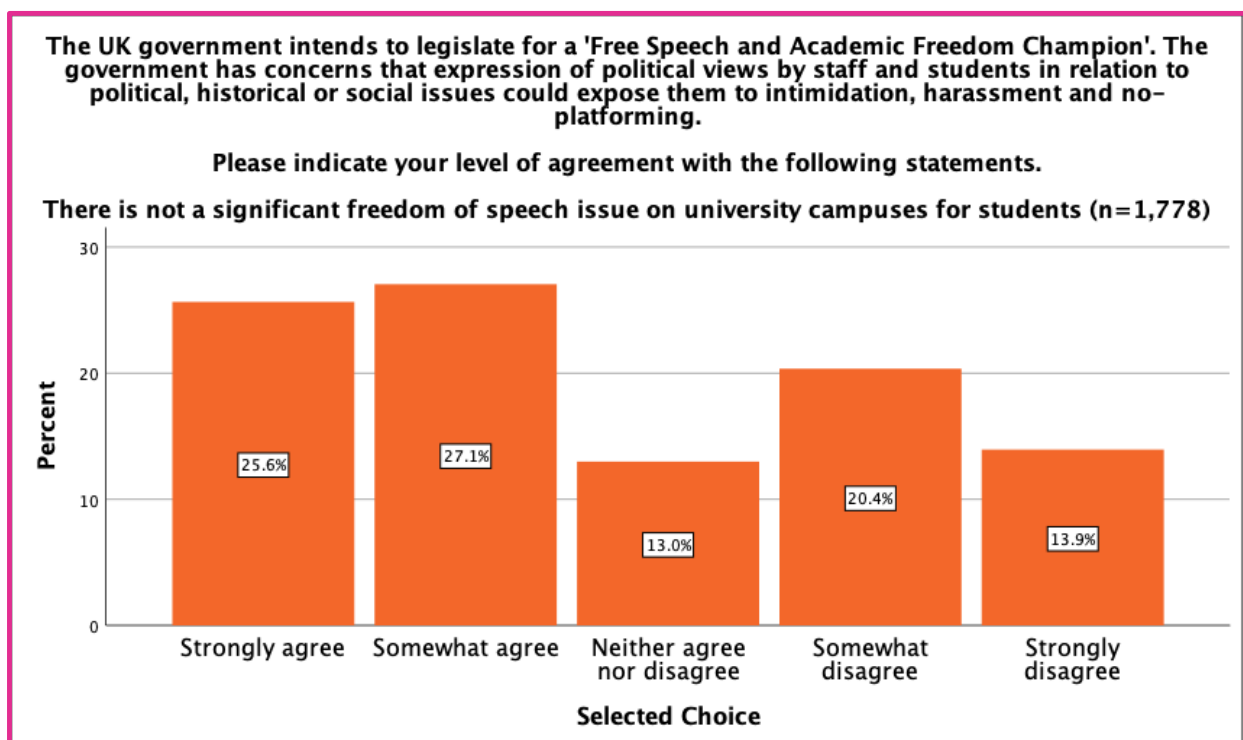
			Please indicate the extent of your familiarity with the UK government's intention to legislate for academic freedom and freedom of speech?					Total
			Extremely familiar	Moderately familiar	Somewhat familiar	Moderately unfamiliar	Extremely unfamiliar	
My contract is:	Permanent	Count	133	491	549	257	198	1628
		%	8.2%	30.2%	33.7%	15.8%	12.2%	100.0%
	Fixed term	Count	13	66	98	49	36	262
		%	5.0%	25.2%	37.4%	18.7%	13.7%	100.0%
Total		Count	146	557	647	306	234	1890
		%	7.7%	29.5%	34.2%	16.2%	12.4%	100.0%

The extent to which there is a freedom of speech issue on university campuses for students

When asked if there was a significant freedom of speech issue on university campuses for students, there were mixed views with 52.7% either strongly agreeing or somewhat agreeing that there was not a significant freedom of speech issue (Figure 69).

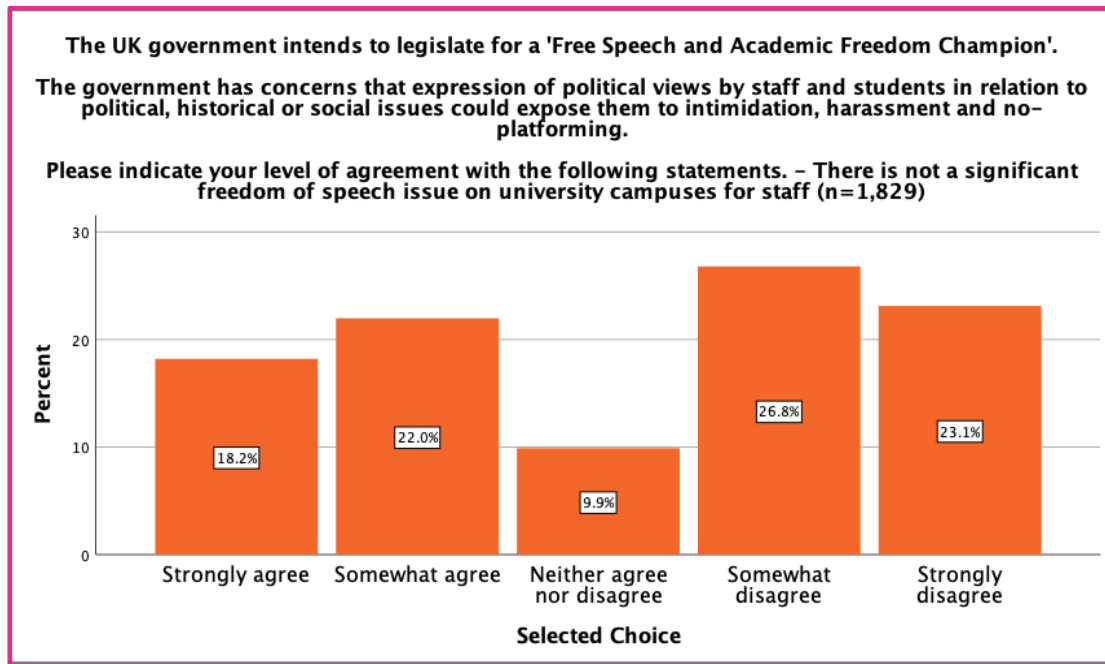*Figure 69. The extent to which there is a freedom of speech issue on university campuses for students.*

The UK government intends to legislate for a 'Free Speech and Academic Freedom Champion'. The government has concerns that expression of political views by staff and students in relation to political, historical or social issues could expose them to intimidation, harassment and no-platforming.

Please indicate your level of agreement with the following statements.

There is not a significant freedom of speech issue on university campuses for students (n=1,778)

Selected Choice	Percent
Strongly agree	25.6%
Somewhat agree	27.1%
Neither agree nor disagree	13.0%
Somewhat disagree	20.4%
Strongly disagree	13.9%

The extent to which there is a freedom of speech issue on university campuses for staff

The question as to whether or not there was a significant freedom of speech issue on campus for staff also brought about a range of responses, with just under half (49.9%) of participants opting for either the 'somewhat disagree' or 'strongly disagree' options (Figure 70).
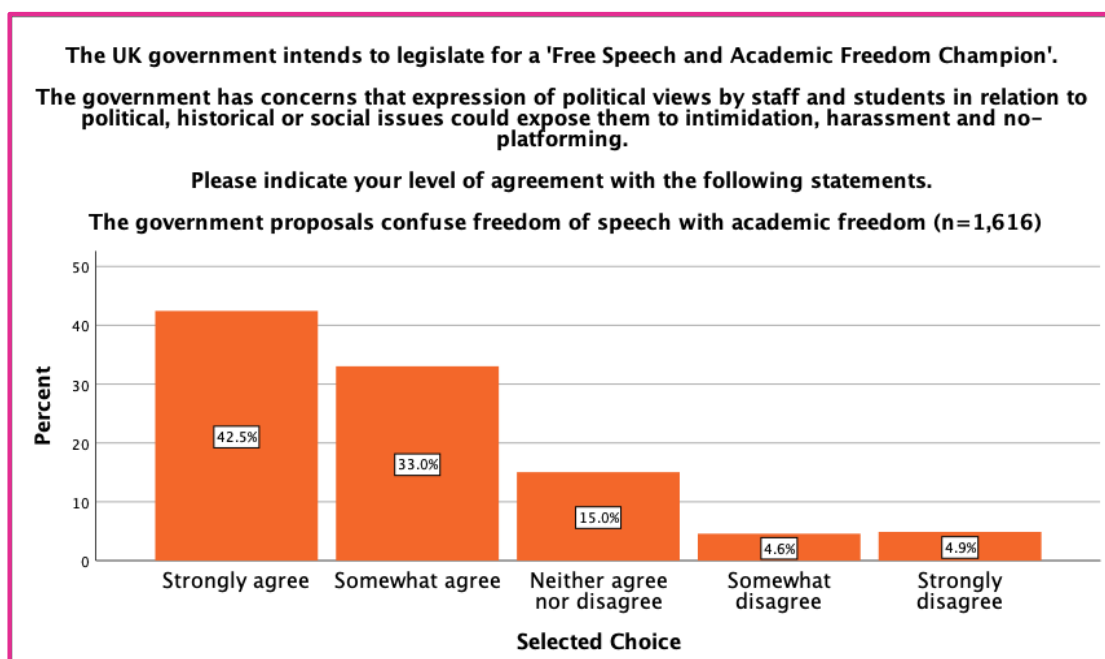
Figure 70. The extent to which there is a freedom of speech issue on university campuses for staff.

The UK government intends to legislate for a 'Free Speech and Academic Freedom Champion'.

The government has concerns that expression of political views by staff and students in relation to political, historical or social issues could expose them to intimidation, harassment and no-platforming.

Please indicate your level of agreement with the following statements. – There is not a significant freedom of speech issue on university campuses for staff (n=1,829)

The extent to which the government proposals confuse freedom of speech with academic freedom

75.5% of respondents either somewhat or strongly agreed that the government's proposal confused freedom of speech with academic freedom (Figure 71).

Figure 71. The extent to which the government proposals confuse freedom of speech with academic freedom.

The UK government intends to legislate for a 'Free Speech and Academic Freedom Champion'.

The government has concerns that expression of political views by staff and students in relation to political, historical or social issues could expose them to intimidation, harassment and no-platforming.

Please indicate your level of agreement with the following statements.

The government proposals confuse freedom of speech with academic freedom (n=1,616)

The extent to which respondents were aware of their employer monitoring the public online activities of academic staff

Most respondents (Figure 72) felt that their institutions were actively monitoring the online activities of their academics (25.6% chose 'strongly agree', and 41.2% selected 'somewhat agree').
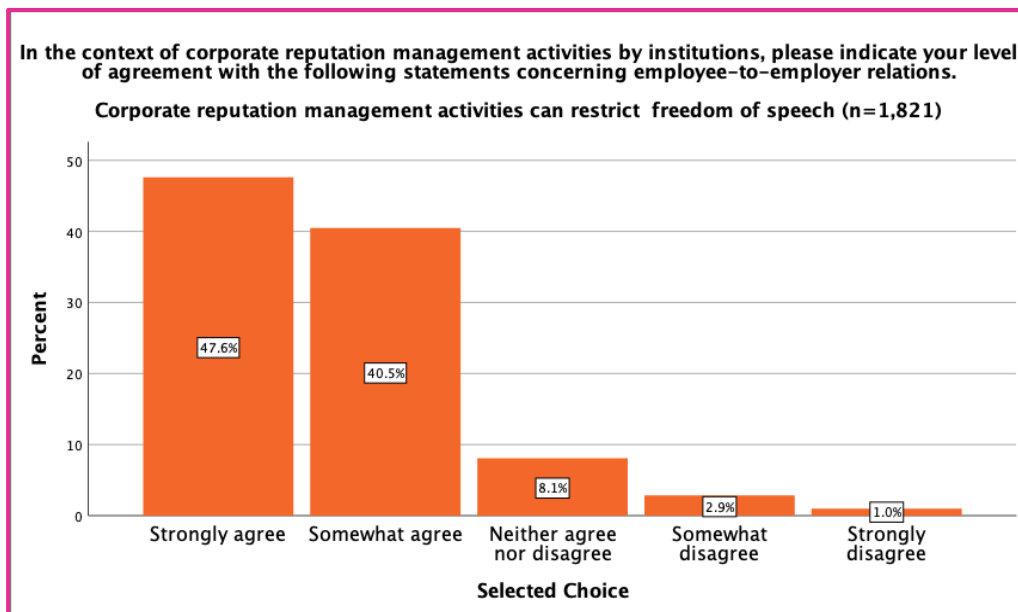
Figure 72. The extent to which respondents were aware of their employer monitoring the public online activities of academic staff.

In the context of corporate reputation management activities by institutions, please indicate your level of agreement with the following statements concerning employee-to-employer relations.

I believe that my institution monitors the online activities of academics (e.g. social media, news articles, public speaking) (n=1,638)
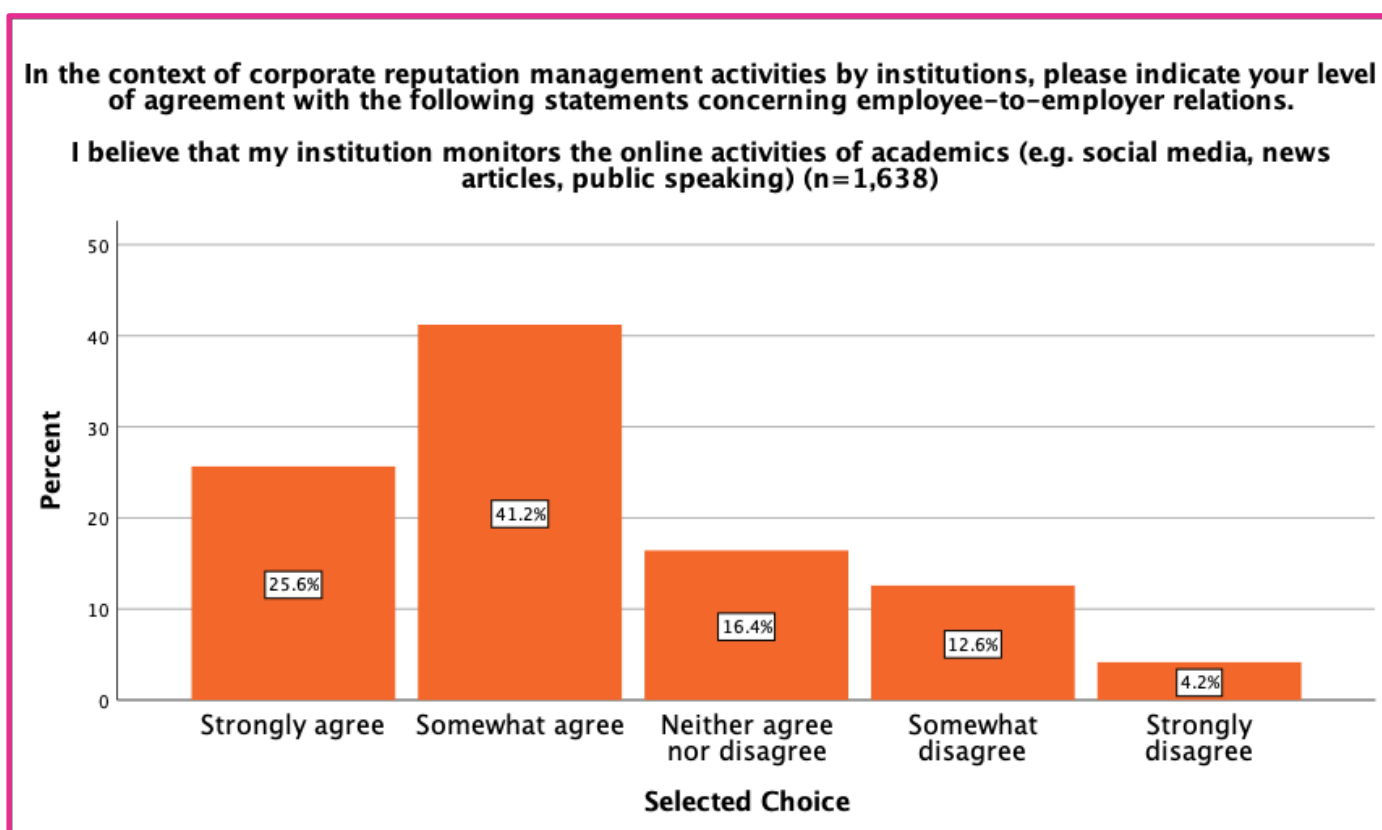
The extent to which universities' corporate reputation management activities restrict freedom of speech

Most respondents (88.1%) felt that the ways in which their institutions carried out corporate reputation management activities risked restricting their freedom of speech (47.6% chose 'strongly agree' and 40.5% selected 'agree').

Figure 73. The extent to which universities' corporate reputation management activities restrict freedom of speech.

In the context of corporate reputation management activities by institutions, please indicate your level of agreement with the following statements concerning employee-to-employer relations.

Corporate reputation management activities can restrict freedom of speech (n=1,821)

The extent to which universities corporate reputation management activities restrict academic freedom

Most respondents (Figure 74) felt that the ways in which their institutions approached corporate reputation management risked restricting academic freedom (47.9% chose the 'strongly agree' option and 40.2% selected the 'somewhat agree' option).

Figure 74. The extent to which universities corporate reputation management activities restrict academic freedom.

In the context of corporate reputation management activities by institutions, please indicate your level of agreement with the following statements concerning employee-to-employer relations.

Corporate reputation management activities can restrict academic freedom (n=1,822)
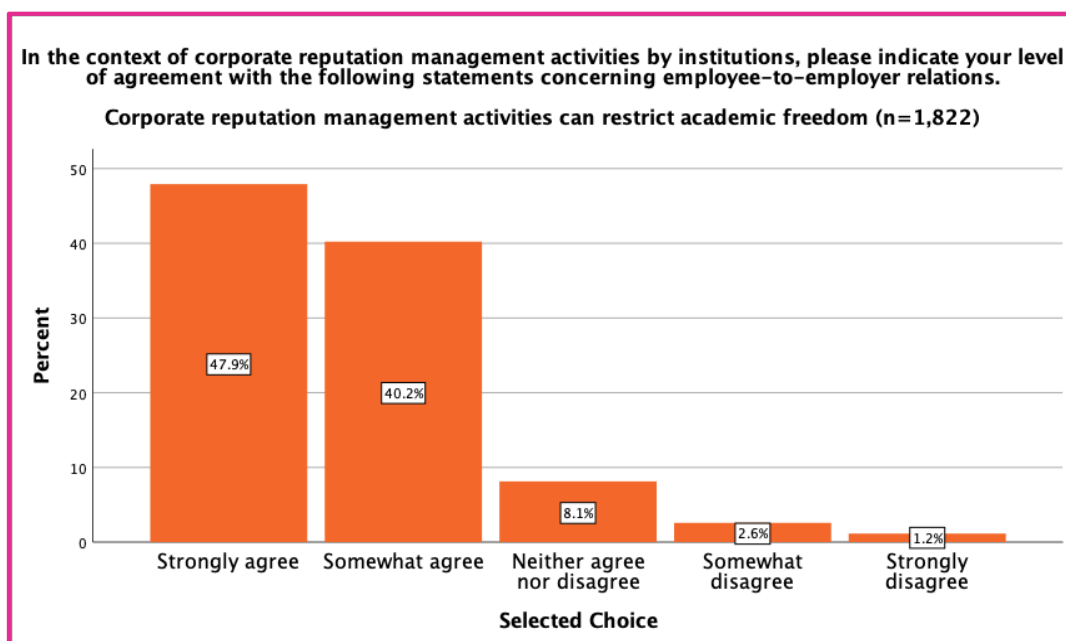
Voices of **"** *academics*

"There is a significant problem in relation to academic freedom and academics' freedom of speech as a result of government pressure, monitoring, and regulation. In other words, the government is attempting to generate a moral panic around a supposed culture war in order to shield itself, and established power structures, from important and valid criticism".

"If university rallies for people to have an "online" presence (for sure, there is an indication, that this is discussed as a goal with PhD students (- which seems a bit ridiculous to me - at least in my field!), then it does feel like they should not interfere with what is put on that online profile/presence. (in essence they wish for people to make PR for the university, not to express themselves)".

"We have a draconian social media policy that means we can be immediately dismissed for gross misconduct if we bring the institution into disrepute. This has a considerable chilling effect on staff engagement with any form of public social media outlet, which ironically has done the most harm to our outreach efforts particularly with schools and professional bodies as staff now refuse to use these unless they can make themselves anonymous".

"It is in the contract - 'must not bring the institution into disrepute' - which is highly subjective".

Voices of " academics

"My university wrote reputational issues into our new contracts as potential grounds for dismissal."

"I know a number of staff have been forced out with non-disclosure agreements. Some have been contacted about posting on their private social media about their work".

"Protection of corporate reputation is in my contract. and yet I have a lot of critical things to say about my employer. I only say them to friends and close colleagues... a senior professor has recently circulated critical views on management initiative X, and he was slapped for circulating his brilliant analysis. Even top level profs have PTSD from being frequently slapped for expressing their views".

"My institution has in fact initiated disciplinary proceeding against staff for comments made on social media, so I am keenly aware of how monitored my activities are".

Findings

Certain contemporary forms of university staff performance management are only possible due to the affordances of institutional digital technology. The Academic Freedom in the Digital University survey instrument had two core purposes:

- to discover respondents' holistic views on academic freedom

- to ascertain respondents' holistic views on institutional digital technology, specifically with regards to how institutional digital technology shapes the ways in which academic freedom is enabled (or disabled) and can be exercised

Drawing on the statistical data presented in the previous chapter, the key findings are grouped together below. These are written as statements, with the percentage of respondents in agreement with the statement shown in brackets.

The current state of academic freedom in the UK higher education sector

- Protection for academic freedom is in decline (58.2% agree/strongly agree).

- Individual academic freedom for teaching is in decline (56.8% agree/ strongly agree).

- Individual academic freedom for research is in decline (51.7% agree/ strongly agree).

- Individual autonomy is in decline (75.9% agree/strongly agree).

- University self-governance is in decline (57.7% agree/strongly agree).

- Employment protection is in decline (72.1% agree/strongly agree).

Strength of professional identity and the types of freedom most desired

- Despite a degree of deprofessionalisation with regard to some aspects of the academic role, professional identity still remains important for academics (65.9% strongly agree).

- Both 'freedom to' (79.6% strongly agree) and 'freedom from' are important for academics (78.4% strongly agree) and are similarly valued (72.8%), rather than there being a greater desire for one type of freedom over another.

The impact of digital systems on working conditions in the contemporary UK higher education sector

- Digital technology has led to improvements in the working lives of teaching and research staff (44% agree/strongly agree) and has led to improvements in the student experience (50% agree/strongly agree).

- Digitally-enabled changes in performance management implemented over the last ten years have led to reduced academic freedom (82.4% agree/strongly agree).

- Digitally-enabled measurements of the student experience implemented over the last ten years have led to reduced academic freedom (83.8% agree/strongly agree).

Workload management systems and academic freedom in teaching

The survey asked respondents about their perspectives on institutional workload systems, examining the specific type of institutional control that such systems enabled through large-scale, institution-wide time-control over workers. Workloading systems can be understood as a technology of power (Han, 2017) that gives one group power over another. These systems can also allow management to give time 'gifts' and 'punishments' (Wood, 2018), through determining the work that academics do. This can be understood as a challenge or a constraint to academic freedom, but one wrapped up in business-first rhetoric.

Respondent data revealed that:

- Effectively negotiating teaching workloads with management is difficult (57% agree/strongly agree).

- Meeting teaching responsibilities requires working beyond workloaded tariffs (82.5% agree/strongly agree) leading to increased academic worker exploitation.

- While the preferred pedagogic approach is not influenced by allocated workload tariffs (53.1% agree/strongly agree), inaccurate workload teaching time allocation tariffs has an impact on the quality of student feedback that academics provide (68.4% agree/strongly agree).

- Allocated workloading for teaching tariffs disincentivises taking an ambitious approach to teaching and marking (77.4% agree/strongly agree).

As detailed in the previous chapter, respondents' willingness to put in extra unpaid hours allows academics, on an individual level, to be able to meet their targets and enables universities to continue operating relatively efficiently and effectively, even though staff resources (number of staff or the number of hours staff officially work) may not adequately match real-world business requirements.

Workload management systems and academic freedom in research

- Negotiating research workloads is difficult (60.9% agree/strongly agree), and meeting research responsibilities requires working beyond workloaded tariffs (82.5% agree/strongly agree).

- Allocated workloaded research tariffs do not influence research design (51.6% agree/strongly agree) and do not influence the topics researched (51.6% agree/strongly agree), but allocated workloaded tariffs can disincentivise staff from taking an ambitious approach to research and research dissemination (66.3% agree/strongly agree).

Digital teaching governance and academic freedom

- Academic freedom in teaching-related processes is important in terms of wellbeing and good performance (70.8% strongly agree) and is also important for work satisfaction (71.8% strongly agree).

- Respondents' level of awareness of the institutional ability to digitally monitor distinct aspects of their teaching performance via a multitude of systems varied depending on the aspect of their work being monitored. These are listed below with the areas where awareness was higher listed first:

  ◊ awareness of institutional monitoring of the VLE for gaining managerial oversight of how online aspects of teaching are delivered and learning is enabled (82.4%)

  ◊ awareness of the use of electronic module evaluation systems for the large scale collection of student (consumer) views on academics' teaching (78.4%).

  ◊ awareness of institutional monitoring of lecture recording systems for overseeing academics' teaching practices (77.9%).

◊ awareness of the monitoring of online assessment systems for overseeing academics' grading practices (71%).

◊ monitoring of curriculum management systems to oversee curriculum design (49%).

- Being aware of the institutional ability to monitor the content used on the VLE reduces academics' sense of academic freedom (58.8% agree/strongly agree).

- Being subject to continuous teaching performance assessment (e.g. subject committees, online module evaluations, student satisfaction surveys, NSS) reduces academics' sense of academic freedom (75.3% agree/strongly agree).

- Being aware of the institutional ability to monitor assessment design reduces academics' sense of academic freedom in assessment design (e.g. it makes one more likely to go for standardised

designs, rather than be innovative) (64.5% agree/strongly agree).

- Being aware of the institutional ability to monitor grading through grade monitoring processes reduces academics' sense of academic freedom in grading (e.g. if there is institutional pressure to give higher or lower grades, academics may feel obliged to conform to the institutional steer) (57.5% agree/strongly agree).

- Overall, the ways in universities captured and monitored various elements of teaching work via digital systems shaped academics' sense of academic freedom (64% agree/strongly agree).

Digital governance and academic freedom in research.

- Academic freedom in research-related processes is important to wellbeing and good performance (81.3% strongly agree) and for work satisfaction (81% strongly agree).

- There are varying levels of awareness with regards to the institutional ability to digitally monitor distinct aspects of staff research performance. These are ordered below by the degree of academic awareness:

  ◊ awareness of research grants applications monitoring (89.9%).

◊ awareness of public profile monitoring (82.2%).

◊ awareness of impact activities monitoring (81%).

◊ awareness of the monitoring of repository systems to count outputs and create productivity dashboards (80.1%).

◊ awareness of the monitoring of academic appraisal systems to for performance management (76.9%).

- ◊ awareness of monitoring the purpose of research conducted, e.g. if it is funded or non-funded, if it engages with professional practice (73.6%).

- ◊ awareness of monitoring how research is disseminated, e.g. choice of journals for publications, conferences attended (72.8%).

- ◊ awareness of monitoring the topics researched, e.g. to check the alignment of staff research to institutional themes (72.5%).

- ◊ awareness of monitoring citation count systems to identify an individual's impact within academia (71%).

- ◊ awareness of monitoring the self-development academic staff undertake via online researcher development plan systems (50.3%).

- ◊ awareness of monitoring impact outside academia, e.g. through Altmetric (51.3%).

- ◊ awareness of monitoring the methods used for research through central ethical approval systems (49.5%).

- ◊ awareness of monitoring how individuals compare to peers in real time via, for example, systems like SciVal (33.8%).

Digital governance systems, changes in power relations and the future of academic freedom

- Taking into account the full ecology of systems, at the current time, respondents believe that monitoring through digital systems has led to (in rank order, with the highest percentage first):

  - ◊ Increased institutional control (89.9% agree/strongly agree)

  - ◊ Increased student (consumer) voice (55.1% agree/strongly agree)

  - ◊ increased academic freedom (2.3% agree/strongly agree)

- Over the next five years, respondents see the trajectory of digital monitoring as leading to (in rank order, with highest percentage first):

  - ◊ greater institutional oversight (90.9% agree/strongly agree)

  - ◊ greater power for student (consumer) voice (52.7% agree/ strongly agree)

  - ◊ greater academic freedom (1.7% agree/strongly agree)

Academic freedom and freedom of speech in UK HE

- Familiarity with the UK government's plans to legislate for academic freedom and freedom of speech is mixed (only 7.7% extremely familiar).

- Respondents had mixed views with regards to whether or not there was a significant freedom of speech issue on university campuses for students (52.7% thought there was not, 34.3% thought there was).

- Respondents had mixed views with regard to whether or not there was a significant freedom of speech issue on university campuses for staff (40.4% thought there was not, 49.9% thought there was).

- Respondents agreed that the government proposals conflate freedom of speech with academic freedom (75.5% agree/strongly agree).

Academic freedom and corporate reputation management activities

- Awareness of institutional monitoring of the online activities of academics (e.g. social media, news articles, public speaking) was high among respondents (66.8% agree/strongly agree).

- Respondents felt that the ways in which universities carried out online corporate reputation management activities could lead to restrictions in freedom of speech (88.1% agree/strongly agree) and could also lead to restrictions to academic freedom (88.1% agree/ strongly agree).

Differences in the experiences of respondents on fixed-term and permanent contracts

There is a need to acknowledge that the experience of academic freedom is not uniform across all contract types. Survey respondents on fixed-term contracts held different opinions compared to those on permanent contracts for many of the questions. In general, respondents on fixed-term contracts felt less strongly about academic freedom and academic freedom erosions than respondents who were permanently employed.

This is perhaps due to their differentiated contractual status, which can socialise this group differently (e.g. more used to fixed-term induced precarity and more used to working on the projects of others) and provide this group with a distinct perspective on the norms of academic work and the relevance of academic freedom (e.g. if one is specifically employed on a fixed-term contract specifically to work on an already scoped research project, the idea of having academic freedom for research can be a secondary concern). Knowledge asymmetries could also arise as a result of them not being permanent members of staff. In particular, there was a statistically significant difference between the views of academics on fixed-term contracts vs academics on permanent contracts in relation to the following areas. Additionally, it should be noted that those academics on fractional contracts are perhaps more likely to move around institutions. Some of the questions asked respondents to reflect on the comparative level of academic freedom at their current institution, and, thus, it is likely that fractional staff might have a shorter frame of reference than those on permanent contracts and, therefore, be less inclined to report a deterioration (see Appendix B). Additionally, as detailed in Appendix B, there is an intersection between where academics are located in the organisational hierarchy and contract types, with the most insecurely employed clustered at the bottom where academic freedom would be less expected

For each case listed below, respondents on fixed-term contracts had views on academic freedom and academic freedom erosions that were less strong to a statistically significant extent than respondents who were permanently employed:

- Changes in the level of protection for academic freedom over recent years.

- Changes in the level of support for individual autonomy.

- Changes in the level of university self-governance and decision-making.

- Changes in the level of employment protection.

- The extent to which 'freedom from' or 'freedom to' is more valued.

- The importance of 'freedom from' in determining how they carry out work.

- The impact digital technology has had on the working life of academics.

- The impact of performance management systems on academic freedom.

- The impact of employer-allocated teaching and marking hours on adopting an ambitious approach to teaching and marking.

- The ability to negotiate research workload.

- The impact of employer-allocated research hours and the need to put in additional undocumented hours to meet research aims.

- The impact of employer-allocated research hours and the choice of methods.

- The impact of employer-allocated research hours and the adopting of an ambitious approach to research and dissemination.

- The relationship between academic freedom in teaching and a sense of satisfaction at work.

- The relationship between being subject to continuous teaching performance assessment and one's sense of academic freedom.

- The relationship between academic freedom in research, good wellbeing, and high performance.

- The relationship between academic freedom in research and one's sense of satisfaction at work.

- Awareness of the institutional ability to use the academic appraisal system for research performance management.

- Awareness of institutional ability to use citation systems for performance management.

- Awareness of employers' ability to digitally monitor research grant applications.

- Views on the impact of employer monitoring through digital systems on academic freedom.

- Views on the trajectory of digital monitoring and the direction of institutional oversight.

- Views on the trajectory of digital monitoring and the direction of the student voice.

In terms of considering the ways in which the differences in profile between respondents on fixed-term contracts and those on permanent contracts can help explain the differences in responses between the two groups, and some of the unexpected findings, the following explanations are posited.

Between the two groups:

- there can be substantial differences in the ways in which the (i) process of socialisation to workplace norms and (ii) the process of desensitisation to bad working practices plays out. For example, those on fixed-term contracts can be more desensitised to bad employment practices and poor contractual standards (as it is their norm) and also have a more socialised acceptance of neoliberal academia norms (as they have less scope to resist them than permanently employed academics).

- there can be differences in the degree of institutionalisation. For example, academics employed on fixed-term contracts may be less 'institutionalised' i.e. they have less institutionalised acceptance of the managerial practice norms in their current institution and less interest in or familiarity with the institutional vision/mission and internal politics within their current employer.

- academics employed on fixed-term contracts can be less 'sectorised' to UK higher education 'sectoral' managerial practice norms.

- there can be substantial differences in their relationship to work and their relationship to academic freedom. To explain, for academics employed fixed-term, some of whom are employed on contracts shy of full-time hours, work can be experienced differently. For example, work may be less intense (or, conversely, more intense), and they may have less involvement in workplace politics and workplace culture either because they have less buy-in to the institution than permanently employed staff (so, a different sense of the psychological contract with their employer) or because they are excluded from discussions, opportunities and committees due to not having the status of full employees.

- there can be differences in perception of the agency one has. For example, among fixed-term workers, due to contract-related precarity and generally having less voice, they may see themselves as differently agentic to permanently employed academics (e.g. quitting is less of a big decision for them as their contracts are short, HR may not treat them equally to the permanently employed workforce)

- there can be differences in attitudes towards academic freedom due to contract-related precarity, and academic freedom may be seen as a concern for those with more stable working conditions and not in insecure employment.

6. Conclusions and recommendations

The aim of the Academic Freedom in the Digital University study was to explore how digitally-enabled metrics and the technology-facilitated contemporary culture of continuous evaluation of many aspects of academic work mediate power relations between those academic staff being measured and the higher education institution employers doing the measuring (performance management).

Respondent data showed that:

- Protection for academic freedom is declining, in terms of individual academic freedom for teaching, individual academic freedom for research, individual autonomy, university self-governance, and employment protection.

- Academic freedom is important to the wellbeing, good performance, and work satisfaction of academic staff.

- Digital workloading systems (for controlling academic time) are worsening working conditions, leading to employee overwork, students receiving lower quality feedback, and the disincentivising of staff from taking an ambitious approach to teaching and research.

- Being subject to continuous performance assessment (e.g. subject committees, online module evaluations, student satisfaction surveys, NSS, etc.) is reducing academic freedom.

- Digitally-enabled changes to worker performance management over the last ten years have reduced academic freedom.

- Digitally-enabled measurements of the student experience over the last ten years have reduced academic freedom.

- The trajectory of digital monitoring and performance management is anticipated to lead to lower academic freedom, greater institutional oversight of academic activities, and greater power for the student (consumer) voice.

- The awareness one has of their institution's ability to digitally monitor different and multiple aspects of staff teaching performance reduces one's subjective sense of academic freedom and impacts on many aspects of academic work, including the design of assessments and academic judgement when giving grades.

- Universities' online corporate reputation management activities are seen to restrict academic freedom and/or freedom of speech in relation to online communication.

- Awareness of the institutional monitoring of research activities for performance management is higher than the awareness of the institutional monitoring of teaching activities

- Awareness of the social media monitoring of academic voices is high.

- There is a need to acknowledge that the experience of academic freedom is not uniform across all contract types. Survey respondents on fixed-term contracts held different opinions compared to those on permanent contracts for many of the questions. This is perhaps due to their differentiated status, which provides them with a distinctive perspective on key academic freedom issues. This could also reflect knowledge asymmetries between this worker group and permanent staff that arise as a result of the qualitative differences in their worker experiences.

Overall, academic monitoring through digital systems is strongly seen to increase institutional control and reduce academic freedom, but it is also recognised as a tool for increasing the strength of student (consumer) voice.

Recommendations

Rooted in the study's findings, this report makes the following recommendations to better protect academic freedom at UK universities.

Recommendation for all Stakeholders

Stakeholders — universities, unions, management, employees, sector bodies — in the UK higher education sector need to begin to recognise institutional digital technology as a variable that shapes academic freedom. They should also seek to better understand the nuanced and subtle ways in which institutional technology does this. This can happen, for example, by instigating alterations in power relations between employers and workers to create new areas of knowledge asymmetry, or by introducing new incentive and disincentive structures in university work environments to align worker behaviour more closely with organisational objectives. Additionally, stakeholders should also recognise that the nature of any changes to power relations that an institutionally-implemented technology brings might be incremental and either not present or difficult to predict during the decision-to-purchase and implementation period, and therefore on-going monitoring is essential, including of impacts on worker wellbeing and worker stress.

Recommendations for universities

There are four recommendations for universities around technology-enabled and technology-enhanced management practices. These are designed to prevent the (advertent or inadvertent) technology-instigated erosion of academic freedom norms.

Firstly, it is recommended that universities should seek to collaborate with their workplace unions to establish policies and principles that best ensure the ethical use of digital systems (see, for example, the Association for Learning Technology's (2022) framework for Ethical Learning Technology).

Secondly, it is recommended that universities should seek to be transparent with unions and academic staff with regard to the operational and strategic goals intended to be achieved through the implementation of new digital systems, as the use of technology for new forms of performance management is a workforce issue, a union issue and a wellbeing (health and safety) issue (see the UCU's (2024) Health and Safety guidance for information on the full scope of what constitutes health and safety).

Thirdly, it is recommended that universities should consider amending their academic freedom policies to incorporate this report's proposed Principles for Protecting Academic Freedom in the Digital University (see p.175).

Fourthly, it is recommended that universities should seek to commit to conducting detailed Technology Impact Assessments before purchasing and implementing new technologies. The joint International Labour Organisation (ILO)/UNESCO (2018) Committee of Experts on the Application of the Recommendations concerning Teaching Personnel (CEART) report recognises that changes in employment relationships that diminish employment security are likely to weaken "the full exercise of academic freedom and therefore one of the fundamental pillars of excellence in teaching and research". It calls on the UK government to address growing employment insecurity among higher education staff by "ensuring participation of organizations representing teaching personnel in the design of accountability and research frameworks" and by "enhancing policy measures that safeguard tenure or its functional equivalent".

Thus, these Technology Impact Assessments need to consider the potential performance management impact of any new digital systems on existing power relations between management and staff (e.g. does this new technology enable new forms of performance management or employee surveillance that were not previously possible and has this been communicated openly to employees?). The Technology Impact Assessment team ought to include union representation and should make the Technology Impact Assessment reports available to all staff.

The Technology Impact Assessments ought to be updated periodically and include an evaluation of the actual impact a technology has had, compared to the envisaged impact pre-implementation (i.e. has the technology been used in the way it was originally intended to be used?). Regular assessment of the impact of intended and unintended consequences of technology initiatives is important in ensuring that technological initiatives empower academic staff and mitigate any unforeseen negative effects.

Recommendations for unions and individual academics

There are four recommendations for unions and academics.

Firstly, academic staff should actively reflect, in positive and negative ways, on how different technologies could mediate their practice; recognise that policies regarding the use of organisational technology may have unintended negative consequences; and pro-actively communicate with central university teams when major policies and practices become counterproductive.

Secondly, unions, on the sector-level, should consider organisational technology as a key variable that can shape how power is exercised in the contemporary university; take an active interest in the implementation of digital technology and monitor the ongoing effects; and take a leading role in shaping debates around the implementation of digital technologies. This would ensure more consideration is given to the interests of employees and help normalise the consideration of worker interests in debates surrounding technological implementation in the UK higher education sector.

Thirdly, union branches, on the local level, should consider organisational technology as a key variable that could shape how power is exercised in their institution.

Fourthly, it is recommended for unions that they should plan and deliver an extended awareness raising campaign around academic freedom and Digital Education Governance, and also deliver training to branch reps in order to allow branches to better on-board and socialise academics — in particular ECRs and fixed term staff — into productive understandings of academic freedom and the risks and opportunities that digital education governance (Williamson, 2016) brings to the development of their careers.

Five Principles for Protecting Academic Freedom in the Digital University

The Five Principles for Protecting Academic Freedom in the Digital University are designed to complement related existing initiatives that focus on metrics — such as the San Francisco Declaration on Research Assessment (DORA, 2023), the Leiden Manifesto for Research Metrics (2015), and elements of Jisc's (2023) Future Research Assessment Programme (FRAP) (in particular the recent work on the responsible use of technology in research assessment and on reviewing the role of metrics in research assessment) — and existing initiatives that focus on academic freedom (Council of Europe, 2006; CODESRIA, 1990; the Magna Charta Observatory, 1988; World University Service, 1988).

The below principles focus solely on digitally-enhanced and digitally-enabled forms of management and are designed to enable institutions to implement ethical performance management practices that strike the right balance between respecting the tenets of academic freedom (individual autonomy, freedom in teaching and freedom in research) and meeting quality assurance objectives (in relation to teaching and research) through digitally-enabled and digitally-enhanced oversight mechanisms. These principles are also designed to reduce the negative consequences that arise as a result of the excessive performance management norms that are widespread in the sector.

Hence, in deriving these principles, rather than trying to find a conclusive epistemological needle in a philosophical haystack, the goal is to provide some broad preliminary statements that are sharp enough to sew together the concepts of academic freedom and ethical digital education governance (Williamson, 2016), thus producing a modus operandi to allow both to flourish.

1. **Transparency not opacity:** The complete ways in which universities are using digital technology for performance management needs to be more transparent. Both academics and unions should have access to information about which tools are used, how these tools are used, the type of data that is collected, and the ways in which these tools and the data collected are used for performance evaluation (e.g. how they are used to inform recruitment and promotion).

2. **Informed consent not assumed consent:** To the extent that it is possible on a particular system, academics should have the right to provide informed consent as to whether or not their data is collected and used to evaluate their performance, and they should have the right to opt out from this process without negative career consequences (i.e. true consent and not pseudo consent). Unions should be informed by institutions of the systems that do not allow individuals to opt-out.

3. **Used developmentally not punitively:** Digital performance management tools should be used developmentally rather than punitively, and institutions should make academics and unions aware of the full scope of how they evaluate the performance of individual academics using different technologies.

4. **Equity not equality:** Performance metrics should, where possible, take into account the differences in personal circumstances, workloads, and responsibilities between different academics, as well the make-up of different research and departmental teams (e.g. number of research active staff, number of early career academics, relative teaching loads) when making judgements of individuals and teams. Unions should be involved in agreeing terms of use and overseeing impacts.

5. **Shared open governance not restricted closed governance:** Universities should commit to developing governance and oversight mechanisms for academics and unions to use to inform which technologies are implemented and their parameters of use, as well as being able to raise any concerns that arise from punitive use or adverse impacts that arise.

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Appendix A: Profile of respondents

This appendix provides information on the profile of respondents and details the composition of respondents in the Academic Freedom in the Digital University survey in relation to the 2023 UCU membership and the membership of staff in the UK higher education sector, based on the most recent HESA statistics. It is worth noting that UCU membership figures include members employed in Further Education, while HESA figures only include higher education staff.

Gender composition of respondents

Marginally (Figure 75) more male UCU members responded to the survey (1069 men to 916 women) and, in percentage terms (52.71% to 45.17%), the split is very similar to the general male-to-female split in the UK higher education sector (52.86% to 45.96%), as reported in the most recent HESA statistics.

Figure 75. Gender composition of respondents.
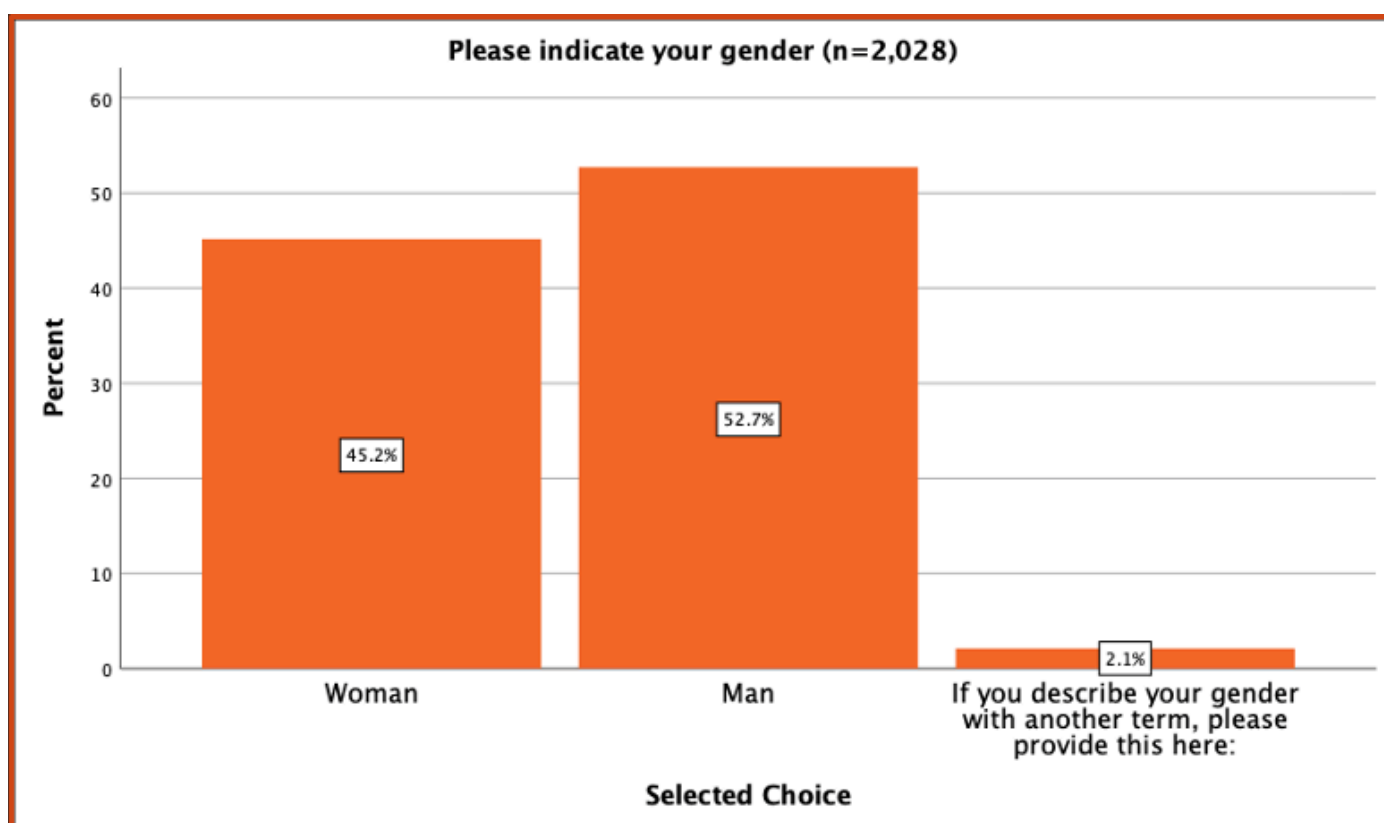
As shown in Table 26, the percentage of female respondents (43.7%) was close to the percentage of female staff employed in the UK higher education sector according to HESA (46.96%), but lower than the percentage of female academics in the UCU (52.72%). The percentage of male respondents (51.0%) was close to the percentage of male staff employed in the UK higher education sector, as per HESA data (52.86%), but lower than the percentage of males in the UCU membership (46.31%).

Table 26. Gender composition of respondents compared to HESA data and UCU membership.

	UCU membership		HESA data		Survey respondents	
	n	%	n	%	n	%
Female	65,972	52.72%	105,440	46.96%	916	43.7%
Male	57,953	46.31%	118,695	52.86%	1069	51.0%
Other	1,005	0.80%	390	0.17%	43	2.1%
U	199	0.16%				
(blank)	2	0.00%			67	3.2%
Total	125,131	100.00%	224,530	100.00%	2095	100.00%

Ethnicity composition of respondents

Most respondents identified their ethnicity as White British (57.3%), with White Other (28.7%) as the second biggest respondent group (Figure 76).

Figure 76. Ethnic composition of respondents.
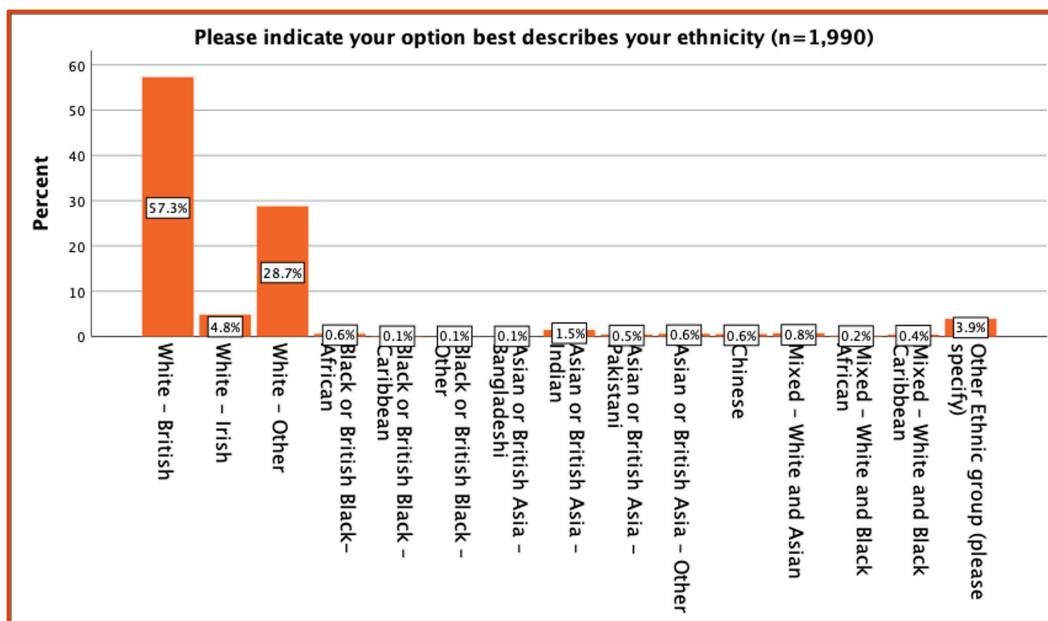
The percentage (Table 27) of white respondents (86.16%) was greater than the percentage of white members of the UCU (77.65%) and greater than the percentage of white staff in the UK higher education sector (73.94%). The percentage of black respondents (0.71%) was below the percentage of black members of the UCU (2.38%) and below the percentage of black staff in the UK higher education sector (2.32%). The survey had a lower percentage of Asian respondents (2.43%) than the percentage of Asians in the UCU membership (5.56%), and this was lower than the percentage of Asian staff working in the UK higher education sector (10.25%). Likewise, the survey had a lower percentage of mixed-ethnicity respondents (1.29%) than the percentage of mixed-ethnicity academics in the UCU (2.69%), and this was also lower than the proportion of mixed-ethnicity staff in the UK higher education sector (2.41%).

Table 27. Ethic composition of respondents compared to HESA data and UCU membership.

	UCU membership		HESA data		Survey respondents	
	n	%	n	%	n	%
White	97,163	77.65%	166,010	73.94%	1808	86.18%
Black	2,972	2.38%	5,205	2.32%	15	0.71%
Asian	6,958	5.56%	23,020	10.25%	51	2.43%
Mixed	3,371	2.69%	5,410	2.41%	27	1.29%
Other	1,588	1.27%	5,310	2.36%	78	3.72%
Not known	13,079	10.45%	19,575	8.72%	119	5.67%
Total	125,131		224,530	100.00%	2098	100.00%

Age composition of respondents

Most respondents (Figure 77) were in the 45+ age group (65.1%), with the 55+ age group being the next biggest (35.5%).

Figure 77. Age range of respondents.
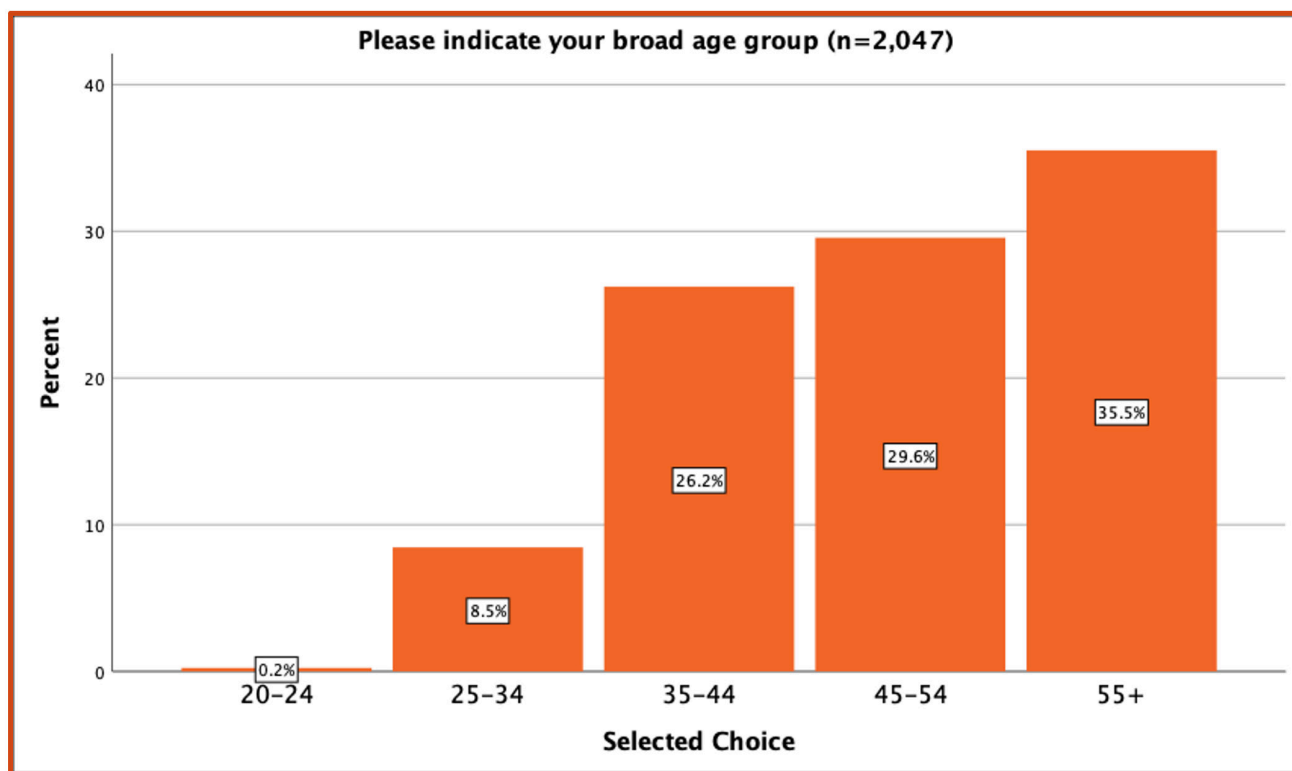
The survey (Table 28) had a lower percentage of respondents under 24 years old (0.24%) than the percentage of members in this age group within the UCU membership (1.39%), and this was also lower than the percentage of this age group in the HESA data (1.39%). The survey had a lower percentage of respondents aged 24-34 years old (8.45%) than can be found within the UCU membership (15.91%) and in HESA data (25.35%). The survey had a broadly similar percentage of respondents aged 35-44 years old (26.23%) than can be found in the UCU membership (24.25%) and in HESA data (28.48%). The survey had a similar proportion of respondents aged 45-54 years old (29.56%) to that in the UCU membership (25.13%) and in HESA statistics (24.07%). The survey had a higher proportion of respondents aged 55+ years old (35.52%) than that in the UCU membership (30.76%) and in HESA statistics (19.20%).

Table 28. Age composition of respondents compared to UCU membership.

	UCU membership		HESA data		Survey respondents	
	n	%	n	%	n	%
0 -24 years	1,741	1.39%	6,480	2.89%	5	0.24%
25-34 years	19,909	15.91%	56,925	25.35%	173	8.45%
35-44 years	30,339	24.25%	63,955	28.48%	537	26.23%
45-54 years	31,441	25.13%	54,055	24.07%	605	29.56%
55+	38,490	30.76%	43,110	19.20%	727	35.52%
Unknown	3,211	2.57%				
Total	125,131	100.00%	224,530	100.00%	2,047	100.00%

Sexual orientation composition of respondents

86.3% of respondents identified as heterosexual, with LGBTQ+ respondents comprising 12% of the sample (Figure 78). The size of the LGBTQ+ data set allows this study to test if differences in LGBTQ+ respondents' experiences of academic freedom are statistically significant. Although not explored in this report, the study also recognises the value of intersectionality and how the combination of age, race, gender, and other factors may mediate one's sense of academic freedom.

Figure 78. Respondent profile by sexual orientation.
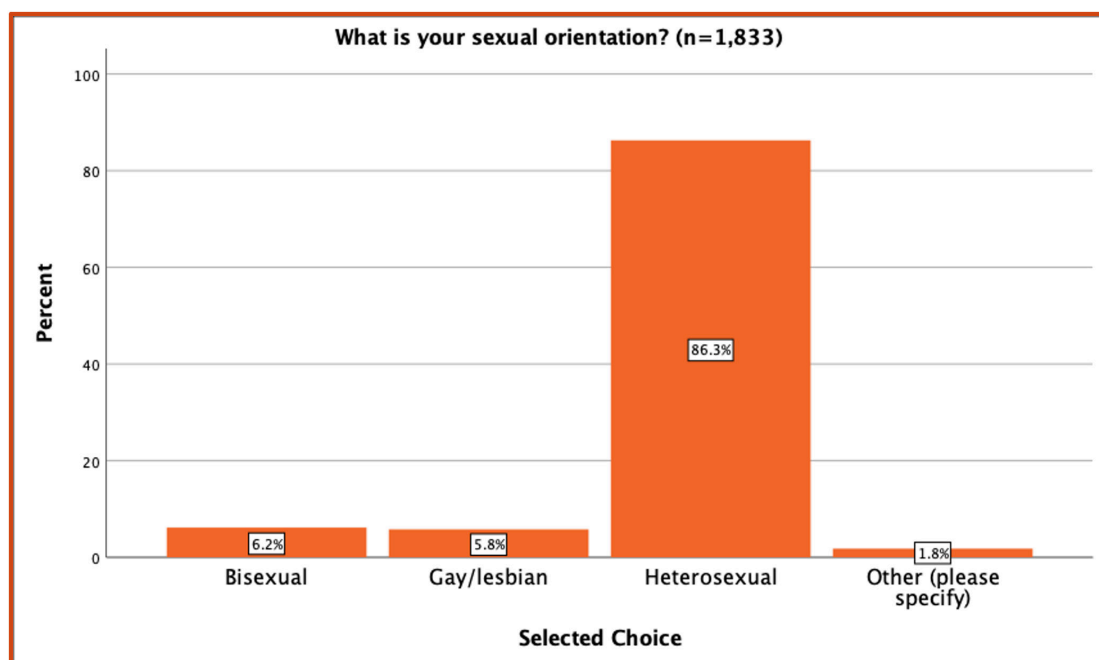
HESA does not have publicly accessible data on the sexual orientation of academic staff at the sector level (Table 29). The percentage of bisexual academic staff in the Academic Freedom in the Digital University survey (5.39%) is marginally higher than that of bisexual academic staff in the UCU membership. (4.11%). The percentage of heterosexual academic staff in the survey (75.47%) is higher than the representation of heterosexual academic staff in the UCU membership (59.35%). The percentage of lesbian or gay academic staff in the survey (5.06%) is higher than the representation of gay or lesbian academic staff in the UCU membership. (1.28%). 12.51% of respondents to the Academic Freedom in the Digital University survey skipped this question. 31.03% of UCU members do not provide this information to the UCU.

Table 29. *Sexual orientation composition of respondents compared to HESA data and UCU membership.*

	UCU		HESA		Survey respondents	
	n	%	n	%	n	%
Bisexual	5,148	4.11%			113	5.39%
Gay	2,607	2.08%				
Heterosexual	74,259	59.35%			1581	75.47%
Lesbian or Gay	1,602	1.28%			106	5.06%
Other	2,690	2.15%			33	1.58%
(blank)	38, 825	31.03%			262	12.51%
Total	86,306	100%			2,095	100%

Composition of respondents by employment terms: Full-time vs part-time

This research also sought to explore the importance of employment terms as a variable in shaping perceptions of academic freedom (Figure 79). 80.2% of respondents were employed on full-time contracts. As 19.8% of respondents were part-time, the data set will allow for comparisons between the experiences of part-time and full-time staff. This will be explored in an upcoming publication.

Figure 79. Composition of respondents by employment terms: Full-time vs part-time.
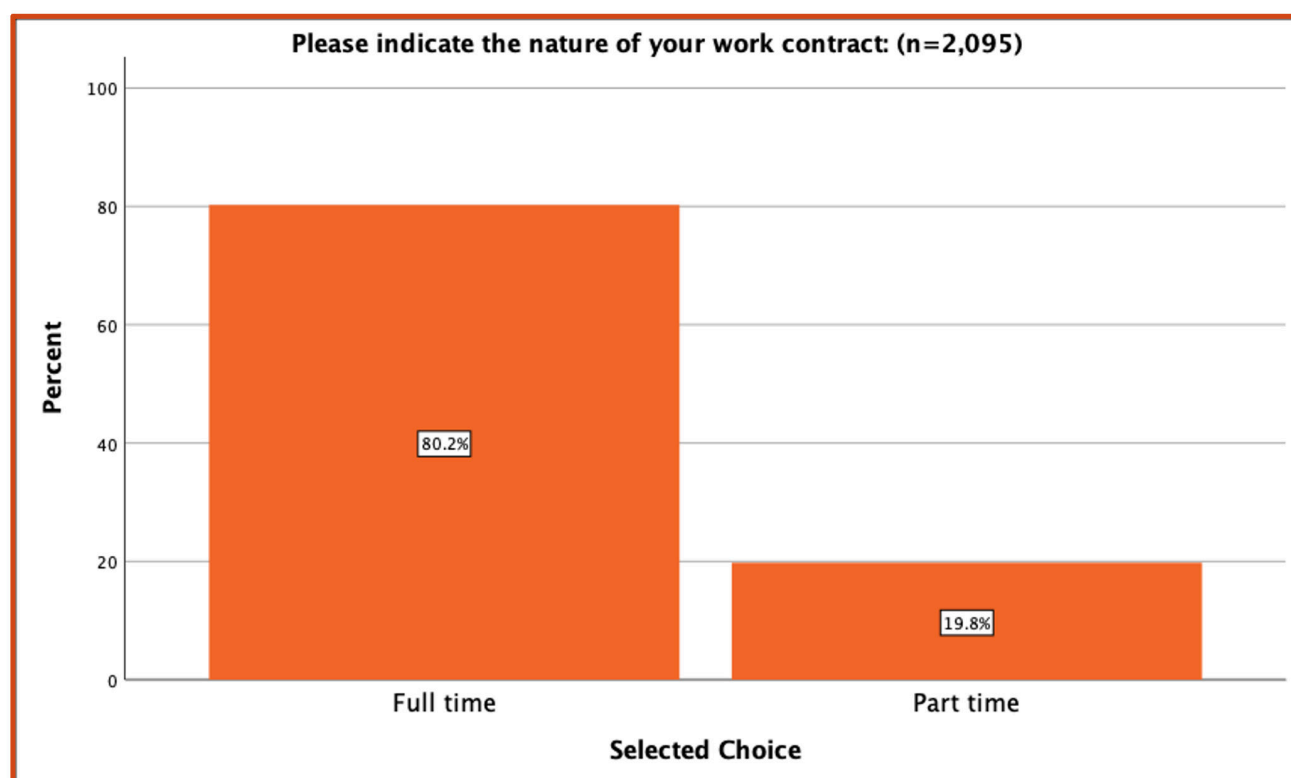
The percentage of full-time staff (Table 30) in the Academic Freedom in the Digital University survey (80.24%) is higher than that of full-time staff in the UCU membership (62.14%) and in HESA data (66.40%). The percentage of part-time staff in the Academic Freedom in the Digital University survey (19.76%) is similar to the representation of part-time staff in the UCU membership (18.83%), but lower than the percentage in HESA data (33.60%).

Table 30. Composition of respondents by employment terms in relation to HESA and UCU data.

	UCU		HESA		Survey	
	n	%	n	%	n	%
Full Time	77,755	62.14%	149,085	66.40%	1681	80.24%
Hourly Paid	8,725	6.97%	N/A			
Part Time	23,561	18.83%	75,445	33.60%	414	19.76%
Unknown	2,303	1.84%				
Variable Hours	2,633	2.10%				
(blank)	10,154	8.11%				
Total	12,5131	100.00%	224,530	100.00%	2095	100.00%

Composition of respondents by whether on a permanent or a temporary contract

Data on the permanence of contract was also sought, as the literature on how workers experience agency at work suggests that fixed-term workers can feel less agency due to contract insecurity. 85.3% of respondents were employed on permanent contracts, and 14.7% were on fixed-term contracts (Figure 80).

Figure 80. Composition of respondents by whether on a permanent or a temporary contract.
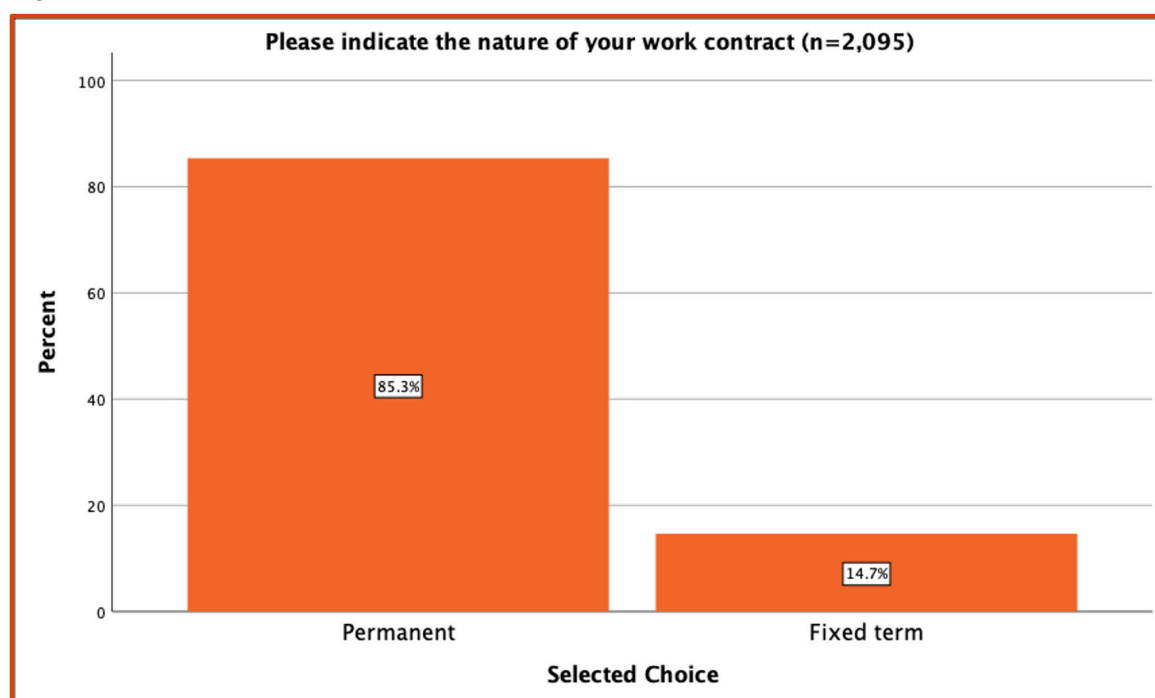
Composition of respondents by whether on predominantly teaching or research contracts or contracts that involved both

Most respondents (63.2%) were employed on research and teaching contracts (Figure 81).

Figure 81. Composition of respondents by whether on predominantly teaching or research contracts or contracts that involved both.
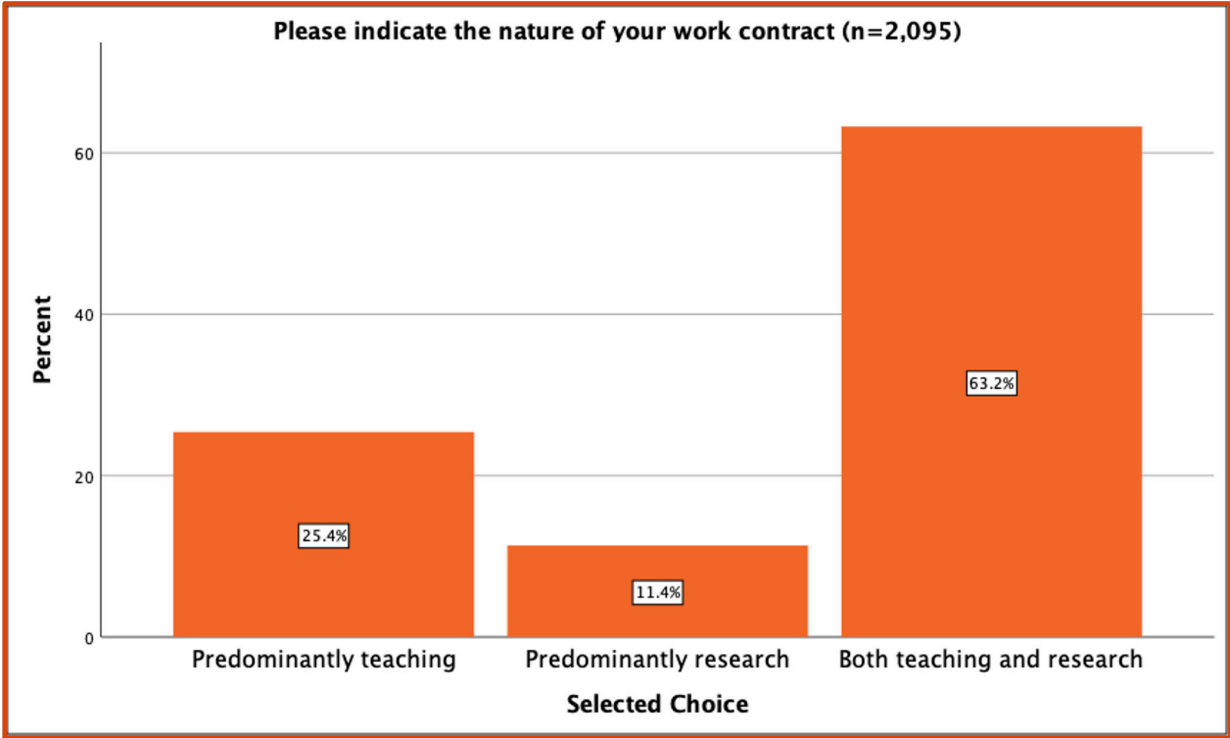
Disability status of respondents

89% of respondents considered themselves not to have a disability, and 11% identified as having a disability. This is higher than reported in the most recent HESA statistics, where 5.08% reported a disability (Figure 82). This could be due to differences in reporting. The Academic Freedom in the Digital University survey relied on academic self-reporting. In contrast, the HESA stats are based on what academic staff have disclosed to their employers, and there could be, in general, a tendency for workers to not fully disclose disabilities to their employers for fear that being identified as having a disability may impact career progression.

Figure 82. Respondent composition by disability status.

Do you consider yourself to be disabled? (n=2,010)
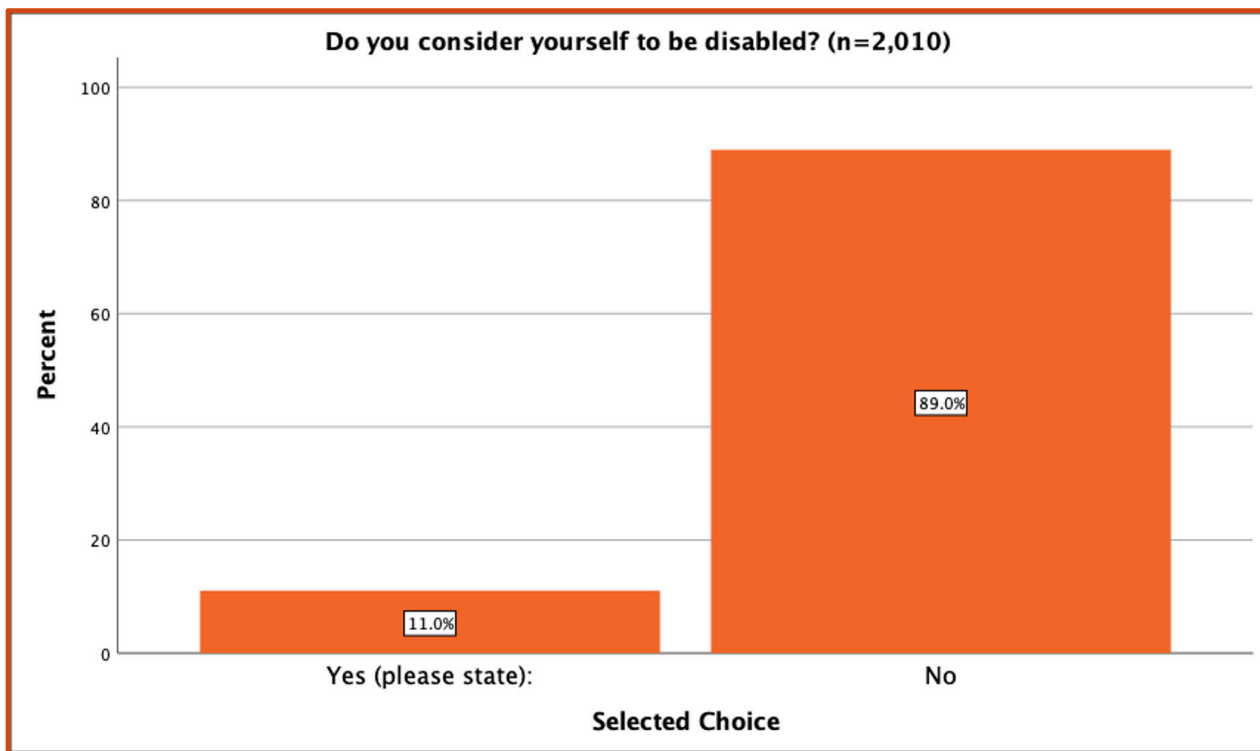
Respondent composition by visa status

The majority (66.5%) of respondents were British residents (Figure 83).

Figure 83. Respondent composition by visa status.

Are you a current UK visa holder? (n=2,021)
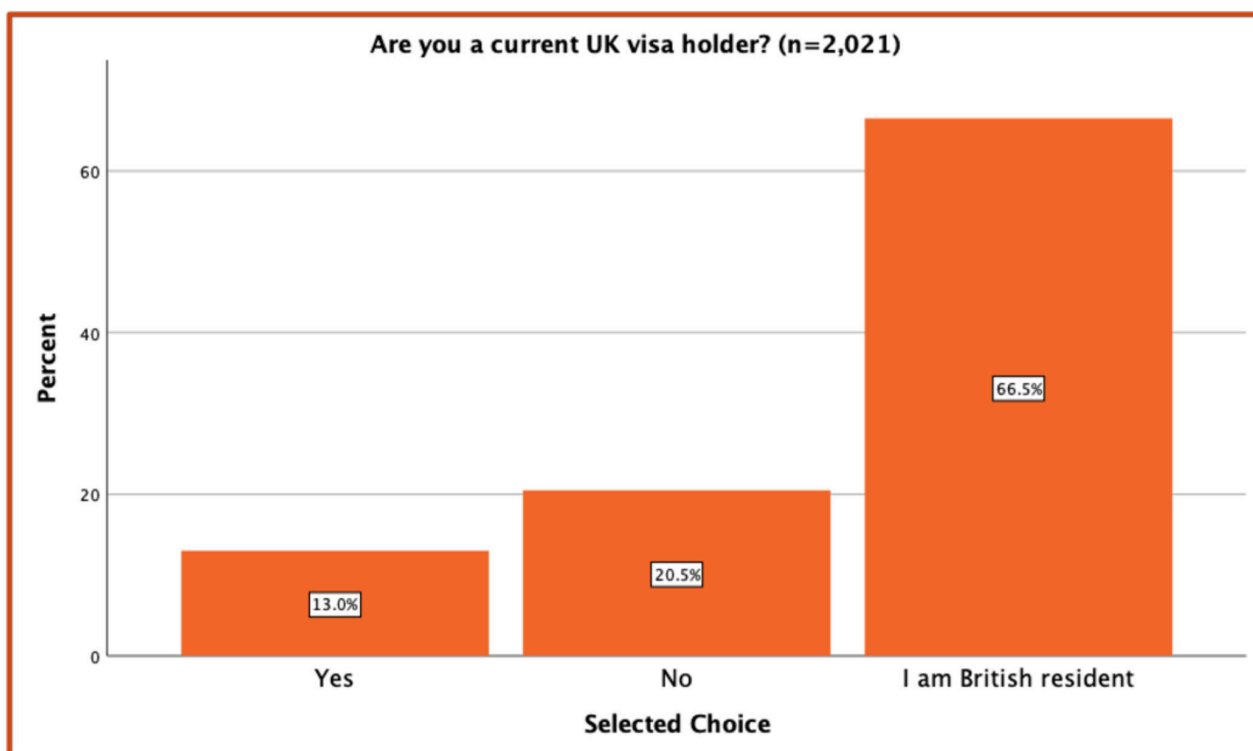
Composition of respondents by discipline

Respondents were split across disciplines (Figure 84). Due to the broadness of some option categories used, many respondents opted for Arts and Humanities (27.8%) and Social Science (20.8%). Respondents whose disciplines comprise the hard sciences were also sizable but – as there was no science or STEM option to select – academics in these disciplines had more itemised options to choose from (Computer Sciences, Engineering, Life Sciences etc.).

Figure 84. Composition of respondents by discipline.
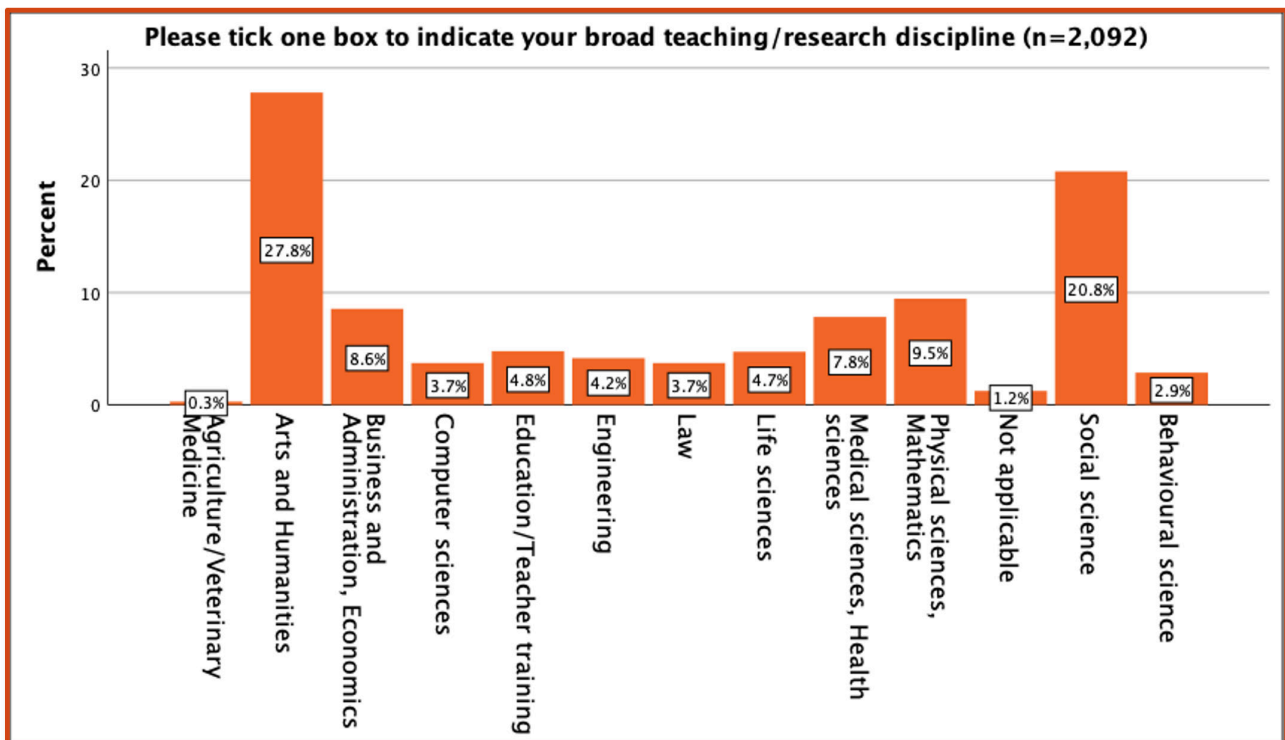
Composition of respondents by time in the current institution

Respondents' answers for the time worked in their current institution (Figure 85) were split across the answer categories, but the biggest respondent group was those who had worked in their institution for 16+ years (29.3%).

Figure 85. Composition of respondents by time in the current institution.
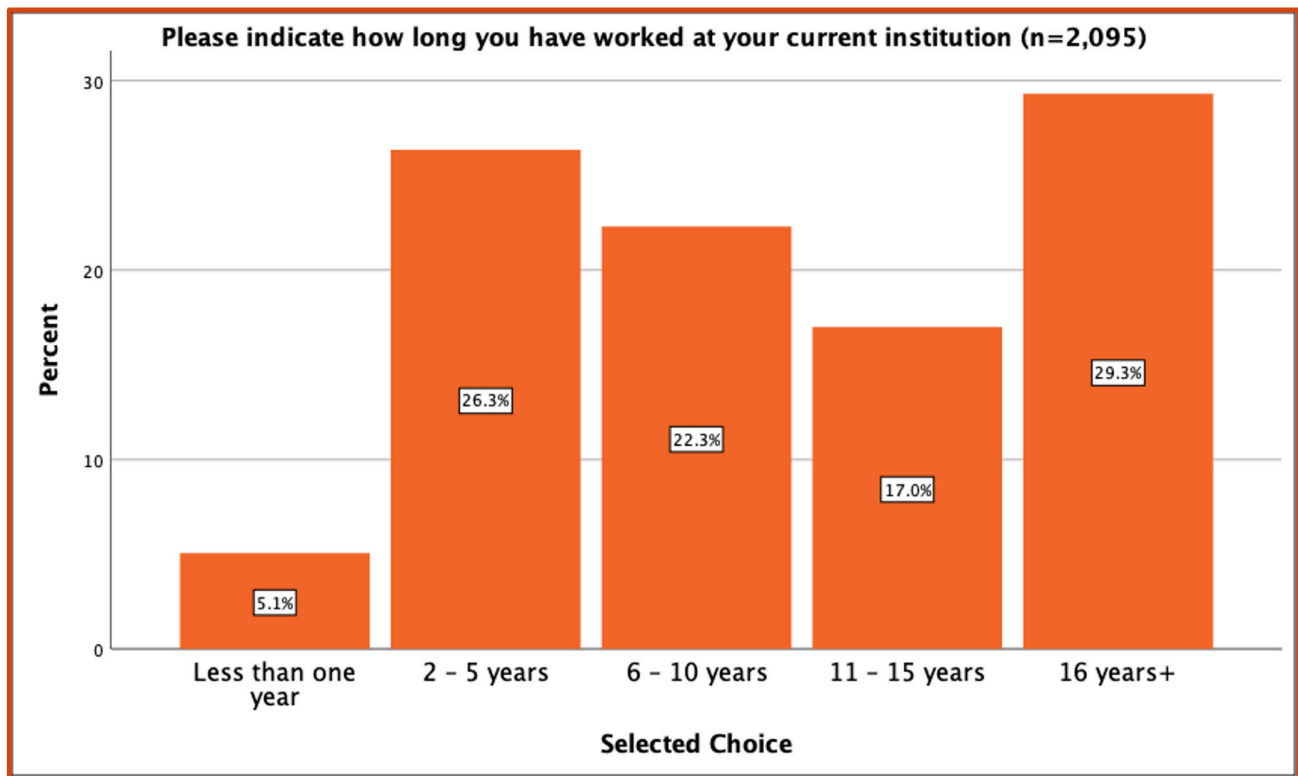
Composition of respondents by their current role in their existing institution

Nearly half of respondents (49.5%) held the title of Lecturer or Senior Lecturer (Figure 86). To acknowledge the broad mix of job titles in the UK higher education sector and how job titles in post-92 institutions tend to differ from Russell Group institutions, the survey sought to embrace this diversity but to group similar role profiles together. The survey also sought to identify the different levels of management roles among survey respondents. In the UK higher education sector, there are many different management roles (e.g. Head of School, Head of Department, head of a research centre) and leadership roles (Director of Teaching and Learning) which can be highly paid, high in influence, and high in responsibility, but have limited formal hierarchal powers when it comes to directly managing staff. Managers may also be current or former union members, and could have varying views on managerialism. Role in the organisation — an academic's hierarchal placement in an organisation — was anticipated to be a key variable in how staff experience academic freedom, and this study sought to measure whether a higher hierarchal post in the organisation manifested as greater or lesser freedom. This will be explored in a future publication.

Figure 86 Composition of respondents by their current role in their existing institution.

Please indicate which group your current role fits within (n=2,089)

- Other: please specify — 3.6%
- Research Fellow / Research Assistant — 6.5%
- Associate Lecturer / Hourly Paid Lecturer / Graduate Teaching Assistant — 5.6%
- Lecturer — 20.1%
- Senior Lecturer — 29.4%
- Reader / Associate Professor / Principal Lecturer — 13.7%
- Professor — 18.6%
- School/Departmental/Faculty Management — 2.2%
- Senior Management (VC, PVC, DVC) — 0.3%
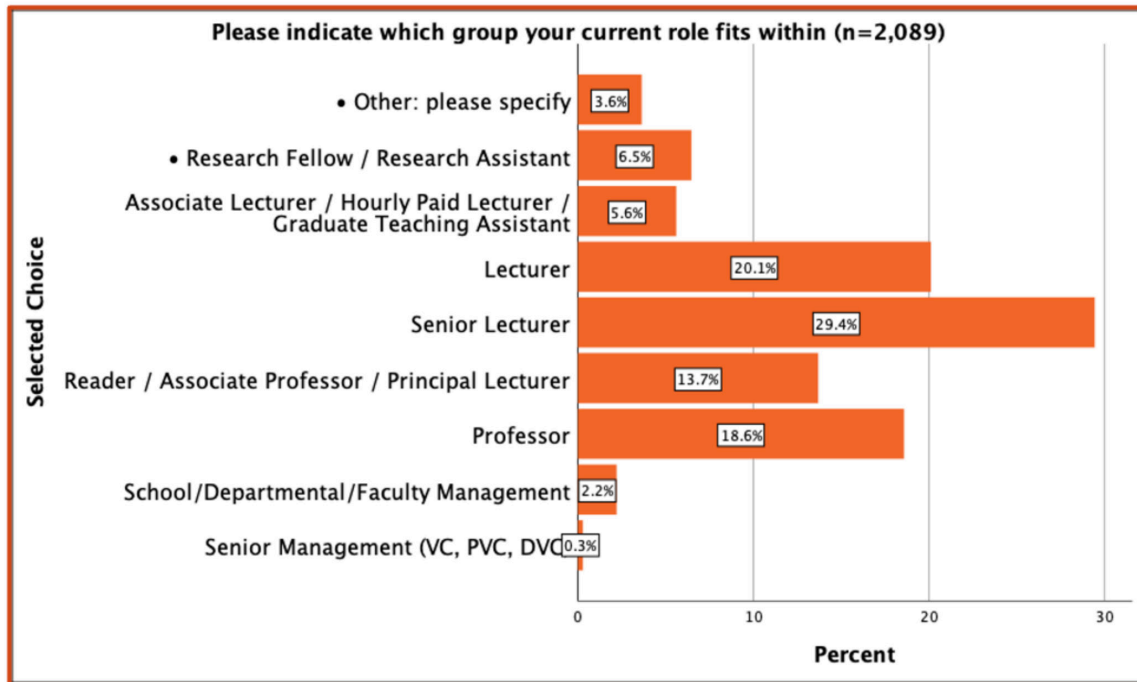
Composition of respondents in terms of time spent in the UK higher education system

Respondents had worked mainly in UK higher education for 11+ years (66.9%). The biggest group of respondents had worked in UK higher education for 16+ years. This reflects the age makeup of respondents, as detailed earlier (Figure 87).

Figure 87 Composition of respondents in terms of time spent in the UK higher education system.

Please indicate how long have you worked in UK HE in total (n=2,095)

- Less than one year — 1.1%
- 1–5 years — 12.9%
- 6–10 years — 19.0%
- 11–15 years — 19.1%
- 16 years + — 47.8%
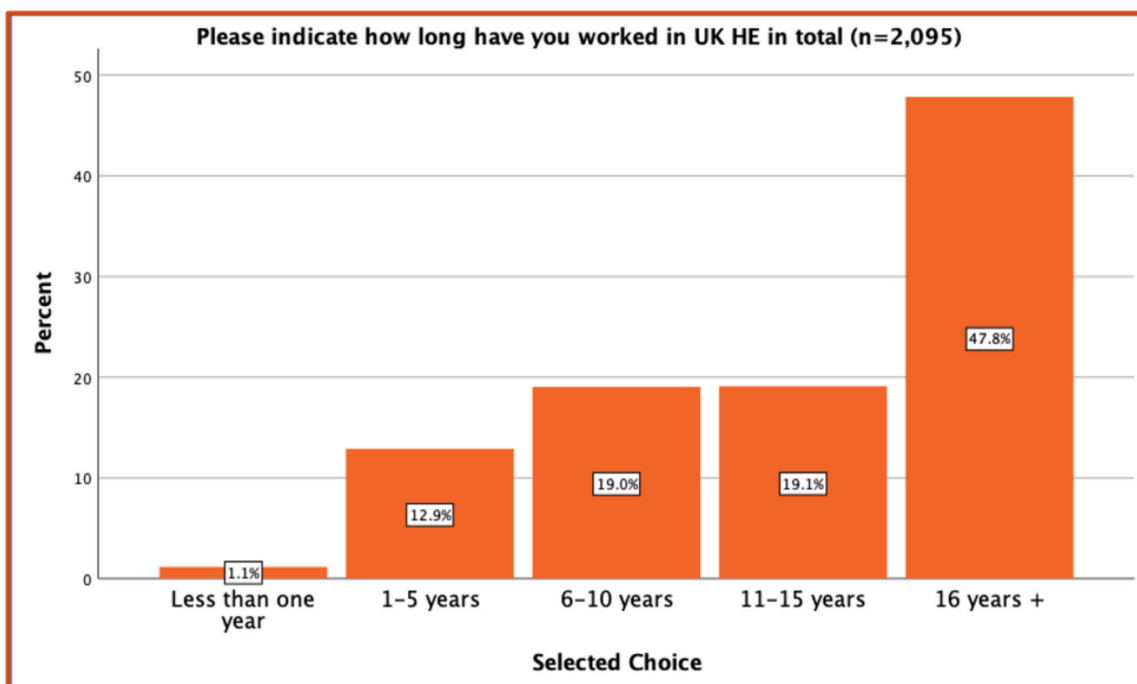
Appendix B: Comparison of characteristics of respondents on permanent contracts vs respondents on Fixed Term contracts

Appendix B presents a comparison of the characteristics of survey respondents on permanent contracts vs respondents on fixed-term contracts. The general pattern will be discussed and where the difference in respondent profile is different to a statistically significant degree, this will be clearly indicated.

Summary

Overall, in terms of raw numbers, 1729 respondents were employed on permanent contracts, and 299 respondents were employed on fixed-term contracts.

In comparison to respondents employed on permanent contracts, respondents employed on fixed-term contracts in the sample were mostly female, younger, more likely to have a disability, more likely to identify as LGBTQ+, more likely to need a work visa, more likely to have spent less than 5 years in their institution, more likely to be in an associate lecturer or research assistant/fellow roles, more likely to be part-time, more likely to be on a contract that is solely focussed on either teaching or research and more likely to have spent less than 10 years in the UK HE sector.

With respect to similarities, both respondent groups were ethnically similar (white) and mostly worked in the arts and social sciences.

Statistically significant differences

The following variances in profile were found to differ to a statistically significant extent.

- **Age:** The fixed-term sample was younger, with more than 50% of fixed-term respondents under 44 years old compared to 31.8% of permanent respondents being under 44 years old.

- **Disability status:** A higher percentage of fixed-term respondents reported a disability (14.7% vs 10.4%).

- **Sexual orientation:** Fixed-term respondents were more likely to identify as LGBTQ+ (18.1% vs 12.9%).

- **Time in the institution (this data was requested to explore the extent to which a respondent could be said to be institutionalised and socialised to institutional norms):** Perhaps unsurprisingly, 59.9% of fixed-term respondents had been in their institution for less than 5 years. This compares to 26.5% among permanent respondents. This could suggest that fixed-term respondents can become more 'socialised' to low academic freedom and precarity.

- **Full-time and Part-Time:** Fixed-term respondents were split almost 50-50 between those who worked full and part-time. Among permanent respondents, 85.5% worked full-time.

- **Role focus:** Those on fixed-term contracts tended to be either on solely teaching-focussed or solely research-focused contracts (89.6%). Whereas, those on permanent contracts had roles that encouraged both (72.3%).

- **Time spent in UK HE (this data was requested to explore the extent to which a respondent could be considered to be socialised to sector norms):** Those on fixed-term contracts had spent less time in UK HE (53.4% less than 10 years) compared to those on permanent contracts (51.2% having been in the sector more than 16 years).

Non-statistically significant differences:

The following differences in profile were found to not differ to a statistically significant extent.

- **Gender:** There was a bigger representation of female respondents in the fixed-term group.

- **Ethnicity:** Both sets of respondents were mostly White British and White Other, although among the fixed-term group, there was a higher percentage of White British and a lower percentage of White Other respondents).

- **Visa status:** Respondents on fixed-term contracts were more likely to need a work visa (16.1% to 12.5%).

- **Discipline:** Both groups were mostly working in the Arts and Social Sciences (61% of permanent respondents and 62.9% of fixed-term respondents).

- **Roles:** The role profiles were very different. Permanent respondents were mostly Senior Lecturers or Lecturers (55.2%). Fixed-term respondents were mostly Associate Lecturers or Research Assistants/Fellows (67.7%).

Academic Freedom in the Digital University

WELCOME

Dear colleague,

The current status of, and protection for, academic freedom in UK higher education is a priority area for UCU.

As part of this work, we are collaborating with researchers in a project that is being led by the School of Education at the University of Lincoln. The study is entitled Academic Freedom in the Digital University and looks at how metrics and the culture of continuous evaluation mediate power relations between academic staff and higher education institutions.

Your views are crucial to the union's ongoing work on improving the protection for academic freedom. So, please help us by filling in the survey here.

This survey has six sections. Each section starts on a new page. You can move forward and backward to another section. It should take about 25 minutes to complete the survey. You may prefer to complete the survey on a computer rather than on a mobile.

All those participating in the survey and providing their email address at the end of section 6 stand the chance of winning £100 of John Lewis vouchers. The winner will be determined by lottery.

Thank you.

Jenny Sherrard
UCU Head of Policy and Equality

Participant Information Sheet and Consent Form

Information about the research

Title of study: Academic Freedom in the Digital University
Name of researcher: Chavan Kissoon (School of Education, University of Lincoln).

I'd like to invite you to take part in this research study. Joining the study is entirely up to you. Before you decide, I would like you to understand why the research is being done and what it would involve for you.

What is the purpose of the study? This study is part of ongoing academic freedom research project centred at the University of Lincoln's School of Education. It looks at at how metrics and the culture of continuous evaluation mediate power relations between academic staff and universities. The survey has been designed as part of an ongoing UCU initiative which is designed to provide improved help and guidance for UCU members in respect to their academic freedom rights and responsibilities.

Why have I been invited? You are being invited to take part because you work in a UK Higher Education Institution (HEI).

Do I have to take part? It is up to you to decide whether or not to take part. If you decide to take part you will be required to complete consent in Qualtrics but are still free to withdraw at any time and without giving a reason. This would not affect your legal rights.

What will happen to me if I take part? The online survey is envisaged to take approximately 25 mins to complete. All questions will be about the your experiences of working in UK HE, the nature of modern academic work and academic performance management systems. All information gathered will be stored securely.

Expenses and payments. You will not be paid to participate in the study but there is an option to enter a prize draw for a £100 John Lewis voucher by providing your email address at the end of this survey.

What are the possible benefits of taking part? Your reflections on your experience will contribute to the generation of new knowledge and inform a doctoral thesis and academic publications. The findings arising from the survey will help the UCU both to further develop its policy on academic freedom, and to provide appropriate support and materials concerning academic freedom, for use by UCU members.

What are the possible disadvantages and risks of taking part? None beyond the time it takes to complete a survey (approximately 25 mins).

Will anyone know I have taken part? The information we collect will be handled in confidence. No one will know you have taken part. I will follow ethical and legal practice and all information about you will be handled in confidence. Although what you say in the survey is confidential, should you disclose anything to me which I feel puts you or anyone else at any risk, I may feel it necessary to report this to the appropriate persons.

Where will my data be stored? The data obtained from the study will be stored securely on the University of Lincoln OneDrive in password protected files. Only the researcher/researchers will have access to it. The data from this study may be put in an Open Access repository for other researchers to use in future research. If so, responses will be anonymised and any personal data (e.g. contact details) will be removed.

What will happen if I don't want to carry on with the study? If you have completed the study anonymously it will not be possible to remove the data provided, as I will not be able to identify you in any way.

What will happen to the results of the research study? The results are planned to be published in a doctoral thesis and academic publications and presented at academic conferences. The findings arising from the survey will help the UCU both to further develop its policy on academic freedom, and to provide appropriate support and materials concerning academic freedom, for use by UCU members, A copy of the published results can be obtained by contacting the researcher. Participants will not be identified in any report/publications. Data will be treated confidentially and any publication resulting from this study will report only data that does not identify individual participants (unless you have agreed to be identified). Participants' anonymised responses, however, may be shared with other researchers or made available in online data repositories.

Who is organising and funding the research? This research is being organised by the School of Education at the University of Lincoln.

Who has reviewed the study? All research conducted by the University of Lincoln is looked at by an independent group of people, called a Research Ethics Committee, to protect your interests.

What if there is a problem? If you have a concern about any aspect of this study, you should ask to speak to the researcher, who will do their best to answer your questions. The researcher's contact details are given at the end of this information sheet. If you remain unhappy and wish to complain formally, you can do this by contacting ethics@lincoln.ac.uk.

Information compliance

The University of Lincoln is the lead organisation for this study and will be the data controller for this study. This means that we are responsible for looking after your information and using

it properly. The university's <u>Research Participant Privacy Notice</u> explains how we will be using information from you in order to undertake this study. If you feel that we have let you down in relation to your information rights then please contact the Information Compliance Team by email on compliance@lincoln.ac.uk or by post at Information Compliance, Secretariat, University of Lincoln, Brayford Pool, Lincoln, LN6 7TS. You can also make complaints directly to the Information Commissioner's Office (ICO). The ICO is the independent authority upholding information rights for the UK. Their website is ico.org.uk and their telephone helpline number is 0303 123 1113. I agree to take part in this research:

Further information and contact details:

- Researcher: <u>Chavan Kissoon</u> | School of Education | University of Lincoln
- Supervisor: <u>Prof. Terence Karran</u> | School of Education | University of Lincoln

I agree to take part in the above study.

○ Yes
○ No

Demographic and Employment information

Please indicate your gender:

○ Woman
○ Man
○ [   ] If you describe your gender with another term, please provide this here:
○ I would rather not say

Please indicate your broad age group:

○ 20-24
○ 25-34
○ 35-44
○ 45-54
○ 55-64
○ 65-74
○ 75+
○ I would rather not say

Please indicate your option best describes your ethnicity:

○ White – British

○ White - Irish

○ White – Other

○ Black or British Black- African

○ Black or British Black – Caribbean

○ Black or British Black – Other

○ Asian or British Asia – Bangladeshi

Asian or British Asia – Indian

○

○ Asian or British Asia - Pakistani

○ Asian or British Asia – Other

○ Chinese

○ Mixed – White and Asian

○ Mixed – White and Black African

○ Mixed – White and Black Caribbean

○ I would rather not say

Other Ethnic group (please specify)

○ [   ]

Do you consider yourself to be disabled?

○ [   ] Yes (please state):

○ No

○ I would rather not say

What is your sexual orientation?

○ Bisexual

○ Gay/lesbian

○ Heterosexual

○ [   ] Other (please specify)

○ I would rather not say

Are you a current UK visa holder?

○ Yes

○ No

○ I am British resident

○ I would rather not say

Please tick one box to indicate your broad teaching/research discipline:

○ Agriculture/Veterinary Medicine

○ Arts and Humanities

○ Behavioural science

○ Law

○ Life sciences

○ Medical sciences, Health sciences

○ Business and Administration, Economics   ○ Physical sciences, Mathematics

○ Computer sciences   ○ Social science

○ Education/Teacher training   ○ Not applicable

○ Engineering

Please enter details of your main teaching/research specialism (e.g.critical race theory, industrial digitalisation, critical management studies, international relations, sustainability) on the line below:

[ ]

Please enter the name of the Higher Education Institution (HEI) at which you currently work on the line below:

[ ]

Please indicate how long you have worked at your current institution:

○ Less than one year
○ 2 – 5 years
○ 6 – 10 years
○ 11 – 15 years
○ 16 years+

Please indicate which group your current role fits within:

○ Senior Management (VC, PVC, DVC)
○ School/Departmental/Faculty Management
○ Professor
○ Reader / Associate Professor / Principal Lecturer
○ Senior Lecturer
○ Lecturer
○ Associate Lecturer / Hourly Paid Lecturer / Graduate Teaching Assistant
○ • Research Fellow / Research Assistant
○ [ ] • Other: please specify
○

Please indicate the nature of your work contract:

	Focus			Mode		Contract-type	
	Predominantly teaching	Predominantly research	Both teaching and research	Full time	Part time	Permanent	Fixed term
My contract is:	○	○	○	○	○	○	○

Please indicate how long have you worked in UK HE in total:

○ Less than one year ○ 11-15 years

○ 1-5 years ○ 16 years +

○ 6-10 years

Academic Freedom and Digital Technology

The questions in this section explore your views on academic freedom.

UNESCO's 1997 Recommendation Concerning the Status of Higher-Education Teaching Personnel, equates academic freedom with:

"*the right, without constriction by prescribed doctrine, to freedom of teaching and discussion, freedom in carrying out research and disseminating and publishing the results thereof, freedom to express freely their opinion about the institution or system in which they work, freedom from institutional censorship and freedom to participate in professional or representative academic bodies*" (UNESCO, 11 November 1997, paragraph 27, p.30).

On a scale of 1-9, what do you believe to be the level of protection for academic freedom in the institution in which you work?

Low level of protection (1)	2	3	4	Average level of protection ⑤	6	7	8	Very high level of protection ⑨
○	○	○	○	○	○	○	○	○

In many institutions teaching higher education courses, it is argued that the protection for academic freedom has changed in recent years.

What is your view, with respect to your institution? (please select one option).

○ The protection for academic freedom has *greatly increased* in recent years.
○ The protection for academic freedom has *increased* in recent years.
○ The protection for academic freedom has *remained unchanged* in recent years.

○ The protection for academic freedom has *diminished* in recent years.

○ The protection for academic freedom has *greatly diminished* in recent years.

○ *I do not know / cannot say* whether the protection for academic freedom has changed in the institution in which I work.

Your views on the importance of academic freedom and the strength of its protection in your institution (please indicate the extent to which you agree or disagree by selecting one of the six options in each row).

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Unsure/Prefer not to say
Individual academic freedom for *teaching* has declined in my institution in recent years.	○	○	○	○	○	○
Individual academic freedom for *research* has declined in my institution in recent years.	○	○	○	○	○	○
Individual autonomy has declined in my institution in recent years.	○	○	○	○	○	○
University self-governance and decision-making (by means of senate or academic board) has declined in my institution in recent years.	○	○	○	○	○	○
Employment protection for academic staff has declined in my institution in recent years.	○	○	○	○	○	○

The questions in this section explore your views on the relevance of different types of academic freedom.

In your current institution, do you value more having *freedom to* or having *freedom from*?

○ Freedom to (agency, the ability to act)

○ Freedom from (lack of interference, not being pressured)

○ Both are equally important to me

○ Unsure/Prefer not to say

Please indicate your level of agreement with the following statements by ticking the appropriate boxes below.

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Unsure/Prefer not to say

My professional identity as an academic is important to me.	○	○	○	○	○	○
Having a sufficient degree of *freedom to* carry out my work is important to me.	○	○	○	○	○	○
Having a sufficient degree of *freedom from* to carry out my work is important to me.	○	○	○	○	○	○

Please indicate your level of agreement with the following statements about the role of digital systems (e.g., email, Teams, Scopus, Blackboard/Moodle) in contemporary UK HE.

Digital technology has significantly *improved* the working lives of teaching and research staff.

○ Strongly agree
○ Somewhat agree
○ Neither agree nor disagree
○ Somewhat disagree
○ Strongly disagree
○ Unsure/Prefer not to say

Digital technology has significantly *improved* the student experience at HEIs.

○ Strongly agree
○ Somewhat agree
○ Neither agree nor disagree
○ Somewhat disagree
○ Strongly disagree
○ Unsure/Prefer not to say

Digitally-enabled changes in performance management in the last 10 years have *enabled greater* academic freedom (e.g. sector-wide ranking mechanisms such as the NSS, TEF, REF, auto-generated research metrics, SciVal and institution-wide initiatives such as scalable online module evaluations).

○ Strongly agree
○ Somewhat agree
○ Neither agree nor disagree
○ Somewhat disagree
○ Strongly disagree
○ Unsure/Prefer not to say

The shift to digitally-enabled measurements of the student experience in the last 10 years has

enabled greater staff academic freedom (e.g. initiatives such as NSS, TEF, DLHE/Graduate Outcomes Survey).

○ Strongly agree
○ Somewhat agree
○ Neither agree nor disagree
○ Somewhat disagree
○ Strongly disagree
○ Unsure/Prefer not to say

Does your institution use a workload application system to allocate staff time?

○ Yes
○ No
○ Unsure/Prefer not say

In the context of teaching work, please indicate your level of agreement with the following statements regarding your experiences with workloading:

	Strongly agree	Agree	Neither agree nor disagree	Disagree	Strongly disagree	Unsure/Prefer not to say
I am able to effectively negotiate my teaching workload.	○	○	○	○	○	○
The teaching hours allocated do not require me to put in additional undocumented hours (e.g. weekends, evenings, annual leave).	○	○	○	○	○	○
The hours allocated generally allow me to use the pedagogic approach I want.	○	○	○	○	○	○
The hours allocated generally allow me sufficient time to feedback on student work.	○	○	○	○	○	○
The hours allocated generally incentivise me to take an ambitious approach to teaching and marking.	○	○	○	○	○	○

In the context of research aspects of your role, please indicate your level of agreement with the following statements regarding your experiences with workloading:

Neither

	Strongly agree	Somewhat agree	agree nor disagree	Somewhat disagree	Strongly disagree	Unsure/Prefer not to say
I am able to effectively negotiate my research workload.	○	○	○	○	○	○
The research hours allocated do not require me to put in additional undocumented hours (e.g. weekends, evenings, annual leave).	○	○	○	○	○	○
The hours allocated generally allow me to use the methods I want.	○	○	○	○	○	○
The hours allocated generally allow me to research the topics I want.	○	○	○	○	○	○
The hours allocated generally incentivise me to take an ambitious approach to research and dissemination.	○	○	○	○	○	○

Please write in the box below any other comments you wish to add regarding your experience with workloading systems.

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Digital governance and academic freedom in teaching

In the context of teaching, academic freedom can be broadly understood as institutions giving staff a suitable level of freedom to (e.g. agency, discretion, judgement) to make choices over:

- content of the curriculum
- pedagogic approach
- entry standards
- assessment methods
- marking criteria
- grade determination

It also incorporates freedom from undue interference in the above areas.
Please indicate your level of agreement with the following statements.

I believe that staff academic freedom - as defined above - in teaching-related processes is important to ensure high levels of staff wellbeing and performance?

○ Strongly agree
○ Somewhat agree
○ Neither agree nor disagree
○ Somewhat disagree
○ Strongly disagree
○ Unsure/Prefer not to say

Academic freedom in delivering teaching is very important to my sense of satisfaction at work.

○ Strongly agree
○ Somewhat agree
○ Neither agree nor disagree
○ Somewhat disagree
○ Strongly disagree
○ Unsure/Prefer not to say

All digital learning systems can capture data for analysis but the level and nature of analysis varies, in accordance with institutional culture, management approach and organisational capability. Depending on the aspect, the monitoring may be done by peers, professional services or those with leadership roles (programme leaders, research directors) and may be active or passive.

Please indicate your level of agreement with the following statements.

I believe that my institution has the ability to digitally monitor my teaching performance via the following online systems:

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Unsure/Prefer not to say
A VLE (e.g. Blackboard, Canvas, Moodle)	○	○	○	○	○	○
A student assessment similarity checking system (e.g. Turnitin)	○	○	○	○	○	○
A lecture recording system (e.g. Panopto, Echo360)	○	○	○	○	○	○
A curriculum management system (e.g. APMS, Tribal SITS)	○	○	○	○	○	○
An electronic module evaluation system	○	○	○	○	○	○

Knowing that my institution can monitor the content I use on my course (e.g. via VLE or lecture recording systems auditing) reduces my sense of academic freedom.

○ Strongly agree
○ Somewhat agree
○ Neither agree nor disagree
○ Somewhat disagree
○ Strongly disagree
○ Unsure/Prefer not to say

Being subject to continuous teaching performance assessment (e.g. subject committees, online module evaluations, student satisfaction surveys, NSS) reduces my sense of academic freedom.

○ Strongly agree
○ Somewhat agree
○ Neither agree nor disagree
○ Somewhat disagree
○ Strongly disagree
○ Unsure/Prefer not to say

Knowing that my institution can monitor my assessment design (e.g. through central curriculum database systems) reduces my academic freedom in assessment design (e.g. it makes me more likely to go for standardised design rather than be innovative).

○ Strongly agree
○ Somewhat agree
○ Neither agree nor disagree
○ Somewhat disagree
○ Strongly disagree
○ Unsure/Prefer not to say

Knowing that my institution can monitor my grading (e.g. through grade monitoring processes) reduces my academic freedom in grading (e.g. if there is institutional pressure to give higher grades, I may feel obliged to conform).

○ Strongly agree
○ Somewhat agree
○ Neither agree nor disagree
○ Somewhat disagree
○ Strongly disagree
○ Unsure/Prefer not to say

Overall, how my institution captures and monitors various elements of my teaching work in digital systems has no impact on my sense of academic freedom.

○ Strongly agree
○ Somewhat agree
○ Neither agree nor disagree
○ Somewhat disagree
○ Strongly disagree
○ Unsure/Prefer not to say

Do you feel that your academic freedom in teaching has been diminished as a result of use of digital monitoring? If so, how? Please write your comments in the box below.

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Please write in the box below any other comments you would like to make with respect to your academic freedom in the context of teaching, either pre-pandemic or post the emergence of COVID-19.

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Digital governance and academic freedom in research

In the context of research, academic freedom can be broadly understood as institutions giving staff a suitable level of freedom to (e.g. agency, discretion, judgement) to make choices over:

- what to research
- how to research it (e.g. method)
- why to research it (purpose)
- with whom to research (collaborators)
- how to disseminate (conference presentations, journal articles, findings).

It also incorporates *freedom from* undue interference in the above areas.
Please indicate your level of agreement with the following statements.

Academic freedom - as defined above - in carrying out research aspects of their role is important for ensuring high levels of staff wellbeing and performance.

○ Strongly agree

○ Somewhat agree
○ Neither agree nor disagree
○ Somewhat disagree
○ Strongly disagree
○ Unsure/Prefer not to say

Academic freedom - as defined above - in conducting research is very important to my sense of satisfaction at work.

○ Strongly agree
○ Somewhat agree
○ Neither agree nor disagree
○ Somewhat disagree
○ Strongly disagree
○ Unsure/Prefer not to say

Please indicate your level of agreement with the following statements.

I believe that my institution has the ability to digitally monitor my research performance via the following online systems:

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Unsure/Prefer not to say
An academic Appraisal system (for general performance management)	○	○	○	○	○	○
An online researcher development plan system (for research performance management)	○	○	○	○	○	○
SciVal (for benchmarking in relation to peers)	○	○	○	○	○	○
Altmetrics (for impact outside academia)	○	○	○	○	○	○
Citation systems (for impact inside academia)	○	○	○	○	○	○
A repository system (e.g. ePrints) (for storage of outputs and productivity dashboards)	○	○	○	○	○	○

I believe that my institution has the ability to digitally monitor these elements of my research performance:

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Unsure/Prefer not to say

My public profile	◯	◯	◯	◯	◯	◯
The research grants that I apply for	◯	◯	◯	◯	◯	◯
The topics I research (e.g. to check the alignment of my research to institutional themes)	◯	◯	◯	◯	◯	◯
The methods I use in my research	◯	◯	◯	◯	◯	◯
The purpose of my research (e.g. if it is funded, if it engages with professional practice)	◯	◯	◯	◯	◯	◯
How I choose to disseminate my research (e.g. choice of journals, conferences attended)	◯	◯	◯	◯	◯	◯
If my research is generating impact	◯	◯	◯	◯	◯	◯

Do you feel that your academic freedom in research has been diminished as a result of use of digital monitoring? If so, how? Please write your comments in the box below.

How does monitoring by your institution affect - if at all - the topics you research (e.g. pressure to align your research to departmental research priorities)? Please write your comments in the box below.

How does the monitoring by your institution affect - if at all - the methods you use in your research (e.g. to start publishing systematic reviews, to use traditional quantitative methods, to reduce methodological innovation due to ethical approval processes). Please write your comments in the box below.

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[empty text box]
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How does pressure from your institution - if at all - shape the purpose of your research (e.g. to prioritise more applied research or funded projects at expense of core research interests)? Please write your comments in the box below.

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[empty text box]
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How does pressure from your institution manifest in terms of how you disseminate your research (e.g. specific journals, specific routes, specific conferences). Please write your comments in the box below.

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[empty text box]
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Please write in the box below any other comments you would like to make with respect to academic freedom in research either pre-pandemic or post the emergence of COVID-19:

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[empty text box]
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Trajectory of digital governance

Within an institution or sector, the introduction of new practices (such as monitoring via digital systems) can subtly shift power dynamics between the institution, academic staff and various stakeholders (e.g. students, professional bodies, industry). The questions on this page seek to ascertain your views on who is most empowered by the increasing use of technology.

Please indicate your level of agreement with the following statements.

On the whole and taking into account the full ecology of systems, at the current time, I see monitoring through digital systems as:

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Unsure/Prefer not to say
Increasing academic freedom	○	○	○	○	○	○
Increasing institutional control	○	○	○	○	○	○
Increasing student (consumer) voice	○	○	○	○	○	○

Over the next five years, I see the trajectory of digital monitoring as leading to:

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Unsure/Prefer not to say
Greater academic freedom	○	○	○	○	○	○
Greater institutional oversight	○	○	○	○	○	○
Greater power for student (consumer) voice	○	○	○	○	○	○

Freedom of speech and academic freedom

Please indicate the extent of your familiarity with the UK government's intention to legislate for academic freedom and freedom of speech?

Extremely familiar	Moderately familiar	Somewhat familiar	Moderately unfamiliar	Extremely unfamiliar	Unsure/Prefer not to say
○	○	○	○	○	○

The UK government intends to legislate for a '*Free Speech and Academic Freedom Champion*'. The government has concerns that expression of political views by staff and students in relation to political, historical or social issues could expose them to intimidation, harassment and no-platforming.

Please indicate your level of agreement with the following statements.

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Unsure/Prefer not to say
There is *not* a significant freedom of speech issue on university campuses *for students*.	○	○	○	○	○	○
There is *not* a significant freedom of speech issue on university campuses *for staff*.	○	○	○	○	○	○

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Unsure/Prefer not to say
The government proposals confuse freedom of speech with academic freedom.	◯	◯	◯	◯	◯	◯

In the context of corporate reputation management activities by institutions, **please indicate your level of agreement with the following statements concerning employee-to-employer relations**.

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree	Unsure/Prefer not to say
I believe that my institution monitors the online activities of academics (e.g. social media, news articles, public speaking).	◯	◯	◯	◯	◯	◯
Corporate reputation management activities can restrict freedom of speech.	◯	◯	◯	◯	◯	◯
Corporate reputation management activities can restrict academic freedom.	◯	◯	◯	◯	◯	◯

Please write in the box below any other comments you would like to make with respect to freedom of speech.

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End of survey

Thank you for taking the time to complete this survey.

If you would like an abridged copy of the research report resulting from this survey, please enter your email address below.

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If you would like to be entered into a prize draw to win a £100 John Lewis voucher, please enter your email address below.

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Academic Freedom

in the Digital University