

A survey into the career motivations and expectations of doctoral researchers

The changing landscape

The recent introduction of significant government funding to embed personal and professional development within research degree programmes has led to a shift in how our researchers are trained, and we are starting to see a change in attitudes of potential employers. In addition to the ‘traditional’ recruitment of PhD researchers for their specific subject related knowledge and skills, employers are also beginning to recognise the higher level generic skills that are an integral part of the process of completing a PhD.

The increasing focus on the employability of doctoral researchers brings to the fore different issues for different stakeholders:

- **Postgraduate researchers**

Individual researchers need to be able and supported to understand their own skills, strengths and motivations in the context of career opportunities.

- **Universities**

As a result of the Roberts’ funding, the current agenda reflects an increased emphasis on generic skills development. As part of this, Universities are increasingly interested in how effective they are being in equipping their researchers with the employability skills they will need for their future careers.

- **Employers**

Employers, particularly non-academic employers, are becoming more interested in understanding who PhD researchers are, what they can offer, and what their expectations are.

The UK GRAD Programme works with employers, universities, researchers and other stakeholders to embed personal and professional development for postgraduate researchers. We conducted this survey to better understand postgraduate researchers’ motivations for undertaking a PhD and to gain an insight into their career expectations. We hope that this data may be useful to recruiters and potential recruiters targeting the PhD sector and in developing resource plans. Additionally, we hope that the data may be useful to anyone interested in the career motivations and expectations of UK doctoral researchers.

Our approach

In order to gain a better understanding of the views of the PhD researchers themselves, we have conducted a survey that asks about their career expectations. This research was conducted during October 2005, via an on-line survey, which was distributed through the UK GRAD Hub and the National Postgraduate Committee networks, and via direct mail to Research Council funded students.

Respondents: 647

- 97% were studying full time
- 94% were UK domiciled
- 81% were Research Council funded
- 12% had recently started their PhD, 28% were half-way through, 55% were towards the end of their PhD, and 6% had completed their PhD at the time of completing the survey

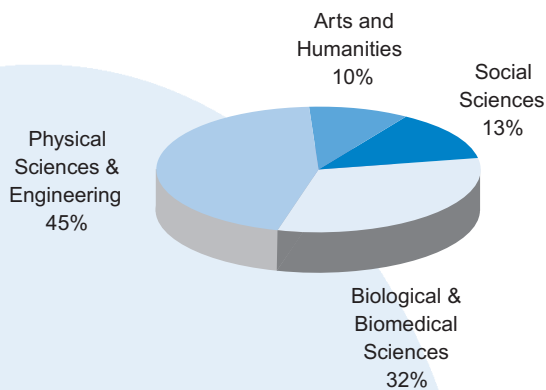


Figure 1: Breakdown of respondents by subject background

We aimed to get a sample representative of the whole cohort, however, the respondents are skewed towards fulltime, Research Council funded researchers (RC funded students make up approximately a third of all full-time PhD researchers). The respondents probably represent the 'traditional' cohort, who continue directly from undergraduate to postgraduate study, and does not fully represent distance learners, part-time and mature researchers. Despite this, there are still some clear themes raised by the data.

Emerging themes

The themes emerging from the survey are:

● Motivations

There are a wide variety and breadth of reasons why individuals undertake a PhD. The complex interplay of motivations and reasons that underpin career choice thus far is a key factor in understanding how best to support our research students in thinking about careers.

● Career expectations

Although the survey group seem to have considered the benefits to their career of undertaking a PhD, they are not clear about what that career actually looks like or about the career opportunities available to them.

● Bridging the knowledge gap

The responses to the survey highlight that there is still some distance to travel before researchers feel aware of the information and opportunities available to them – both in terms of future career options and their approach to career choices and decision making.

Motivations

It was apparent from those surveyed that their reasons for undertaking a PhD are complex, diverse and wide-ranging.

We asked respondents to indicate their core reasons for undertaking a PhD (see Figure 2). Respondents could select more than one reason.

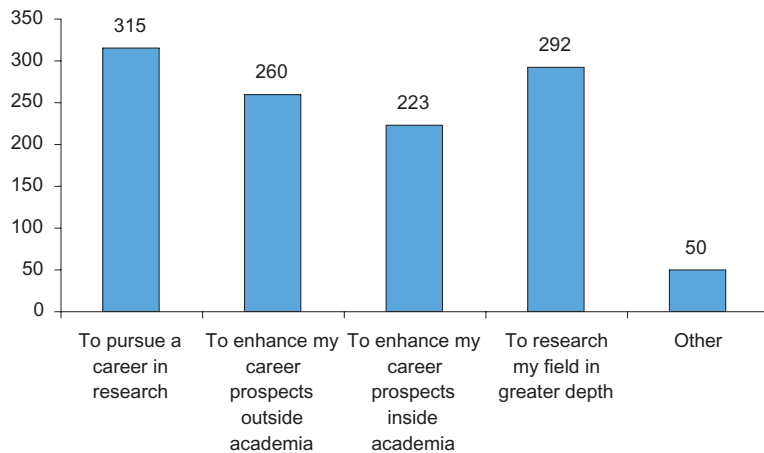


Figure 2: Core reasons for undertaking a PhD

The data shows that 34% of respondents were undertaking a PhD to enhance their career prospects **inside** academia and that 49% wanted to pursue a career in research. 45% of respondents indicated that the chance to research their field in greater depth was a core reason for further study. It is interesting that 40% considered that undertaking a PhD would enhance their career prospects **outside** the academic sphere. The 'other' category provides us with some interesting insights into the breadth of people's motivations. Responses included:

- "I thought it would enhance my knowledge and be a great learning experience"
- "To further myself intellectually, and to pay the bills for three years!"
- "To put off thinking about a career"
- "Enjoyed Uni life still, not ready for a job"
- "Convenient option at the time, having no other jobs lined up"
- "To stand out from the crowd – other degree levels are so common these days"

To best support our researchers we need to be able to understand their career intentions in the longer term. Researchers need information, advice and guidance to help them think about both academic and non-academic career opportunities. They also need to be able to understand their own preferences about style of workplace, management, culture etc and those of potential employers, in order to make decisions based on values and motivations.

Career expectations

The data from the survey indicates that broadly speaking PhD researchers **do** expect their PhD to enhance their career prospects; however, they are not always sure what that 'career' is or what it looks like.

You can see from the previous section on motivations that a high number of respondents cited that they undertook a PhD in order to enhance their career prospects inside or outside academia. It is reassuring to see that 72% of respondents felt that studying for their PhD has indeed enhanced their career prospects. However, 28% felt that it had neither enhanced nor hindered their career prospects and 5% responded that doing a PhD had actually hindered their career prospects.

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The survey asked about the careers expectations of postgraduate researchers when starting their PhD, which are displayed in Figure 3.

At the **beginning** of their PhD, 43% (28 researchers) of all the Arts and Humanities respondents had a clear idea of what they wanted to do after completion, compared with only 21% (61 researchers) of respondents from a Physical Sciences and Engineering discipline. 11% (7 researchers) of all Arts and Humanities respondents, 11% (10 researchers) of all Social Sciences respondents, 16% of all Biological and Biomedical Sciences respondents, and 33% of all Physical Sciences and Engineering respondents had no clear idea of their career expectations beyond their PhD.

Taking all survey responses, 26% of the respondents had a clear idea of what they wanted to do once they had completed their PhD, 51% had a vague idea of their career aspirations, and a further 23% had no clear idea in mind. This may not be surprising considering the range of motivations cited by respondents for embarking on a PhD in the first place.

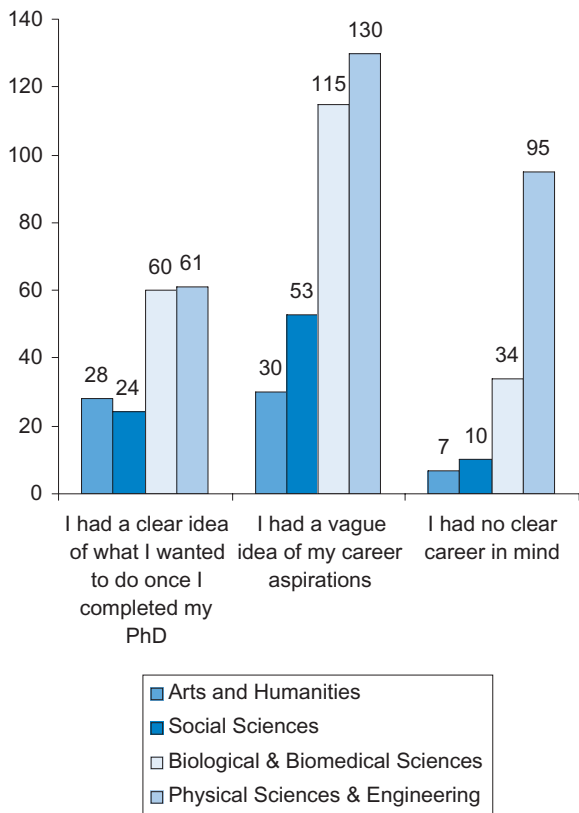


Figure 3: Career expectations when starting PhD (results displayed by discipline)

We then asked respondents about their **current** career expectations (see Figure 4). Only 20% of the respondents had a clear idea of the opportunities available to them and had some clarity about what they wanted to do when finishing their studies. 28% identify that they do have a clear idea of the opportunities available to them, but may value further support around the career management and decision making processes. 52% of the respondents want more information on the opportunities available to them.

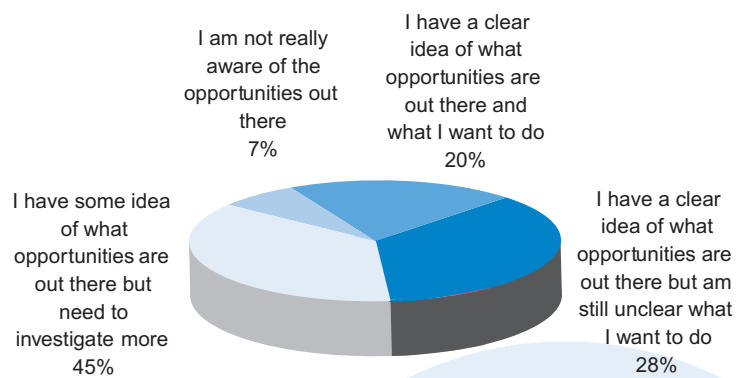


Figure 4: Current career expectations

We asked respondents what options they were considering at the end of their PhD (see Figure 5). A fifth of the respondents were considering applying for a position as part of a graduate recruitment programme, 65% of these were from a Physical Sciences and Engineering discipline.

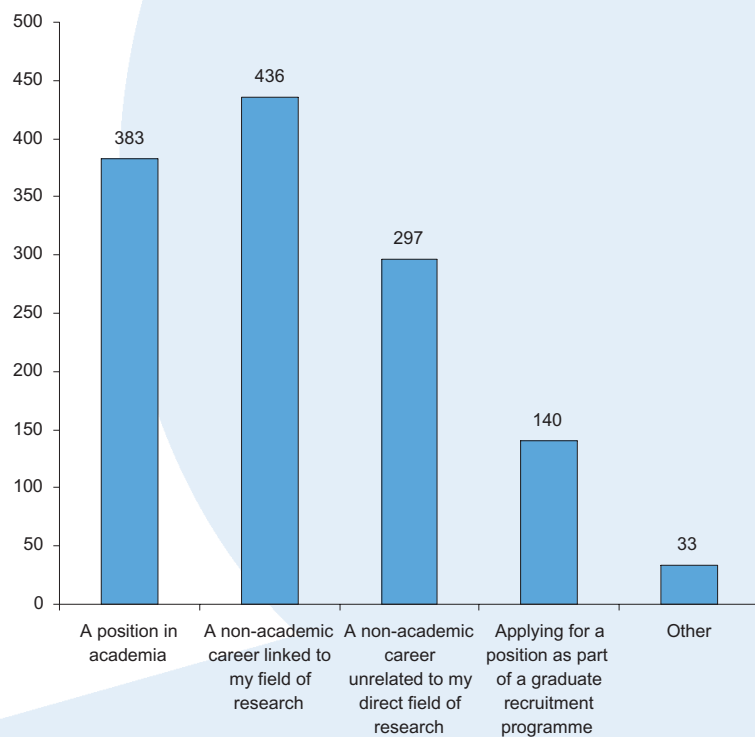


Figure 5: Career options being considered by the respondents

Employers frequently ask us whether doctoral graduates expect to be paid more as a result of their PhD qualification. In our research 43% answered yes, 24% did not think that their PhD would have a positive impact on their salary, and 33% were unsure. Given that doctoral graduates have spent an additional three years working to develop both specialist and generic skills, this is not surprising. Of those respondents considering entering a graduate scheme, 40% expected to be paid more as a result of their PhD.

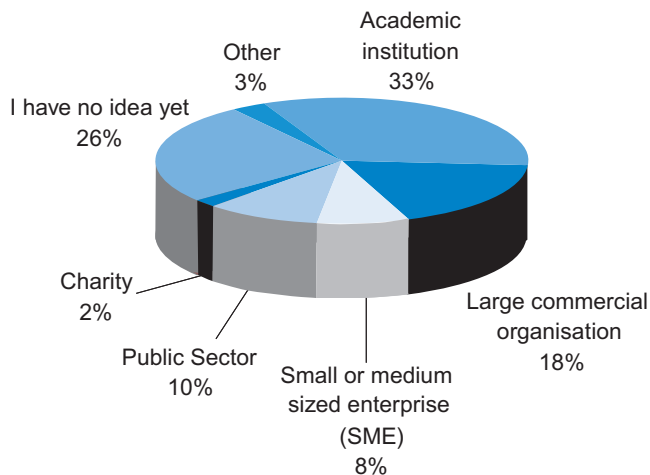


Figure 6: Types of organisations with which respondents expected to find employment

Figure 6 details the respondents' views about the type of organisation that they expected to find employment with. 77% of respondents are looking to work with a non-academic employer, with a significant proportion considering SMEs and the Public Sector. This is a key message about the breadth of doctoral graduates' aspirations.

Of the 433 respondents that were not intending to enter an academic organisation, 337 gave an indication of what their expectations were regarding their future role. Of these 337, 47% of the respondents had the expectation that they would be recruited into a post specifically targeted at PhD researchers, whereas, 44% thought that employers would treat them exactly the same as any other student graduating from higher education. 9% thought that their PhD would have no bearing on their future employment.

Bridging the knowledge gap

The final theme is that there seems to be a gap between the career expectations of PhD researchers and their knowledge of the opportunities available to them. In Figure 4 we saw that 52% of respondents stated that either they had some or no idea of the career opportunities available to them, and consequently identified the need to investigate further. Therefore, it is interesting that a third of respondents have never visited a career service and just under half had never been to an employer presentation.

A larger number of respondents visited their Careers Service and attended presentations by employers as undergraduates than whilst completing their PhD. 73% of those respondents that had visited their Careers Service whilst undertaking their PhD were currently nearing the end of their PhD. There may be an opportunity for postgraduate researchers, Careers Services and employers to engage in a dialogue earlier.

The large number of respondents who are uncertain about which career path to follow may be indicative of a need to further develop career management and planning processes within the research environment.

Summary

The themes raised in this survey highlight the need for employers, University Careers Advisory Services, and UK GRAD to continue supporting postgraduate researchers to make informed career choices.

The themes from this survey raise a number of areas to take forward:

● Postgraduate researchers

Given the complex range of reasons for undertaking a PhD, the career management support available for a postgraduate researcher needs to be appropriate for that individual. It is the responsibility of the individual researcher to find appropriate support from their University Careers Advisory Service, departments and other available resources, in order to enable them to make informed career choices. Careers Advisory Services, UK GRAD and employers are keen to find better ways of providing support and information for postgraduate researchers. UK GRAD would welcome feedback from postgraduate researchers as to how information and support about future careers could better meet their needs.

● Universities

Universities still face the challenge of engaging postgraduate researchers in dialogues about their next steps. We know that one impact of the Roberts' funding is that some Careers Advisory Services are expanding their provision for PhDs and research staff. This increase in resource is attracting more researchers to their Careers Services and providing clearer routes for employers to reach a key group who can offer higher level skills.

● Employers

Given our research indicates 77% of respondents are seeking work with a non-academic employer, this presents a real opportunity for employers who wish to capitalise on the higher level skills available from trained researchers. Bridging the gap is the key role for University Careers Advisory Services and UK GRAD. Get in touch if you are interested in finding out more about what researchers can offer you and your business.

We hope that this survey will add to the strategic debate about how we train and prepare our researchers for their professional careers, and how they are supported and differentiated in the recruitment processes. Furthermore, we hope that it will add weight to the call for further detailed research into doctoral careers so that we can begin to recognise the contribution of our researchers to the UK and global economies.

If you are interested in responding to any of the themes raised or in working more closely with postgraduate researchers, please contact the UK GRAD Programme on 01223 448510 or contact us via our Website: www.grad.ac.uk