Time Poverty and its Impact on Research Culture

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Abstract

This article, based on our experience carrying out research culture surveys at our respective universities, discusses how 'time poverty' represents a significant challenge to the creation of positive research cultures. Time poverty is a term used to capture the fact that people persistently report having too many things to do and not enough time to do them, and is linked to poorer mental and physical health, as well as low productivity.

We argue that frameworks for defining and discussing research culture tend to be structured around tangible and easily categorised attributes. This can fragment and compartmentalise discussion and action toward discrete issues relating to research, and risks missing deeper structural and systemic issues that underlie them. To tackle time poverty, we will need a more systemic approach, requiring a broad range of solutions relating to the delivery of both research and education, and spanning from sector-wide level responses to individual behaviours. Without tackling time poverty, there is a risk that efforts to improve research culture will be stifled, because underlying issues still pervade and erode the culture, or simply because people don't have time to engage with or contribute to change. We discuss these issues in relation to some of the findings from our institutional research culture surveys and work we've already started in our institutions and suggest some further actions to take.

Keywords: academic work; higher education; research culture; survey research; time; writing retreats

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Introduction

To better understand how we can build more positive research cultures at our institutions, we recently conducted surveys with our research communities. The findings of our surveys pointed towards time pressure being a major issue for many colleagues. The perception of growing time pressures, while only rarely discussed in work on research culture, is well documented in literature on the sociology of higher education (**e.g., O'Neill, 2014; Vostal, 2015; Ylijoki and Mäntylä, 2003**). While reflective of the 'high-speed tempo' that characterises contemporary social experience (**Vostal, 2015: 71**), sociologists agree that academics face particular challenges and that 'time pressure, haste, hurry and rush are prevalent predicaments in the lives of academics' (**Vostal, 2015: 75**). We draw on the concept of 'time poverty,' which emerged from work in economics and sociology, calling attention to the essential importance of time as a resource (**Vickery, 1977**). It has been defined as people feeling 'like they have too many things to do and not enough time to do them' and survey evidence links it 'to lower well-being, physical health and productivity' (**Giurge et al., 2020: 993**). In the context of research culture, our survey data suggests that time poverty appears to negatively impact on creativity and developing new ideas, engagement with collaboration, networking and career development opportunities, and colleagues' mental health and well-being.

As we discuss in more detail below, perceptions of time poverty arise from increasing demands from educational activities, financial constraints, and growing bureaucratisation of higher education, especially in the UK. However, frameworks for defining and discussing research culture tend to be structured around attributes that are more tangible and are easily categorised (**e.g., Shift Insight, UK Reproducibility Network & Vitae, 2024**). This can compartmentalise discussion and action toward discrete issues relating to research, and risk missing deeper structural and systemic issues. We acknowledge that recent initiatives to reduce bureaucracy in research and funding processes are valuable for releasing time for researchers and research enablers (**Tickell, 2022**). However, we argue that this is only part of the problem, and to effectively tackle time poverty to improve research culture, we will need a more systemic approach that goes beyond simplifying process. Being academic leads for research culture in our respective institutions, we see the complexity of issues relating to time poverty that require a broad range of solutions – across both areas of research and education and ranging from sector-wide and institutional initiatives to individual level responses. Given that time will be important for colleague and student experience, the quality of research we do, and our ability to invest in culture change, we ignore time poverty at our peril.

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What Is Research Culture and Why Measure It?

Research culture 'is a hazy concept which includes the way we evaluate, support and reward quality in research, how we recognise varied contributions to a research activity, and the way we support different career paths' (**Casci & Adams, 2020: 1**). Although there is no single agreed definition, perhaps the most widely adopted is that of the Royal Society that describes it as 'the behaviours, values, expectations, attitudes and norms of our research communities' (**Shift Insight, UK Reproducibility Network & Vitae, 2024: 5**).

Improving research culture is at the forefront of conversations and activity across the sector, and is already high on the agenda of institutions, funders and other organisations across the UK. This is largely due to a series of reports around research culture foregrounding pressing challenges that could no longer be ignored (**e.g., Cornell, 2020; Noone, 2020; Wellcome 2020; MI Talent, 2022**). These challenges include a need to: increase diversity; tackle bullying and harassment; reduce precarity; improve wellbeing; improve people management; better support career progression; recognise a wider range of contributions to research; embed responsible research assessment; and promote more transparency and openness in research. A number of different frameworks and toolkits have been developed to help facilitate change (**e.g., Science Europe, 2021; Russell Group 2021; Vitae, 2024**). Work to improve research culture in Higher Education institutions (HEIs) in the UK looks set to be further accelerated through a growing number of dedicated funding streams being made available, including research culture funding to English and Welsh institutions from Research England and Higher Education Funding Council for Wales, Wellcome's Institutional Research Culture Fund, and the UKRI EDI Caucus Flexible Fund. There will also be an increased emphasis on research culture through the new People, Culture and Environment component of REF2029, which intends to:

…appropriately recognise and reward HEIs that create conditions in which excellent research and impact can be produced in the disciplinary areas that they support (**REF2028, 2023: 7**).

This includes the ways in which:

…HEIs support their staff, enable collaboration beyond the institution, support the broad development of disciplinary knowledge and ensure the integrity of their research (**REF2028, 2023: 7**).

The pace and scale of activity can sometimes be quite bewildering – on the surface, there are so many issues to address, frameworks in which to work, and areas to focus on, but where does one start?

This question is further complicated because of the need for change within different institutional contexts as universities vary in many ways including their size, their research and education focus, and their current culture. As Gadd (**2022**) quite rightly points out, any improvements in our research culture must be based on a 'strong sense of the lived experience of our research communities: the good, the bad, and the ugly' and accompanied with a portfolio of actions reflecting local values and priorities. Therefore, we are seeing the emergence of an evidence base around lived experiences of research culture, with the publication of research culture surveys across numerous higher education institutions, supported by those of funders and sector-wide groups. The University of Glasgow was the first university to run an institutional research culture survey in 2019 (**University of Glasgow, 2019**). Since then, research culture surveys have been carried out at other universities, including Edinburgh (**Macleod et al, 2020**), St Andrews (**Albaghli et al., 2021**), and University College Dublin (**University College Dublin Research Culture Initiative Team, 2021**). Although these surveys paint similar pictures, each gives their own insights into the experiences of specific research communities. Therefore, at Newcastle and Cardiff, we decided to carry out surveys to ensure that our actions are evidence-driven and community-led. The surveys allowed us to better understand the lived experiences of people in our diverse research communities, and provide a baseline against to measure the impact of our actions in future. We were also able to benchmark our results against the sector more widely by drawing on some measures used in previous surveys.

Our Institutional Surveys and the Emergence of Time Poverty

Our survey designs were based on consultation with stakeholders. They included both quantitative, closed-ended questions and open-ended qualitative ones that allowed us to identify key themes. We combined measures already used in earlier research culture surveys with new questions developed and piloted within our institutions. Newcastle's survey was carried out in 2021 around four identified attributes of a positive research culture: Collaboration and collegiality; Freedom to grow and explore; Fairness and inclusion; and Openness and integrity (**Newcastle University, 2022**). Cardiff built on this approach in their 2022 survey, broadly aligning to these four attributes and including an additional three emerging from consultation with stakeholders: Job security and career development; Work-life balance; and Mental health and wellbeing (**Cardiff University, 2023**). Both surveys were shared widely across each institution, seeking responses from all colleagues involved in research, including academic staff, research staff, professional services colleagues, and postgraduate researchers (see **Table 1** for breakdown of respondents).

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Table 1: Breakdown of respondents to our surveys by role

Role	Cardiff	Newcastle
Postgraduate researchers	365	132
Research-only	224	140
Teaching and Research	475	285
Teaching and Scholarship	65	28
Professional Services	161	157
No response/self-described	22	99
Total	**1312**	**841**

Across the two surveys, there were striking similarities in the findings. Quantitative results at both institutions provide evidence of positive experiences around collaboration and collegiality, and widespread perceptions of strong institutional commitments to research integrity and open research. However, more negatively, just over a third of colleagues felt that they had sufficient and/or quality time to think creatively and develop their ideas: this was the case for just 36% of all respondents at Cardiff and 34% at Newcastle. At both institutions, this proportion was lower for academic colleagues than for researchers or professional services colleagues. Cardiff also asked quantitative questions about work-life balance and wellbeing; 47% of respondents indicated that they were happy with the overall hours they work each week, with 38% disagreeing with the sentiment.

Extensive qualitative comments provided a richer and deeper understanding around how time impacts current research culture and colleagues' experiences. Along with a need for more time to be creative and develop ideas, respondents highlighted many activities that they felt they didn't have sufficient quality time for, including preparing grants, writing papers, designing innovative research, exchanging ideas and learning from others, horizon scanning, and building networks. Colleagues also mentioned a lack of time being a barrier to accessing career development opportunities, finding training and developing new skills.

Respondents in both surveys reported a range of specific issues that lead to insufficient quality time for research, including: routine administrative duties, unnecessary form filling, navigating over-complex processes and procedures, overly bureaucratic management of teaching, providing quality student supervision, inefficient policies, clunky systems, and a proliferation of meetings. Colleagues highlighted how daily demands led to research being pushed into evenings and weekends, impacting on their lives outside work and their overall wellbeing, and exacerbating inequalities for those with caring responsibilities. Some colleagues indicated that they were contemplating alternative careers, outside of academia, due to workload and time pressure:

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There is no time at all to pursue creative ideas. This all needs to be done in your own time which is not always possible (due to research and academic pressures). [Research-only contract, Woman, White - all UK based or international identities, Part-time, Newcastle University]

We lack the most important resource: quality time, to think creatively and explore ideas. For colleagues who take on roles like directors of X in the school, the time spend [sic] on these roles are not properly accounted with teaching and research and most often the research is done when there are spare times after work and during the weekend. [Academic Teaching & Research contract, Full-time, Newcastle University]

Workload seems to be ever increasing and is taking over more of my evenings despite my efforts to keep this to a minimum. My young children comment about how much time I spend working and lack of time with them. It isn't sustainable. [Academic Teaching & Research contract, Female, 35-44 years, White – British, Open-ended contract, Cardiff University]

Every researcher and academic I know works well over their allocated working hours. If you don't work beyond the usual working week, you are less likely to progress and valued less. Maintaining a work-life balance is almost impossible. [Academic Teaching & Research contract, Female, 25-34 years, White – British, Open-ended contract, Cardiff University]

The issues of workload and time poverty reported at Cardiff and Newcastle are not unique to our institutions and have also emerged in the results from surveys elsewhere, including St Andrews and Wellcome (**e.g., Albaghli et al., 2021: 25; Wellcome, 2020: 37-38**). Similarly to our data, and in line with a more recent survey of University and College Union members (**UCU, 2022**), qualitative comments from these two earlier surveys point to respondent perceptions that pressures on their time had increased over recent years. As noted in the Wellcome report:

High workloads and long hours appear to be viewed as part and parcel of research life, but their impact on researchers' wellbeing is felt to be worsening as the demands of jobs grow and competition increases. (**Wellcome, 2020: 34**).

The issue of time poverty is a complex and structural one, tied to a range of sector-wide challenges. Our survey respondents highlighted numerous perceived causes, including increased bureaucracy at institutional level, particularly relating to the management of teaching and student experience. For some, the Covid-19 pandemic exacerbated existing problems through added workloads associated with the pivot to online

teaching, coupled with caring responsibilities brought about by the closure of schools and childcare facilities (**Corbera et al., 2020**). As research has shown, adverse impacts of the pandemic were not distributed evenly. Academic mothers with young children were far more likely to report mental health and productivity challenges because of caring responsibilities (**Crook, 2020; Kasymova et al., 2021**)**.**

More broadly, UK HEIs are facing an increasingly challenging financial environment, due to decreased income from tuition fees and grant funding, coupled with increasing costs (**Universities UK, 2024**). In some cases, this has led to increased workloads through reduced staffing levels, including reduced financial and administrative support for research (e.g., **Hanna, 2023**). Furthermore, evidence suggests that the growth of bureaucratic processes is perceived to restrict academic autonomy across the sector (**Nash, 2019; Ylijoki & Mäntylä, 2003**). Other conversations in our own institutions revolve around how the pendulum swings from emphasis on delivery of education to research and back again, as universities worry about their position in various evaluation exercises and league tables. Continuous and frenetic activity can make it difficult for colleagues to know how best to effectively spend their time or create time and space for 'deep work' (**Newport, 2024**). Along those lines recent years have seen prominent calls for 'the slow university' (**O'Neill, 2014**) and 'the slow professor' (**Berg & Seeber, 2016**) to challenge the stress associated with a constant experience of 'time crunch' and to 'advocate deliberation over acceleration' (**Berg & Seeber, 2016: xviii**).

Whatever the causes, the lived experience of time poverty has a profound impact on research culture at our institutions and across the sector. However, as many of our respondents pointed out, although our surveys focused on research culture, solutions to structural issues will sit outside of the research domain, and releasing the pressures on time will need a broader institutional or sector-wide response. Perhaps the findings from research culture surveys can be a lightning rod for sector-wide thinking and change.

What Can We Do About It?

Tackling the issue of time poverty in the context of research culture is complex, but we want to articulate how important we think it is. We recognise that in the context of improving research culture, there are initiatives in the sector for reducing research bureaucracy to free up more time (**e.g., Tickell, 2022**). However, research is not conducted in a vacuum away from other activities, in particular, there is an interdependency between education and research, and people have additional requests on their time and commitments in terms of administrative and leadership roles and responsibilities (**Bell, Rajendran, & Theiler, 2012**). Therefore,

tackling time poverty needs a much more co-ordinated and concerted effort.

Given the prominence of time poverty in our research culture surveys, we are taking steps at our institutions to address it. Interestingly, and independently from one another, we are doing so in similar ways. For example, we are both looking to protect time for research, through supporting writing groups and retreats, exploring and revising sabbatical and research leave policies, and seeing what initiatives work at local levels (e.g., meeting free days and weeks, and email policies). As part of their Research Culture Action Plan, and under a top priority project of 'Releasing Quality Time', Newcastle University has funded off-campus writing retreats, and is now developing a more sustainable and inclusive model for group writing activities. The current aim is to work with the research community to produce a set of resources that make organising local retreats easy, including finding and booking suitable local locations, suggestive itineraries and guides, and how to make the most from the time away from the desk and everyday tasks. The aim is not only to make organising retreats easy, but to emphasise the value of protecting time, and give colleagues and students permission and tools to do it, to help create a more values-driven culture. Similarly, Cardiff has started their own initiative, entitled *Taking Back Time*. The institution has re-introduced a university-funded research leave scheme, additional to school-level schemes already operating and will be piloting school-level initiatives to free up time, which may include meeting-and-email free days, and short-term research leaves measured in weeks and days. Cardiff is also funding writing retreats for female Principal Investigators, facilitated through the EMPOWER Network for Female PIs. This is a priority because women have been identified as particularly subject to the challenges of carving out research time (**e.g., Murray and Kempenaar, 2020**). Both universities are collating local initiatives to protect time for research, to see what works and what does not, and identify cultural or structural barriers that need addressing. These also sit in wider initiatives and activities at multiple organisational levels that seek to streamline research (and other) processes, reduce bureaucracy and meeting time, make it easy to find information, and give more agency for decision-making.

Across the sector, we believe that institutions ignore time poverty at their peril. Not only can it significantly impact colleague experience, performance and research quality, but it also restricts colleagues' abilities to engage with and contribute to activities to improve local and institutional research culture. Whether it be increasing mentoring, building networks and collaborations, developing open research practices, or upskilling to improve leadership, education and management capacity – these all take time. Therefore, tackling time poverty in a wider context

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will be essential to improving research culture as well as staff and student experience. We see it as a fundamental and systemic driver for many of the discrete challenges to a positive research culture. As an underlying issue, it has remained largely invisible because of our emphasis on discrete and siloed issues which can made it difficult to detect structural problems.

It Is certainly the case that there isn't one solution to the problem. Rather, solutions will be diverse and tailored to specific environments, opportunities and constraints. We do, however, believe, that universities – and the groups and individuals working within them across the sector – have the agency to address the problem and improve research culture.

Acknowledgements

Karin Wahl-Jorgensen has been Dean of Research Environment and Culture at Cardiff University since 2021. In that role, she works to develop a more inclusive, collaborative, and creative research culture across the institution. She led the development of Cardiff's Research Culture Action Plan and the first institutional research culture survey. She is a member of the GW4 Board and UKRN Institutional Lead. She is also a Professor in the School of Journalism, Media and Culture. Her research focuses on journalism and citizenship, and she has authored or edited ten books, more than 80 journal articles and 45 book chapters.

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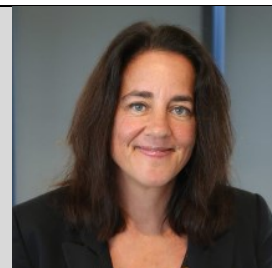
Candy is Professor in Animal Behaviour and Cognition at Newcastle University, and also Dean for Research Culture & Strategy there. She has responsibility for enhancing research culture across the institution, and the programme of work that she now leads on includes a priority project to release quality time for research. Over the last 10 years, she has held a series of leadership roles, with a particular focus on researcher career development and equality, diversity and inclusion. She strongly believes in cross-institutional collaboration for sector-wide change, as seen in this joint publication

References

Albaghli, B., Craig, Prof. A.-M., Harris, J. and Woodfield, R. (2021). *St Andrews Research Culture Survey Report 2021*. Available at: https://www.st-andrews.ac.uk/assets/university/research/documents/research-culture/research-culture-project-survey-report-aug-21.pdf [Accessed: 2 February 2024].

Bell, A. S., Rajendran, D., & Theiler, S. (2012). Job stress, wellbeing, work-life balance and work-life conflict among Australian academics. *E-journal of Applied Psychology*, *8*, 25-37.

Berg, M., & Seeber, B. K. (2016). *The slow professor: Challenging the culture of speed in the academy*. University of Toronto Press.

Cardiff University (2023). Research culture survey report 2023 executive summary. Available at: https://www.cardiff.ac.uk/documents/2741029-research-culture-survey-report-2023-executive-summary [Accessed: 2 February 2024].

Corbera, E., Anguelovski, I., Honey-Rosés, J., & Ruiz-Mallén, I. (2020). Academia in the time of COVID-19: Towards an ethics of care. *Planning Theory & Practice*, *21*, 191-199.

Cornell, B (2020). PhD Life: The UK student experience. HEPI Report 131. Available at: https://www.hepi.ac.uk/wp-content/uploads/2020/06/PhD-Life_The-UK-Student-Experience_HEPI-Report-131.pdf [Accessed: 26 January 2024].

Casci, T., & Adams, E. (2020). Research culture: Setting the right tone. *Elife*, *9*, e55543.

Crook, S. (2020). Parenting during the Covid-19 pandemic of 2020: Academia, labour and care work. *Women's History Review*, *29*, 1226-1238.

Gadd, E. (2022). *Research Culture: where do you start?* Available at: https://lizziegadd.wordpress.com/2022/04/14/research-culture-where-do-you-start/ [Accessed: March 27 2024].

Giurge, L. M., Whillans, A. V., & West, C. (2020). Why time poverty matters for individuals, organisations and nations. *Nature Human Behaviour*, *4*, 993-1003.

Hanna, L. (2023). We need to talk about staff retention in the sector. HEPI blog, 28 November. Available at: https://www.hepi.ac.uk/2023/11/28/we-need-to-talk-about-staff-retention-in-the-sector/ [Accessed: 2 February 2024].

Kasymova, S., Place, J. M. S., Billings, D. L., & Aldape, J. D. (2021). Impacts of the COVID-19 pandemic on the productivity of academics who mother. *Gender, Work & Organization*, *28*, 419-433.

Macleod, M. R., Thomson, L., Shinton, S., Mellifont, B., Campbell, A., and Tanriver, A. (2020). *University of Edinburgh Research Culture Survey*. Available at: https://osf.io/82f4x/ [Accessed: 2 February 2024].

Midland Innovation TALENT (2022). Research culture: A technician lens. Available at: https://www.mitalent.ac.uk/write/MediaUploads/research%20culture/TALENT ResearchCulture_Report_V10.pdf [Accessed: 26 January, 2024].

Murray, R. and Kempenaar, L. (2020). Why do women attend writing retreats? *Gender and Education* 32, 1001-1018.

Nash, K. (2019). Neo-liberalisation, universities and the values of bureaucracy. *The Sociological Review*, *67*, 178-193.

Newcastle University (2022). *Research Culture Survey Report 2022*. Available at: https://www.ncl.ac.uk/mediav8/our-research/files/RC_SurveyReport_2022.pdf [Accessed: 2 February 2024].

Newport, C. (2024) *Slow productivity: The lost art of accomplishment without burnout.* Penguin, U.K.

Noone, H. (2020). *The ARMA Research Culture Survey Report.* Available at: https://arma.ac.uk/wp-content/uploads/2021/03/ARMA-Research-Culture-Survey-2020.pdf [Accessed: 26 January 2024].

O'Neill, M. (2014). The slow university: work, time and well-being. *Forum Qualitative Sozialforschung Forum: Qualitative Social Research*, *15*, Art. 14.

REF2028 (2023). Research Excellence Framework 2028: initial decisions and issues for further consultation (REF 2028/23/01). Available at: https://repository.jisc.ac.uk/9148/1/research-excellence-framework-2028-initial-decisions-report.pdf [Accessed: 27 March 2024].

Russell Group (2021). *Research Culture and Environment Toolkit*. Available at: https://russellgroup.ac.uk/media/5924/rce-toolkit-final-compressed.pdf?=section2 [Accessed: 2 April 2024].

Science Europe (2022) A values framework for the organisation of research. Available at: https://scienceeurope.org/media/itzhj4wj/202206-se-statement-values-framework.pdf [Accessed: 27 March 2024].

Shift Insight, UK Reproducibility Network & Vitae (2024). Research Culture Initiatives in the UK: Report. Available at: https://www.ukri.org/wp-content/uploads/2024/01/UKRI-180124-ResearchCultureInitiativesInTheUK.pdf [Accessed: 29 January, 2024].

Tickell, A. (2022). *Independent review of research bureaucracy: Final report*. Department of Business, Energy and Industrial Strategy (BEIS). Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1094648/in dependent-review-research-bureaucracy-final-report.pdf [Accessed: 29 January 2024].

Universities UK (2024). *Financial sustainability of UK universities: PwC findings.* Available at: https://www.universitiesuk.ac.uk/what-we-do/policy-and-research/publications/financial-sustainability-uk-universities [Accessed: 27 March 2024].

University and College Union (2022). *Workload Survey 2021 Data Report.* Available at: https://www.ucu.org.uk/media/12905/UCU-workload-survey-2021-data-report/pdf/WorkloadReportJune22.pdf [Accessed: 26 January 2024].

University College Dublin Research Culture Initiative Team (2022). *Research Culture Survey 2021*. Available at: https://www.ucd.ie/researchculture/t4media/2021_Survey_Report_UCD_Research_Culture_Final.pdf [Accessed: 26 January 2024].

University of Glasgow (2019) *Research Culture Survey*. Available at: https://www.gla.ac.uk/myglasgow/ris/researchculture/researchculturesurvey/ [Accessed: 2 February 2024].

Vickery, C. (1977). The time-poor: A new look at poverty. *Journal of Human Resources*, 12, 27-48.

Vitae. (2024). *Research Culture Framework.* Available at: https://www.vitae.ac.uk/impact-and-evaluation/research-culture-framework-final.pdf [Accessed: March 27 2024].

Vostal, F. (2015). Academic life in the fast lane: The experience of time and speed in British academia. *Time & Society* 24(1), 71-95.

Wellcome Trust (2020). *What researchers think about the culture they work in.* Shift Learning, London. Available at: https://wellcome.org/reports/what-researchers-think-about-research-culture [Accessed: 2 February 2024].

Ylijoki, O-H. and Mäntylä, H. (2003). Conflicting time perspectives in academic work. *Time & Society* 12, 55–78. a consistent citation style with hyperlinks where possible.

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