

Do researchers' early careers have to be precarious?

A 'What do researchers do?' research article

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Context

Though a doctoral qualification opens up multiple career directions, and conceptions of doctoral study have shifted significantly during the last two decades, a doctorate continues to be viewed by many as a stepping stone to an academic research job and potentially a career in academia. In the UK, the most recent Postgraduate Research Student Experience Survey¹ found that 39% of respondents envisaged an academic career after completing their doctorate, with 11% specifically aiming at a research career within higher education (HE). Across Europe, around 75% of early career researchers aspire to an academic career and 79% in the UK.^{2 3}

There has been considerable growth in the numbers studying doctoral programmes in the UK, and Europe generally, leading to concern that doctoral researchers need to be much more aware that only a small minority, often estimated at 10-15%, will enter academic careers even if many more want to. However, there has also been an increase in the number of research staff in UK HE, which is frequently the first step in an academic career. HESA figures for 2017/8 show that some 49,515 individuals were employed on research-only contracts, albeit at all career stages⁴, up from 45,660 in 2013/4.

Fixed-term employment is common within the early academic career stage. Vitae's Careers in Research Online Surveys gather the views of research staff in UK universities about their career experiences and the results present a challenging picture for early career researchers. In recent surveys, 72% reported being employed on a fixed-term contract (although this has declined from 82% in 2009). The proportion in Russell Group institutions was almost 80% across all major disciplinary groups, while at other institutions this varied from 71% in physical and engineering sciences to 41% in social sciences and 37% in the arts and humanities. Amongst those who had completed their doctorate in the last five years, 86% were employed on a fixed-term contract. HESA reports that 67% of research-only staff were employed on fixed-term contracts between 2014/5 and 2017/8.

Consultation on the recommendations from the recent independent review of the Concordat to Support the Career Development of Researchers provides evidence that many researchers regard addressing the prevalence of fixed-term contracts within HE research as a priority, despite reduction in their use being highlighted as a goal of the 2008 Concordat. Insecure employment contracts were highlighted as the most important issue to resolve by individual respondents.

In a recent report⁵ UCU argued that insecure employment is now the norm rather than the exception for early career academics. A survey of postdoctoral researchers in the humanities and social sciences⁶ found that respondents reported negative personal and professional implications of being employed on a fixed-term basis, including the anxieties and distractions of needing to regularly search for work.

New data

Vitae's analysis of the most recent L-DLHE data in Table A below shows that doctoral graduates working in HE research occupations⁷ are considerably less likely than those in

¹ https://www.heacademy.ac.uk/system/files/hub/download/pres_2017_report_0.pdf

² <https://www.vitae.ac.uk/vitae-publications/reports/vitae-5-steps-forward-web.pdf>

³ http://ec.europa.eu/euraxess/pdf/research_policies/Researchers%20Report%202014_FINAL%20REPORT.pdf

⁴ <https://www.hesa.ac.uk/news/24-01-2019/sb253-higher-education-staff-statistics>

⁵ https://www.ucu.org.uk/media/7995/Precarious-work-in-higher-education-a-snapshot-of-insecure-contracts-and-institutional-attitudes-Apr-16/pdf/ucu_precariouscontract_hereport_apr16.pdf

⁶ http://www.workingknowledgeps.com/wp-content/uploads/2018/04/WKPS_PrecariousPostdoc_PDF_Interactive.pdf

⁷ UK and EU domiciles who are in employment, 3.5 years after obtaining their doctoral qualification

other sectors to be employed on an open-ended contract. Just 17.3% of those working in HE research were employed on an open-ended basis.

This is in sharp contrast to all of the other occupational groups analysed, where more than two thirds of these graduates were employed on an open-ended basis. Of particular note is that most doctoral graduates working in HE in teaching and lecturing roles, rather than research roles, were employed on an open-ended basis.

Table A	2016 L DLHE					(N)
	Open-ended contract	Fixed term (12 mths+)	Fixed term (<12 mths)	Self-employed	Other (incl temp agency)	
HE research occupations	17.3%	74.7%	6.3%	0.3%	1.4%	300
Research (not in HE sector)	78.9%	14.6%	2.7%	2.7%	1.1%	185
Teaching and lecturing in HE	72.7%	19.4%	5.8%	0.2%	1.9%	480
Other HE	72.4%	19.5%	4.1%	0.8%	3.2%	125
Other teaching occupations	79.4%	4.4%	4.4%	10.3%	1.5%	70
Other common doctoral occupations	84.3%	8.4%	0.8%	2.8%	3.7%	605
Other occupations	69.2%	7.0%	1.4%	14.7%	7.7%	285
All	68.2%	21.6%	3.4%	3.6%	3.2%	2055

What this analysis masks, however, is disciplinary differences. In practice, the position for art and humanities and social sciences doctoral graduates (at this stage) working in any kind of HE role is less stark: more than two thirds have open-ended contracts of employment, compared with just under half in the other sciences. This is because a larger proportion are employed on open-ended teaching contracts.

Trends

The fixed-term nature of most early career researchers' contracts appears to be a consistent anomaly in comparison with other occupational groups. Previous Vitae research showed that the proportion of doctoral graduates working in HE research employed on open-ended has remained at 16-17% since 2010.⁸

Although the employment conditions of other academic occupations, such as teaching and lecturing, appear to reflect those of the rest of the labour market, this analysis shows that even teaching and lecturing roles in HE have become somewhat less secure over time; in 2010, 80% of doctoral graduates working in these roles were employed on open-ended contracts, whereas by 2016 this had fallen to 72%.

There is also some evidence to suggest gendered implications of the common use of fixed-term contracts in HE research. In our '*What do research staff do next?*' survey in 2016, female respondents disproportionately reported that they left HE research due to the lack of job security, fixed term contracts and poor work-life balance. HESA data from 2017/8 provides some evidence too, with 36% of all female academic staff employed on fixed-term contracts compared with 32% of males⁹. Amongst doctoral graduates in our analysis of 2016 L-DLHE data, evidence suggests there may be a minor difference by gender, with 18% of men compared with 16.5% of women working in HE research roles had an open-ended

⁸ <https://www.vitae.ac.uk/vitae-publications/reports/what-do-researchers-do-early-career-progression-2013.pdf/view>

⁹ <https://www.hesa.ac.uk/news/24-01-2019/sb253-higher-education-staff-statistics>

contract. On the other hand, this difference has not emerged from data from the Careers in Research Online Survey of research staff.

Implications

There is a range of implications of the widespread employment of researchers on fixed-term contracts for institutions, as well as the individuals themselves. For institutions it offers flexibility but there are potential costs due to the turnover of research staff, in terms of lost productivity and time taken to hire and train new staff. A few institutions have chosen recently to employ all research staff on open-ended contracts, presumably reflecting the view that providing what is perceived to be more secure employment for researchers is beneficial to them, and the Concordat retains the aspiration that the use of fixed-term contracts should be minimised.

There are also potential costs to overall research capacity in terms of talent loss, in the context of the UK's Industrial strategy to increase its investment in research and innovation to 2.4% of GDP.¹⁰ Vitae's *'What do research staff do next?'* survey in 2016 explored researchers' transitions away from research posts in European HE institutions to occupations in other employment sectors and illustrated disillusionment amongst researchers as a major contributor to this loss of talent for the academic sector. The three most common reasons for researchers' transitions away from academic research were their desire for better long-term employment prospects, wanting greater job security and no longer being prepared to be employed on short/fixed-term contracts. The proliferation of fixed-term contracts for HE researchers, concentrated in the early career stage – along with an increasing number of doctoral graduates – contribute to the outcome that many early career researchers aspiring to a long-term career in HE research will not achieve it.

Knowledge gaps

Despite the insights highlighted above, the L-DLHE dataset is not comprehensive enough to give a deep insight into the security of HE research employment. We are missing information on several related issues. First, we are unable to gain insights into the extent to which the widespread use of fixed-term employment contracts in HE research impacts on the longer-term career destinations of doctoral graduates. Does it affect their decisions about continuing to work in HE or moving to another sector in the longer term, for all such graduates or especially certain groups of them?

Second, despite research and policy concerns around the lack of BAME academics working in HE, we do not know how different minority ethnic groups experience insecure employment in HE research in comparison to their white peers. The scale of the L-DLHE survey means there are simply too few respondents in minority ethnic groups to conduct robust analysis.

Furthermore, recent changes mean that there will be less data on doctoral graduate career paths as there are now no systematic surveys of doctoral graduates beyond the Graduate Outcomes survey, which records destinations only at 15 months after graduation.

Conclusion

From our analysis, HE research is the only occupational group in which most doctoral graduates are predominantly employed (i.e. as early career researchers) on a fixed-term basis. Concordat-related reviews and analysis of destinations data suggest the trend for insecure employment of early career researchers is persistent, particularly in the sciences, and impacting on the attractiveness of the early career stage in HE.

¹⁰https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/664563/industrial-strategy-white-paper-web-ready-version.pdf

As a result, how much talent is leaving HE, particularly female and BAME researchers, and/or those whose personal circumstances do not enable them to flourish at the highly-competitive precarious postdoctoral phase? The recent sector consultation on the recommendations of the Independent Review of the Concordat to Support the Career Development of Researchers confirmed the high level of sector interest in having such data – with 99% of respondents saying data on researcher career paths were important at an organisation and UK level.

At a time when there are policy aspirations to increase the number of researchers in the UK, the current lack of systematic career tracking of doctoral graduates and early career researchers means that issues affecting the supply and subsequent paths of needed highly-skilled postgraduate talent into research remain little understood.

