A Survey of SHAPE Research Careers

A report by the Careers Research & Advisory Centre (CRAC)

Commissioned by the British Academy

June 2024

Written by Katja Jonsas and Robin Mellors-Bourne

Careers Research & Advisory Centre (CRAC) Ltd
22 Signet Court
Cambridge CB5 8LA
www.vitae.ac.uk

About CRAC

The Careers Research & Advisory Centre (CRAC), registered as a charity in 1964, provides research, expertise and innovation services for all those who support career development, at all ages and across all sectors. CRAC's research and consultancy work focuses on career-related learning, employability development and career transitions, including STEM and researcher careers. CRAC also owns and manages the Vitae programme, which enhances support for the professional and career development of researchers and, increasingly, development of the research environment.

Contents

1. Executive summary

Introduction and aims

The British Academy, the UK's academy for humanities and social sciences, supports a variety of researchers in the SHAPE (Social Sciences, Humanities, and Arts for People and the Economy) disciplines. SHAPE is a collective name that was developed as a tool to tell the story of these subjects, which help us to make sense of the human world, to value and express the complexity of life and culture, and to understand and solve global issues. To inform and respond to ongoing policy debates on enhancing research culture and the wider research and development (R&D) landscape, the Academy launched the SHAPE Research Careers project to produce a more nuanced understanding of how policymakers, institutions, and other actors can provide and support a better range of career opportunities for SHAPE researchers.

As a part of the SHAPE Research Careers project, the Academy commissioned CRAC to conduct a survey to explore the themes of identity, mobility, and porosity (e.g. movements between and across academia and other sectors) within the careers of SHAPE researchers.[1] The survey specifically intended to investigate research and research-related careers for SHAPE postdoctoral graduates. To do so, the key objectives were to assess:

• 	Who SHAPE researchers are and what they do, within and beyond academia;
• 	The nature and extent of mobility and porosity within the SHAPE research careers;
• 	The motivations for and barriers to research careers for SHAPE disciplines.

The key objectives of the survey study were to gain a better understanding of the careers and trajectories of SHAPE researchers and how they engage in research and research-related activities, within and beyond academia. An online survey of SHAPE researchers was designed to address these aspects, and this report presents results based on 910 responses to this survey.

Employment of SHAPE researchers

While 80% of survey respondents (N = 910) were currently employed in academia/higher education (HE), which was the same whether they had a social sciences or a humanities disciplinary background, the survey shows that SHAPE researchers work in a range of sectors. The most common sectors of employment other than academia/HE were education and training, the public sector, charity/third sector, creative and cultural, and health and social care; the proportions in each of these sectors did vary according to broad disciplinary background (social sciences vs arts and humanities). Moreover, those working in sectors other than academia/HE had roles not only in research but also positions requiring management and/or professional/technical expertise and skills, and the survey provided some evidence that SHAPE skills and expertise were in demand beyond academia – enabling such employment to be secured and for success within it.

---

[1] In this context, the definition of porosity builds on the understanding of it as movement between academia and other sectors, while extending it to concern the ability to do so. See, for example: Flinders, M. (2023), *Strategic scaffolding: Supporting mid-career and senior research leaders in the social sciences*, for ESRC, ii.

Although a higher proportion of respondents working in academia/HE held an open-ended/permanent contract (69%) than those working in other sectors (56%), this partly reflected strong participation in the survey by established academics, the majority of whom (80%) had open-ended employment. Less than half that proportion of academic/HE respondents at early-career stages (38%) had secured such stability, with most employed on a fixed-term contract. A higher proportion of respondents working in other sectors reported portfolio or multiple employment positions and/or some self-employment (28%) compared with those currently in academia/HE (13%).

In terms of geographic distribution, the overall location profile for SHAPE researchers was not as highly concentrated in London and the Southeast as other aspects of the UK R&D system.

Professional identity and engagement in research
Our survey evidence highlights a wide range of research-related activities being undertaken, within and beyond academia. Most respondents regularly applied research skills at work, felt such skills were required for success in their job, and considered them essential for career progression, although this was emphasised more strongly by those working in academia/HE. Over half of respondents, irrespective of sector, conducted some primary research, evaluated and/or synthesised existing knowledge/research, disseminated knowledge to lay and/or professional audiences, and supported research done by others. On the other hand, higher proportions of those in academia/HE, predictably, undertook certain tasks such as disseminating knowledge to academic audiences and evaluation of research/funding proposals or outputs, and sought funding for their research.

When listing reasons for conducting research, respondents working in academia most commonly identified it as an intrinsic part/expectation of being in their profession, and/or a requirement of their employment contract, and/or to progress in their career. The extent to which these reasons were cited by those working in other sectors was systematically lower, although still substantial, while other reasons such as enhancement of practice (for instance teaching) and support for policymaking were cited to a similar extent (but more rarely mentioned by those in academia/HE).

Use of research skills

Research skills remain important and widely applicable across career stages and sectors. When asked whether their research skills had helped them to gain their current role, 92% of those working in academia/HE either strongly agreed or agreed. This was nearly as high among those working in other sectors (88%). The vast majority of respondents working in academia/HE and those working in other sectors also either agreed or strongly agreed that they regularly applied research skills in their current role (93% for academia/HE, 88% for other sectors). Similar proportions stated that without their research skills they would not succeed in their current role (91% for academia/HE, 84% for other sectors). Only slightly lower proportions agreed or strongly agreed that their research skills were essential for their career progression (89% for academia/HE, 78% for other sectors).

For research activities engaged in in the last 12 months before the survey, just under two thirds of those in academia/HE had either conducted primary or experimental research and/or had

evaluated and/or produced a synthesis of research or knowledge (64% in both cases). More than half had evaluated others' research or project proposals (55%), planned/managed a research project or a research portfolio (54%) and/or conducted new research using existing data/resources (53%). Lower, but still substantial proportions had obtained new projects/funding for their own research (47%) and/or lead and managed other researchers or a research team (36%). A similar trend in results existed for those working in other sectors, with only slightly lower proportions conducting each of these types of activity; although substantially fewer had evaluated others' research (28%) or obtained research funding (21%).

Significantly, when asked if they would like to conduct research in the future, 95% of respondents with a doctorate and 93% of others stated that they would like to do so. Research activity was therefore attractive to all.

Mobility in SHAPE research careers

The survey results suggest that experiences of mobility varied with the sector in which the respondent works, and, to a certain extent, with gender and career stage. Respondents currently working in academia/HE tended to have experienced more geographic mobility than those working in other sectors, but less employer or sector mobility. Much of the international mobility had been undertaken by non-UK nationals, though around 30% of total respondents had undertaken at least some international mobility to date. There was a trend suggesting that female respondents tended to have fewer experiences of geographic mobility but more experiences of changing employer or sector while remaining local, compared with male counterparts. Some evidence indicated that those at early stages of career had relatively greater experiences of sector mobility, compared with later-career respondents (despite the latter having had a longer career history in which to undertake any mobility).

In terms of sector porosity (e.g. movements between and across academia and other sectors), higher proportions of respondents currently working in other sectors had experiences of movement both 'in' and 'out' of academia/HE, compared with those who currently work in academia/HE. This could correlate with the relatively higher extent of portfolio and partial employment outside academia/HE. There was some evidence to suggest a higher percentage of respondents with a background in the humanities who now worked in other sectors had experienced multiple sector changes, compared with those with a background in social sciences.

Sectoral mobility and research careers: motivations and barriers

Most respondents, irrespective of current sector, referred to aspirations for increased job satisfaction and work/life balance, enhancement of role or career progression, and job security as motivations to consider a sector change, either into or out of academia. A higher proportion of female respondents referred to family circumstances/commitments as drivers to change sector (compared with male respondents), in some cases in order to avoid the necessity for geographical mobility in order to progress in their career. More of the early- and mid-career respondents cited enhanced job security, career progression, and work/life balance as important motivations for changing sectors, compared with later-career respondents.

One key finding is that when considering a potential sector move, higher percentages of those working in academia/HE identified all the potential barriers mentioned, compared with those working in other sectors. Lack of experience and credibility, fear that a move 'back' to academia would not be possible, and a lack of guidance and support were brought up by many in academia/HE. Those currently working in other sectors were less inclined to identify barriers, perhaps because they had already experienced some mobility to reach their current job, but were particularly concerned about whether they would be credible or be taken seriously within academia/HE, because they believed experiences in other sectors were not valued. We infer that schemes that enabled short periods of sector mobility could be valuable in giving relatively low-risk experiences of mobility and could reduce some of these concerns and barriers.

The main barriers to progress in a research career were considered to be difficulties in securing funding, insufficient opportunities/positions, and excessive competition, irrespective of sector. As with motivations for sector change, more female respondents referred to family and caring commitments, which limited potential geographical mobility, as a barrier to progression than did male respondents. Similarly, this form of barrier was cited by far more early- and mid-career respondents than by those later in their careers, which presumably relates to life stages. Issues like insufficient reward or expectations of poor work/life balance were more significant for early-career respondents than others.

2. Introduction

In this report, we present the results emerging from a new survey of SHAPE (Social Sciences, Humanities and the Arts for People and the Economy) researchers. In this chapter, we set out the context to the study in terms of the landscape of SHAPE careers and research.

2.1 The UK research landscape and SHAPE disciplines

The UK Government recognises the importance of research and innovation to the economy, setting out its ambition to increase investment in research and development (R&D) in its 'R&D Roadmap' in 2020. In this, the Government expressed a strong commitment to attract, train, and retain diverse talent across the UK research and innovation system to build on the UK's strengths in research and to meet future challenges.[2] To expand this vision, the 'R&D People and Culture Strategy', published in 2021, sets out a wide-ranging vision for development of the UK's R&D talent base and to ensure it is inclusive, dynamic, productive, and sustainable.[3]

The UK research landscape is evolving, driven by shifts in government policy, technological advancements, and the changing challenges and needs of society. There is increasing emphasis on research addressing societal 'grand challenges', such as climate change, health disparities, and technological innovation. The British Academy ('the Academy', hereafter), the UK's academy for humanities and social sciences, supports a variety of researchers in the SHAPE disciplines. SHAPE is a collective name for the social sciences, humanities, and the arts. It was developed as a tool to tell the story of these subjects, which help us to make sense of the human world, to value and express the complexity of life and culture, and to understand and solve global issues.[4] The Academy is committed to informing people about SHAPE disciplines, to illustrate their value and relevance, and to inspire people to study them and follow related careers. This is important within the context of the broad current backdrop of Government focus on funding STEM research.

SHAPE disciplines are diverse in terms of their potential impacts and the career trajectories of those working within them. A recent report notes that SHAPE impact is highly inter- and multi-disciplinary and occurs across many disciplines and realms of society.[5] There is evidence that the career trajectories of those who undertake research in SHAPE disciplines are varied: SHAPE doctoral graduates have the highest levels of portfolio-working and researchers are found in a wide variety of study/employment loci. Although two thirds of SHAPE doctoral graduates work in academia/higher education (HE) within three years of graduation, many are employed in teaching roles (some on casual or fixed-term contracts) even though there is the expectation that they will need to undertake research if they seek career progression.[6] Outside academia, high-skilled jobs are expected to become increasingly essential in the UK's

---

[2] Department for Science, Innovation and Technology & Department for Business, Energy & Industrial Strategy (2020), *UK research and development roadmap*.

[3] Department for Science, Innovation and Technology & Department for Business, Energy & Industrial Strategy. (2021), *Research and development (R&D) people and culture strategy*.

[4] The British Academy, *This is SHAPE*.

[5] Wagner S., Zhao B., Rahal C., Li L., Spiers A., Lu Y., Leasure D., REF 2021 LCDS Project Team, Verhagen M., Mills M. (2024), *The SHAPE of Research Impact*.

[6] Vitae (2022), *What do researchers? Doctoral graduate employment, activities and earnings*.

economic and societal development.[7] Demand is thought to be growing for individuals to be equipped with high-level (including research-related) skills, which they can deploy in different occupational contexts and sectors of employment and/or within an increasingly interdisciplinary research community.

---

[7] The British Academy (2017), *The Right Skills: Celebrating Skills in the Arts, Humanities and Social Sciences*.

3. Aims and approach

In order to inform and respond to ongoing policy debates on enhancing research culture and the wider research and development (R&D) landscape, the Academy has launched the SHAPE Research Careers project to develop a more nuanced understanding of how policymakers, institutions, and other actors can provide and support a better range of career opportunities for SHAPE researchers. As a part of this project, the Academy commissioned the Careers Research & Advisory Centre (CRAC) to conduct a survey of current SHAPE researchers in the UK.

3.1 Aims and research themes

The high-level aim of this project was to explore the core themes of identity, mobility, and porosity within the careers of SHAPE researchers. To address these themes, the three main objectives were:

1. To explore who SHAPE researchers are and what SHAPE researchers do, within and beyond academia;
2. To explore the nature and extent of mobility and porosity within careers for SHAPE researchers;[8]
3. To explore the motivations for and barriers to research careers for SHAPE disciplines.

At the heart of the project was a drive to better understand 1) the careers and trajectories of SHAPE researchers and 2) how they engage in research and research-related activities, within and beyond academia. We defined a SHAPE researcher as someone who has undertaken research training in one of the SHAPE disciplines and/or identifies as a SHAPE researcher and/or uses research skills in their current role.

To address the two research objectives, we identified a series of research questions under three rubrics:

Identity:
- How do SHAPE researchers identify across careers and/or sectors?
- What does 'research' as an endeavour mean to SHAPE researchers and what activities does it include?
- What are their motivations and reasons to engage in research?

Mobility/porosity:
- How is mobility experienced by SHAPE researchers (e.g. geographical or sectoral)?
- How porous are the boundaries between SHAPE researchers' careers (e.g. to what extent is there mobility and is it one way or two way)?

Motivations and barriers:
- What are the motivations for moving sector (or employer)?
- What are the barriers to progression in a research career?

---

[8] See for example Flinders, M. (2023), *Strategic scaffolding: Supporting mid-career and senior research leaders in the social sciences*, for ESRC, ii.

3.2 Approach and methodology

In collaboration with Academy staff, we designed an online survey instrument with thematic sections containing questions which aimed to investigate the various themes. Ten current SHAPE researchers (employed in a range of sectors) reviewed and tested the survey before its launch, providing feedback on the questions and overall design.

The survey was open between late January and late February 2024. A multi-channel attraction campaign was conducted to promote participation in the survey, including identification of 95 subject-based bodies and networks which were requested to notify audiences about the survey (via email or social media). Survey invitations were also sent directly to 41 mailing lists that covered many SHAPE disciplines, while the Academy and Vitae both promoted the survey to their contacts and through social media channels. 'Snowball sampling' was attempted, inviting respondents to identify potential further respondents and share the survey link with them.

Response sample achieved

After de-duplication and cleaning of responses, the survey resulted in a total of 910 useable responses, which included respondents across a wide range of SHAPE disciplines, key career stages, and career sectors (including academia/HE and others). Table 3.1 illustrates the composition of the response sample in terms of disciplines.

Table 3.1: Discipline of survey respondents.

	N	%
Sociology, Social Policy and Anthropology	135	15%
History and Archaeology (including Classics)	102	11%
Languages and Area Studies	64	7%
Creative Arts (including Art and Design)	48	5%
Law	46	5%
Business and Management	36	4%
English Studies	35	4%
Philosophy and Religious Studies	32	4%
Politics	31	3%
Psychology	31	3%
Education and Teaching	25	3%
Combined Humanities, Liberal Arts etc.	22	2%
Media, Journalism and Communications	22	2%
Social Care and Health Studies	19	2%
Economics	15	2%
Other	83	9%
Unknown	164	18%
Total	*910*	

Appendix 1 presents a fuller range of descriptive statistics for the response sample, including characteristics of respondents such as gender, career stage, age, and highest level of qualification as well as some details on employment and current location.

As reported in the next chapter, the majority of respondents were working in academia/HE (80%, *N*=726) at the time of the survey, which was unsurprising given its focus on SHAPE researchers. Interestingly, many of these (*N*=112) who stated that they were employed by a university and/or who reported a job title such as senior lecturer/professor which is used solely in academic/HE institutions, identified their sector as 'education and training' rather than academia/HE. These responses were re-coded accordingly. Most respondents were located in the UK (87%, *N*=758).

Analysis and synthesis

Our analytical approach for the response data included limited analysis of the entire response sample, to generate descriptive statistics, but focused on a series of cross-tabulation analyses to extract results for key sub-groups of respondents. These included respondents currently working in academia/HE (*N=726*) and those working in other sectors (*N=184*). Additional sub-groups used in cross-tabulation analysis were defined by gender, highest degree, and career stage.

With the focus of the study on mobility, much of our analysis drew on comparisons between those respondents working in academia/HE and in other sectors. Attention was paid to differences with gender, degree level and/or career stage where variances were substantive.

It is difficult to assess the representativeness of the response sample in relation to the overall population of SHAPE researchers, partly because existing research has not addressed the characteristics of SHAPE researchers as a group. Drawing on publicly available HESA staff data for SHAPE disciplines for 2022/23, we estimate that around 47% of UK academic staff in SHAPE disciplines were female.[9] This suggests there was an over-representation of female respondents in the survey, as 60% of respondents working in academia/HE reported being female and 24% of them male (female respondents *N=436;* male *N=176*), while 13% did not report their gender and 3% identified as other. Similarly, a comparison between HESA staff data and the survey sample showed a slight over-representation of respondents in professorial roles (20% of respondents working in academia reported being a professor, compared with 15% of SHAPE academic staff being employed in a professorial role in HESA staff data 2022/23).

While the survey gathered responses across diverse employment sectors, the sample sizes of respondents working in particular sectors other than academia/HE were insufficient for robust comparisons to be made between such sectors outside academia. Similarly, while we received responses from all key SHAPE disciplines, the number of respondents per discipline was not high enough to support robust comparisons between individual disciplines.

---

[9] The data for SHAPE disciplines draw on HESA (2023) Table 13 – HE full-time academic staff by cost centre and contract salary 2014/15 to 2022/23, available at https://www.hesa.ac.uk/data-and-analysis/staff/table-13.

4. Employment of SHAPE researchers

One of the main aims of this project was to establish who SHAPE researchers are and where they are employed. In this section, we present results emerging from the SHAPE survey in relation to employment sectors, employer types, occupations, and conditions of employment.

4.1 Employment, sectors and locations

A large majority of respondents to the survey are working in academia/HE (80%), with the remainder (one in five) working in other sectors. Interestingly, this proportion was the same for those who had studied an arts and humanities discipline or a social science discipline.

Table 4.1. summarises the sectors of employment for those working outside academia/HE, expressed as proportions of all those working outside academia/HE. This shows the most common sectors to have been education and training and charity and development work (each about 18-19% of those outside academia/HE, or 4% of all respondents). Other sectors containing over 2% of all respondents included creative arts and cultural, health and social care, and public sector (government and public administration).

When respondents were split broadly into those who had studied (1) arts and humanities or (2) social sciences disciplines, there were some differences in results for a few sectors, although some caution is needed because sample sizes were small. For example, almost all those working in health and social care had a social science background, as well as the majority of those in the public or charity/development sector, presumably reflecting a stronger vocational basis for work in these sectors. The reverse was the case for the creative and cultural sector especially, where all but one respondent was from the humanities, and for media/publishing. This suggests these sectors much more common destinations for those with a humanities background.

Table 4.1: Survey respondents' sector of employment (shown as proportion of respondents working in sectors other than academia/HE).[10]

	All disciplines	Arts & humanities	Social sciences
Education and training	19%	18%	21%
Charity and development work	18%	15%	25%
Creative arts and cultural	12%	19%	1%
Health and social care	12%	4%	18%
Government and public administration	11%	9%	14%
Accountancy and business services	7%	9%	5%
Media and publishing	7%	8%	1%
Advertising, marketing and PR	<1%	0%	<1%
Legal services	1%	0%	2%
Environment and agriculture	<1%	0%	1%
Hospitality, leisure and tourism	<1%	1%	0%

---

[10] Note that 51 respondents who did not identify their discipline of study are (solely) in the 'all' column.

IT and communications	<1%	0%	<1%
Other	11%	15%	7%
Total	*184*	*68*	*65*

Among those who selected 'Other' as their sector, many respondents referred to occupations such as research, language, policy, or consultancy, while a few referred to specific sub-sectors. Some referred to their employer (for example, an NGO, think-tank, or a religious organisation) as a proxy for their sector of employment.

The respondents working in sectors other than academia/HE also indicated the broad type of organisation of their employer (Table 4.2). This suggested that over half of those working outside academia were employed either by a public sector (31%) or third sector organisation (21%), while the research institutes referred to may well also have included bodies in these sectors. Only 13% (or under 3% of all respondents) worked for private sector organisations, fewer than respondents who reported that they were self-employed (18%).

Table 4.2: Type of employer for respondents working in sectors other than academia/HE (N=184).

Public sector	31%
Third sector	21%
Self-employment	18%
Research institute	11%
Private sector SME	9%
Large private sector company	4%
Not known	5%
Total	*100%*

At the time of the survey, 84% of respondents were working in the UK (comprising 70% in England and 14% across the other three home nations), while 13% of respondents were working in another country (Table 4.3). Among those working outside the UK (*N*=115), just under half were in a European Union nation or another European country (48%), and there were small numbers in Oceania (13%), Southeast Asia (11%), North America (8%) and the Middle East (7%), with a few respondents in other parts of the world. In all, there were responses from 44 countries. When this was analysed by broad sector of employment, the geographic profile was very similar for both those working in academia/HE and those in other sectors.

Table 4.3: Current work locations of survey respondents.

	Total	In academia	Other sectors
England	70%	70%	71%
Outside UK	13%	13%	15%

Scotland	10%	11%	7%
Wales	3%	3%	<1%
Northern Ireland	1%	2%	<1%
Not known	3%	3%	1%
Total	*910*	*726*	*184*

Analysis of the locations of respondents working in England revealed that 40% were based in London or the Southeast, and the remainder split relatively evenly between the other English regions (Table 4.4). When this was analysed by broad sector of employment, the proportions of those working in academia/HE in London and the Southeast were somewhat lower (36% together) than overall, whereas these regions accounted for 56% of those working in other sectors, who were also more prevalent in the East of England. Were the locations of respondents to be representative of all SHAPE researchers, these trends by broad sector would suggest that employment in academia/HE is somewhat more evenly distributed than employment in other sectors. For example, there was considerably greater concentration of researchers in other sectors in London and the Southeast, and very few in the North of England or West Midlands.

Table 4.4: Location of respondents in England, with broad sector.

	Total	Other sectors	In academia/HE	HESA academic staff 2022/23
London	25%	35%	22%	26%
Southeast	15%	21%	14%	16%
Northwest	11%	4%	14%	11%
Yorkshire and the Humber	10%	4%	12%	9%
East Midlands	9%	8%	10%	8%
Southwest	9%	7%	9%	9%
West Midlands	8%	3%	9%	9%
East of England	6%	12%	5%	8%
Northeast	6%	4%	7%	5%
Total	*633*	*130*	*503*	

The only readily available benchmark is for the academic aspect of these populations, and recent HESA Staff Record data for academic staff are included in Table 4.4, suggesting that the locations of that portion of survey respondents do roughly resemble the pattern among all academic staff.[11] What these trends also show is that the overall location profile for SHAPE

---

[11] HESA (2023) HE academic staff by HE provider 2022/23, available at https://www.hesa.ac.uk/data-and-analysis/staff/working-in-he.

researchers is *not* as highly concentrated in London and the Southeast as other aspects of the UK R&D system, which some have expressed concerns about.[12]

4.2 Conditions and mode of employment

The survey results suggested certain differences in terms of the contractual type of employment between respondents working in academia/HE and those working in other sectors (Figure 4.1). Almost seven out of ten (69%) of those working in academia/HE had an open-ended or permanent contract, while 23% had a fixed-term contract, and a very small proportion (2%) were either on a casual or hourly paid contract or reported being self-employed, and 5% did not report their employment contract type. By comparison, 56% of respondents working in other sectors held a permanent or open-ended contract and only 16% were on a fixed-term contract, with a significant proportion (17%) being self-employed. A greater proportion were also employed on a casual or hourly paid contract (4%) when compared to those in academia/HE (2%), while 7% of them did not report their contract type.

While these results appear to run counter to many narratives suggesting that academic employment is more precarious than in other sectors, though this may reflect the fact that the response sample strongly represents mid- and later-career academics (comprising two thirds of respondents), far more of whom have a permanent contract, whereas early-career academics tend to be those with less secure contracts. It may also reflect the fact that/ the survey over-represents workers outside academia/HE who do not have permanent employment or that many such people do indeed have other types of contracts.

Figure 4.1 Proportions of respondents with different types of employment contract, with broad employment sector (Respondents working in academia/HE N=726, other sectors N=184).
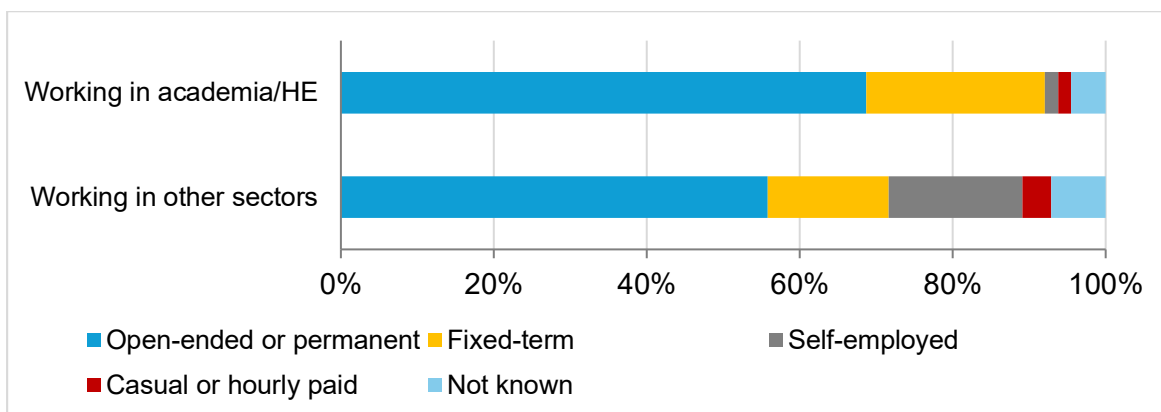
More detailed analysis showed some differences in the proportions of respondents with permanent vs. fixed-term employment contracts, for different groups based on gender and/or

---

[12] Department for Science, Innovation and Technology & Department for Business, Energy & Industrial Strategy. (2020). *UK research and development roadmap.* https://www.gov.uk/government/publications/uk-research-and-development-roadmap.

job level. Outside academia/HE, a slightly higher percentage of male respondents (63%) had an open-ended or permanent contract compared to female respondents (55%).

Among those working in academia/HE, apparent differences in the proportions of male and female respondents with an open-ended or permanent contract were largely explained by the different proportions of respondents at different job levels by gender (Figure 4.2). Multi-variate analysis revealed that only 41% of early-career staff respondents had a permanent contract and the majority (54%) were employed on a fixed-term contract with a small proportion (5%) on more casual arrangements. These results did not differ significantly for male and female respondents. On the other hand, the vast majority of respondents in mid-career and later-career positions in academia/HE had a permanent contract (around 90%), although there was some evidence for a slightly lower proportion of female respondents in mid-career positions having such a contract (85% vs. 95%, respectively) and as many as one in eight (12%) of females respondents having a fixed-term contract at this stage.

Analysis of current mode of working showed that 78% of all respondents (including those who are employed and self-employed) did so on a full-time basis, although this varied by sector and, to an extent, gender. Among those working in academia/HE, 85% worked full-time and 15% part-time, with no difference between male and female respondents.[13] However, of the total 71% of respondents working in other sectors who were working full-time, 83% of male respondents and 67% of female respondents were working full-time, meaning the extent of part-time employment was only greater for females working outside academia/HE. A closer analysis of the female respondents in part-time employment showed that many were in mid- or later-career stages, across a wide variety of occupations.

Figure 4.2: Proportions of respondents working in academia/HE with different types of employment contract, with job level (N=726).

---
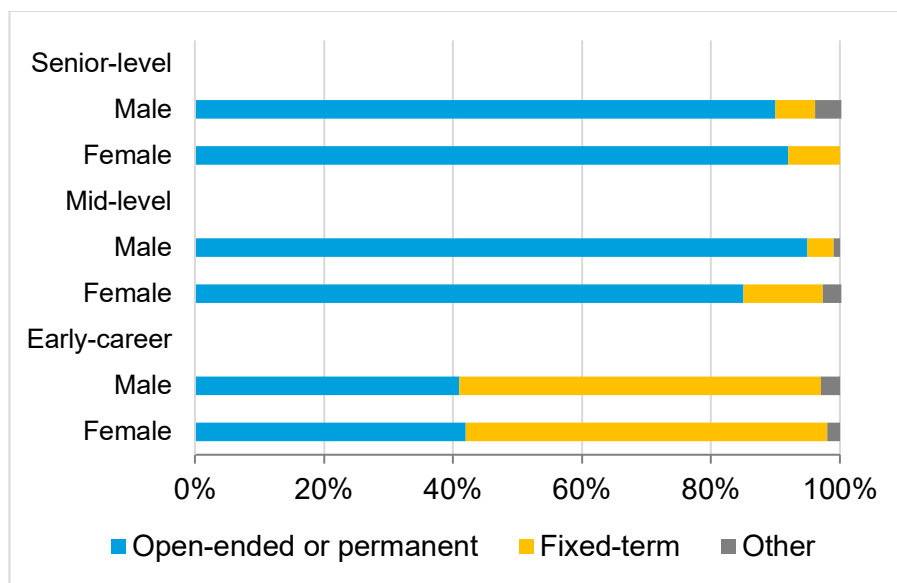
[13] Proportions stated are of those of known mode of employment.

14

In response to a question about whether the respondents held one or multiple employment and/or self-employment positions, this was more common among those whose main employment was in a sector other than academia/HE. Slightly over one in four (26%) of those working in other sectors reported that they had multiple employment and/or self-employment positions, whereas this was lower at 13% for those whose main work was in academia/HE. When taken together with the result for mode of work, this seems to suggest that the existence of flexible work patterns was more common outside academia/HE.

4.3 Occupations of SHAPE researchers

One of the objectives for this study was to understand more about the roles undertaken by SHAPE researchers both in academia and other sectors. In the survey, we asked participants to report their current job title. The responses from those working in academia/HE were then coded using HESA staff contract levels (Table 4.5). Among these were a number of respondents who reported being a doctoral researcher. Where these stated that they had a fixed-term employment contract and/or identified as early-career research staff, these were considered employed staff in Table 4.5. The remainder, who were less than five in number, appeared not to have an employment contract and so were coded separately as PhD students.

Table 4.5 Occupations of survey respondents working in academia/HE (N=726).

B0/E1/E2 Deputy Vice-Chancellor and Provost, Dean, Director, Deputy Director, Head of School)	1%
F1 Professor	20%
F1/F2 Director (Professional Services), Head of Research/Public Affairs/Funding	2%
I Associate Professor, Reader, Principal Lecturer (Post-92), Senior Researcher, Senior Managers (Professional Services)	14%
J Assistant Professor, Senior Lecturer	19%
K Lecturer, Postdoctoral Fellow/Researcher, Research Associate, Researcher, Manager (professional services), Experienced Professionals (Curator, Archivist etc)	32%
L Tutor, Early Career Fellow, Officer, Administrator	8%
M Assistant (Professional Services)	1%
PhD student	<1%
Not known	3%
Total	*100%*

Based on job titles, we considered 41% of academic/HE respondents to be in early-career positions (levels up to K), 33% in mid-career (levels J and I) and 23% in later-career roles (level F and upwards). As noted in the previous section, there were substantive differences in the gender profile of respondents at different career levels, with greater proportions of female respondents at junior levels and relatively higher proportions of males at senior levels (Table 4.6). Viewed the other way around, this meant that within the survey response sample, female

respondents comprised 76% of all those in early-career positions, 70% of those in mid-career level positions, and just under two thirds of those in later-career roles.

Table 4.6: Level of employment position of respondents in academia/HE, with gender (N=620).

	Early-career	Mid-career	Later-career
Male	34%	36%	29%
Female	44%	34%	22%
All	41%	35%	24%
Total	*249*	*214*	*145*

Analysis of level of employment for respondents working in other sectors was also based on job titles. Due to the greater diversity of job titles in other sectors, the coding was based on a fuller understanding of a respondent's role, in terms of occupation but also our understanding of common organisational hierarchies. Based on this coding, 31% of respondents working in other sectors were in a managerial role, 26% in a researcher role, and 23% in a professional/technical role. Smaller proportions had a teaching, consultant, assistant, or officer role (Table 4.7). Further analysis of the job titles for those in managerial roles showed that 7 (out of 57) were in a research-related managerial role such as research manager, head of research and/or research director.

Table 4.7: Occupations of respondents working in other sectors (N=184).

Managerial role	31%
Researcher role	26%
Professional/technical role	23%
Teaching role	6%
Consultant role	3%
Assistant role	3%
Officer role	3%
Artist	1%
Unknown	5%
Total	*100%*

**Gender and qualification level differences in respondents' occupations**
The results emerging from the survey revealed a number of variances with gender for some key occupations. For example, while 26% of all male respondents employed in academia/HE reported that they were a professor, this was the case for 18% of female respondents.[14]

---

[14] For context, HESA academic staff data for 2021/22 shows that, of 23,515 total professors (across all disciplines and modes of employment), 16,515 (70%) of these were male and 6,980 (28%) were female, with a further 20 recorded as 'other'. This compares to 'other senior academic levels', where males represent 59% and females 41% (of 6,330 total) and for 'other contract level', where males and females represent 50%

Similarly, more of the male respondents were at senior lecturer/assistant professor level (24% of male respondents compared with 18% of females) whereas the situation was reversed at lecturer level (35% of female respondents compared with 28% of males).

In other sectors, there were no major differences in the proportions of female and male respondents reporting being a researcher or in another role of key interest in this study. However, a clearly higher proportion of male respondents (40%) reported being in a managerial role than female respondents (25%). The only respondents (admittedly only 2% of all working respondents) who reported being in an assistant role were female. This is conceivably evidence for somewhat of a gender 'career gap' (similar to popular conceptions of a gender pay gap and some genderisation of occupations, in which females are more likely to be in lower-level and lower-paid roles). This includes roles both within academia/HE, but also potentially in other sectors, with females over-represented in lower-paid, lower-level positions (and also reflecting a lack of high-level positions that are undertaken part-time).[15]

Figure 4.3: Occupations of respondents working in academia/HE by highest qualification level (Doctorate N=560, Postgraduate/graduate N=69).
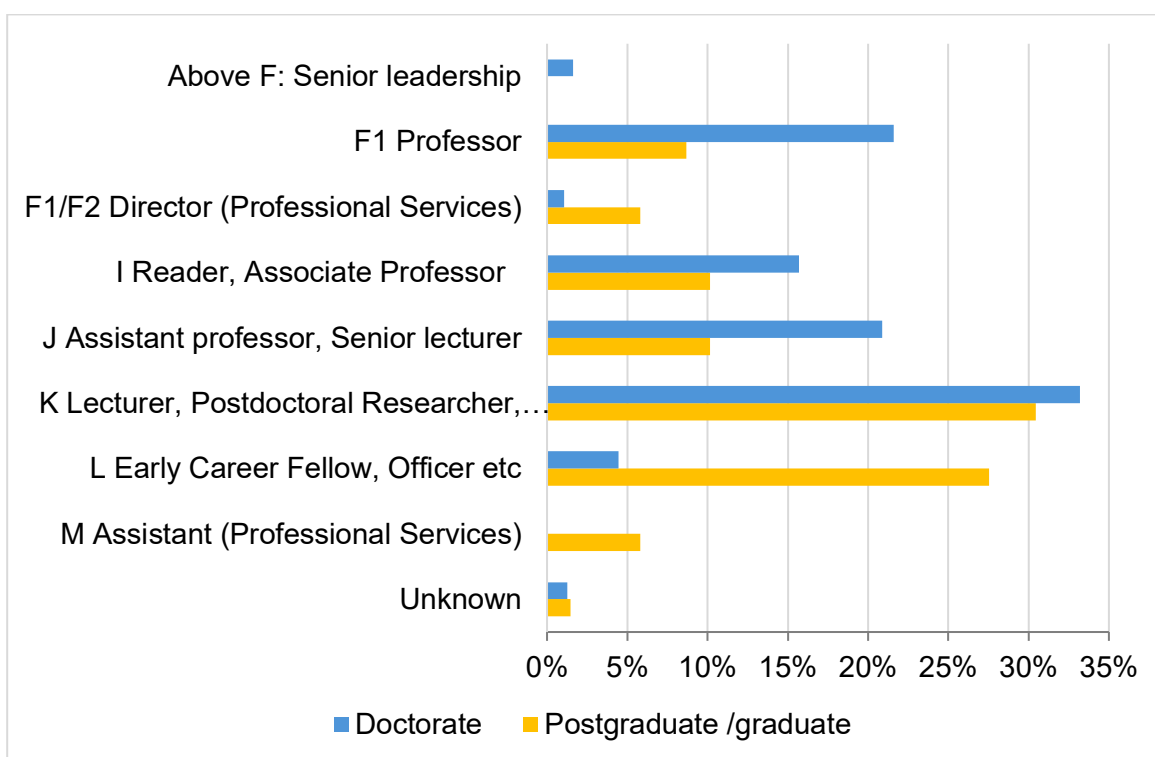
each (of 204,080 total). Higher Education Statistics Agency, *Higher Education Staff Statistics: UK, 2021/22*, 'Figure 2 – Academic staff (excluding atypical) by employment conditions. Academic years 2017/18 to 2021/22', published 17 January 2023.

[15] Stephenson, R. (2024), *Show me the money: an exploration of the gender pay gap in higher education,* HEPI no. 171.

Figure 4.4: Occupations of respondents working in other sectors, with qualification level (Doctorate N=80, Postgraduate/graduate N=55).
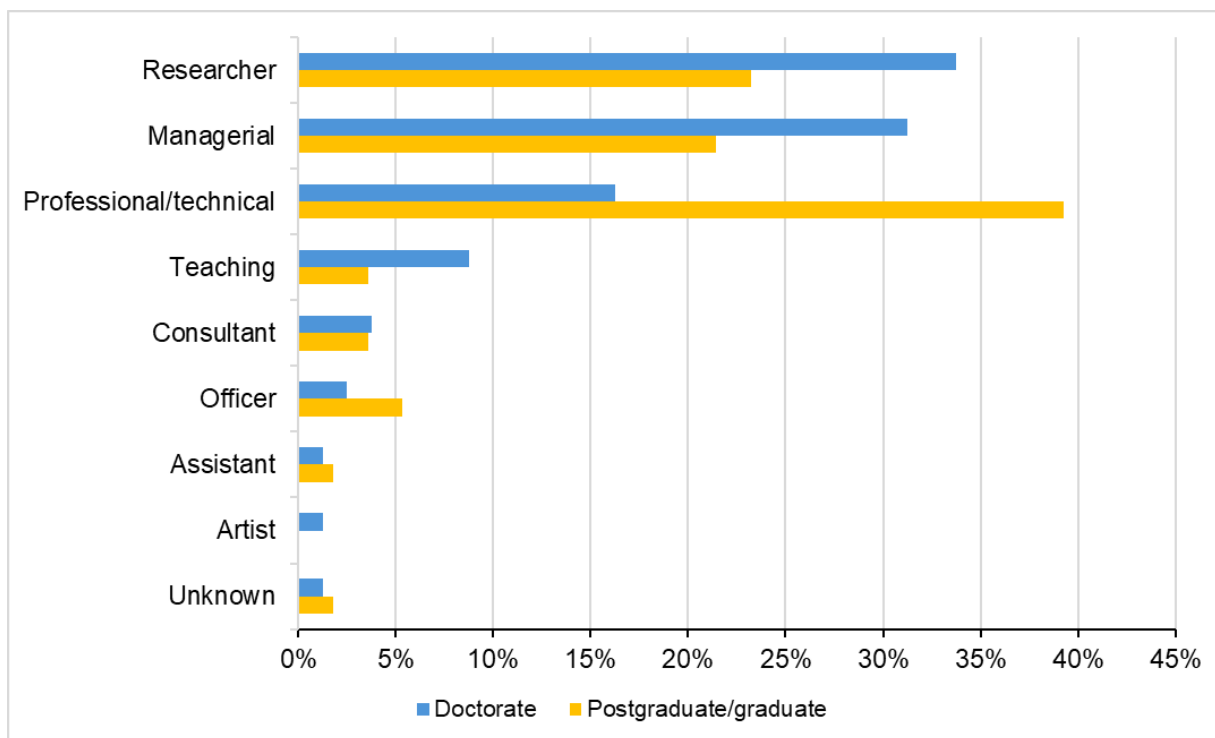
To assess the influence of a doctorate on career progression, Figure 4.3 illustrates an analysis of academic job level for those with a doctorate and those with a lower level of degree as their highest qualification. This shows clearly that most of those at senior leadership, professor or mid-career levels had a doctorate, while early-career level research positions were more or less evenly split, and the most junior (and/or academic-adjacent) positions dominated by those without a doctorate.

A similar analysis of respondents working in other sectors, Figure 4.4, showed a somewhat similar trend, with more of those in researcher, managerial, and teaching roles having doctorates, but higher proportions of those in professional and technical roles having a lower qualification level.

Taken together, these results highlight that SHAPE researchers can be found working in a wide variety of roles in diverse sectors, including research-focused roles, professional/specialist positions, and management. There is some evidence that more SHAPE researchers with a doctorate tend to work in more senior research, specialist and/or managerial roles, than those without a doctorate, whether in or outside academia/HE, and some evidence for a possible career progression gap with gender.

# 5. Professional identity and engagement in research

In this chapter, we set out to explore how survey respondents engage in research activities and their motivations for doing so, as well as perceptions in relation to their identity as SHAPE researchers - one of the main objectives for this study.

5.1 Professional identity

We presented survey respondents with a list of potential occupational titles and asked them to select options that they identified with. Figure 5.1 illustrates these results for those working in academia/HE and working in other sectors, respectively. In the chart, options are ranked by frequency identified by those working in academia/HE, from most popular to least.

Three quarters (75%) of respondents working in academia/HE identified with the term 'academic' as a professional title and around half as a 'researcher'. Around one in five also selected a discipline-specific identity (21%) and a similar proportion chose the broader term 'scholar'. Relatively low proportions of these respondents identified with terms such as 'expert in my profession/field' or 'professional in my discipline/field'.

Figure 5.1: Recognition of potential titles for professional identity (respondents working in academia/HE N=726, other sectors N=184; multiple responses allowed).
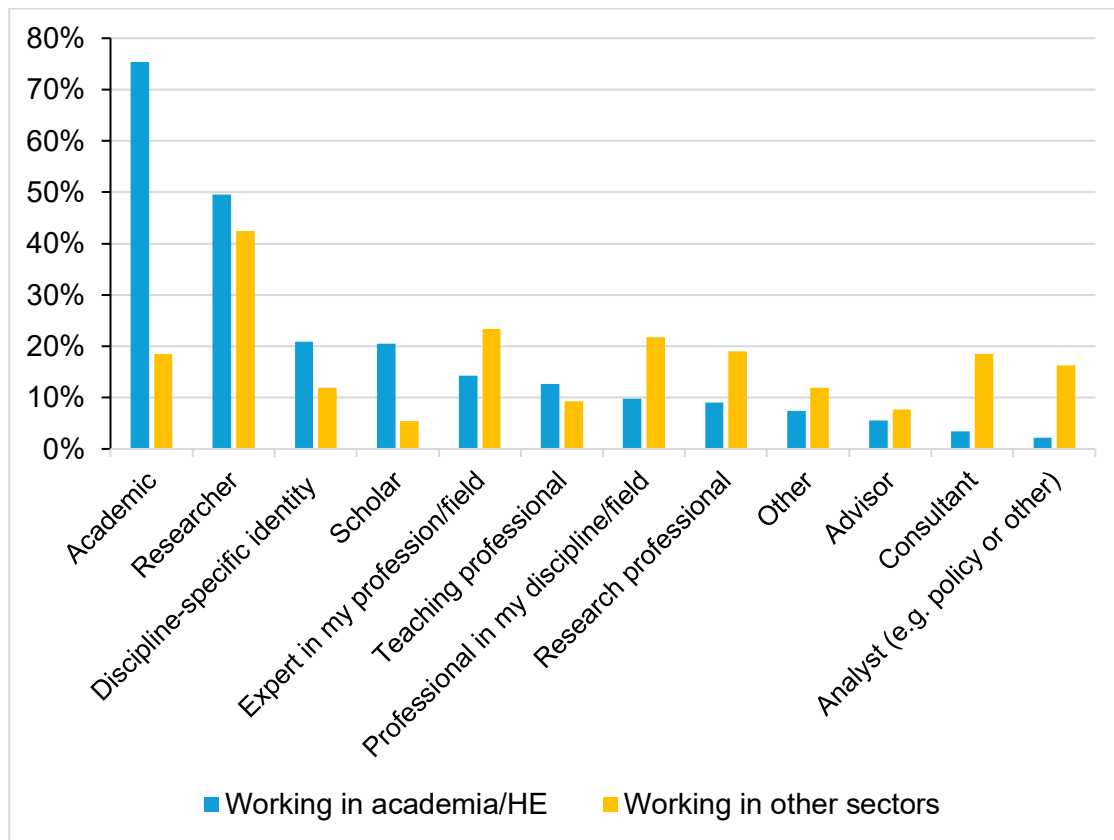
For those working in other sectors, 'researcher' was the most common identity selected (42%), while terms such as 'expert in my field/profession' (23%), 'professional in my discipline/field'

(22%), 'research professional', or 'consultant' (each 18%) were relatively more popular than with those in academia/HE. Smaller proportions selected titles which more specifically described their occupation (such as 'analyst', or 'teaching professional').

Similarly, analysis of the open-ended responses provided by the respondents who selected the 'other' option, revealed that most listed a specific job title such as teacher, manager, writer, translator, librarian, or curator, and rather fewer a description of their professional activities such as policy, management, or professional support.

The survey also invited respondents to indicate the extent to which they felt their professional identity had changed during their career through an open response, which 550 respondents provided. Analysis and coding of these responses revealed an interesting range of interpretations of the concept of professional identity. A small number of respondents (fewer than 5%) felt strongly that their identity had not changed despite job or role shifts, and that maintaining it was important, while a similar number felt that it had yet to change as they were at an early stage of their career:

> *"My professional identity has always been a constant for me."*
>
> Female, mid-career, academia/HE

> *"My professional identity has remained similar throughout my career but has been applied to different topic areas."*   Male, early-career, academia/HE

However, the overwhelming majority of respondents felt that their professional identity had changed during their career, many stating that it had greatly shifted. Most commonly, they related this to progression within their career and a change of role, such as with the evolution from a junior researcher to an 'expert' and/or to a position as a research leader/manager:

> *"Initially, … focused primarily on research, teaching, and preservation efforts within the field of archaeology. However, as I gained experience and recognition, my role would likely expand to include more leadership responsibilities, such as advocating for cultural heritage protection, collaborating with international organizations, and mentoring students and colleagues. Overall, my identity would be shaped by a combination of scholarly pursuits, advocacy work, and educational outreach within the broader archaeological community."*   Female, mid-career, academia/HE

> *"It is a sense of self-perception that has shifted, forming different core identities; moving from 'fledgling academic' to 'recognised expert' has been equally reliant on my own understanding and others' understanding of my work's contribution to interdisciplinary research/the profession/knowledge/social challenges. Recognition in the form of publications, successful grant capture, career rewards, and positions of esteem (i.e. editorial roles; leadership) enable that the perception of the self-as-expert to be grounded in tangible outcomes."*
>
> Female, mid-career, academia/HE

> *"I started as a teacher, became a researcher (during PhD and after, still teaching) and now my role combines both aspects of my previous career: (a) developing/training /mentoring researchers and communicating; and (b) using my research skills to find,*

analyse and evaluate robust evidence and methods of argumentation to influence changes to institutional policy and practice." Female, mid-career, academia/HE

A number of these respondents commented specifically on a shift away from conducting research personally to a wider range of leadership and management roles, which reduced the extent to which they could undertake research themselves. Particularly for those in academia/HE, some identified changes in their field of research (including for some a shift to more interdisciplinary research, or a change in overall disciplinary focus):

> *"It changed from describing myself as "a sociologist" to seeing myself as intellectually located in a multidisciplinary space that has little to do with the traditional concerns of much (but not all) of sociology."* Male, later-career, academia/HE

> *I have developed confidence, and resulting independence to lead on projects for social justice and change. This change in direction (from previous focus on commercial law) has tran[s]formed my identity as a researcher, and academic (in teaching) - now fully a feminist legal scholar.* Female, mid-career, academia/HE

Others identified a change in their approach within their research, for example to become more theoretically oriented, rather than a shift in disciplinary focus.

Interestingly, while a significant number of respondents saw their identity change as their role or roles progressed, typically from being a junior researcher at first and then gaining a teaching position, there were as many cases of identity shift the other way around, i.e. that research became more prominent for them than their teaching role (once in an established position):

> *"As I grow in my academic career my identity is moving towards researcher more than teacher."* Female, early-career, academia/HE

Meanwhile, the second most reported change in identity related to a change in sector (which generally also entailed a change in role):

> *"Having moved from academia into industry I've gained a much greater awareness of the need for practical, applied, and ultimately impactful research, and how few academics can deliver this. I've developed a lot more as a person and a professional than if I'd have stayed in academia, and have a much stronger grasp on the policy and economic drivers for my sector."* Male, mid-career, public sector

> *"Moving from academic (PhD) to more industry research changes to more fast-paced, less thorough research identity."* Gender not reported, early-career, education/training

> *"I have recently moved from working as a postdoctoral academic researcher to working as a public servant, so rather than primarily conducting original research, I am now applying my research skills to inform policy and processes within my organisation."* Female, mid-career, public sector

Notably, this could involve a change (or changes) between sectors, including into academia, as much as the more common move which was 'outward' from academia:

"The career path I took shaped what I have achieved in terms of my professional identity. I always knew I wanted to do some form of research but I initially tried to do this in the NGO sector. While I found it hard to do research in the NGO sector so moved to academia the experience I gained in NGOs has shaped what I am researching now."
Male, early-career, academia/HE

"I have spent most of my career moving between different kinds of knowledge institution (e.g., museums and universities) and, increasingly, working between these 'spaces'. In the process, my research and professional identity has become more complex - cross-institutional and cross-disciplinary - and multi-faceted." Female, mid-career, public sector

These responses offered a far richer picture of perceptions about professional identity than the closed question in the survey, revealing a very wide range of understanding of the term (including a distinct minority who gave no response because they said they did not recognise what the term meant or did not wish to engage with it). There were valuable insights among the responses into the evolution of many respondents' careers, including how activities and skills used were particular to certain roles but also the value of research-related skills through a changing career trajectory.

5.2 Use of research skills

Asked whether their research skills had helped them to gain their current role, 92% of those working in academia/HE either strongly agreed (72%) or agreed (20%). This was nearly as high among those working in other sectors (88%, including 58% who strongly agreed). Furthermore, Figure 5.2 summarises how respondents applied their research skills and the relevance of those skills for succeeding in their current role and for career progression. The vast majority of respondents working in academia/HE (93%) and those working in other sectors (88%) agreed or strongly agreed that they regularly applied research skills in their current role. Similar proportions stated that without their research skills they would not succeed in their current role (91% of those working in academia/HE, 84% of others). Only slightly lower proportions agreed or strongly agreed that their research skills were essential for their career progression (89% in academia/HE, 78% for others).

Consistently, the proportions of those in roles within academia/HE stating strong agreement with these statements were slightly higher than those working in other sectors. However, the importance of research skills to the work of those working in other sectors was also very evident.

Figure 5.2: Application of research skills in current role and relevance for career progression (respondents working in academia/HE N=726, other sectors N=184).
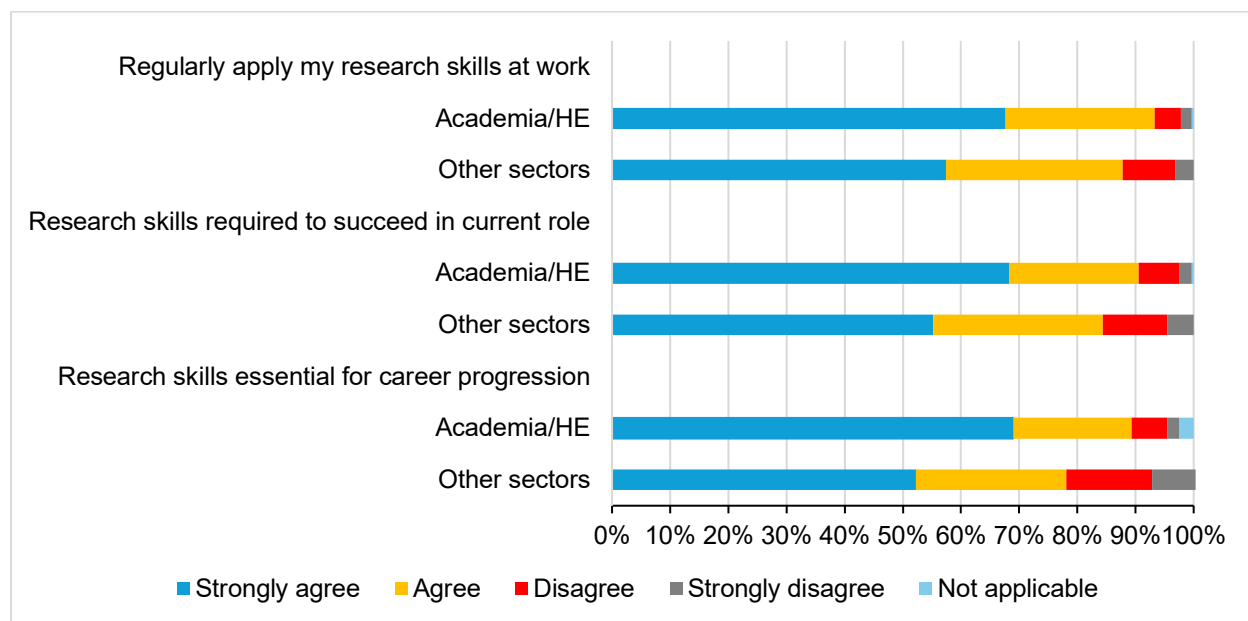
It was only in relation to career progression that a substantial proportion (19%) of those working in other sectors felt research skills were not important – perhaps reflecting that progression in such sectors more commonly involved movement to a more generic management role.

Application of research skills in current roles

To investigate in more detail how respondents engaged in research activities, they were presented with a list of potential activities and asked to select those they had conducted during the last 12 months. These results confirmed that only 6% of respondents working in academia/HE and 8% of those working in other sectors had *not* conducted research in the last year.

Figure 5.3 illustrates the research activities conducted by respondents working in academia/HE and other sectors, respectively, with activities ordered from most common to least for the former group. Just under two thirds of those in academia/HE had either conducted primary or experimental research (64%) and/or had evaluated and/or produced a synthesis of research or knowledge (also 64%). More than half had evaluated others' research or project proposals (55%), planned/managed a research project or a research portfolio (54%) and/or conducted new research using existing data/resources (53%). Lower but still substantial proportions had obtained new projects/funding for their own research (47%) and/or led and managed other researchers or a research team (36%).

A similar trend in results existed for those working outside academia/HE, with only slightly lower proportions conducting each of these types of activities, although substantially fewer evaluated others' research or obtained research funding. The latter could reflect a clearer differentiation of

activities between types of roles or levels of roles outside academia, whereas most of the activities seemed to be undertaken at all levels within academia.

Figure 5.3: Engagement in research activities during the last 12 months. (Respondents working in academia/HE N=726, other sectors N=184).
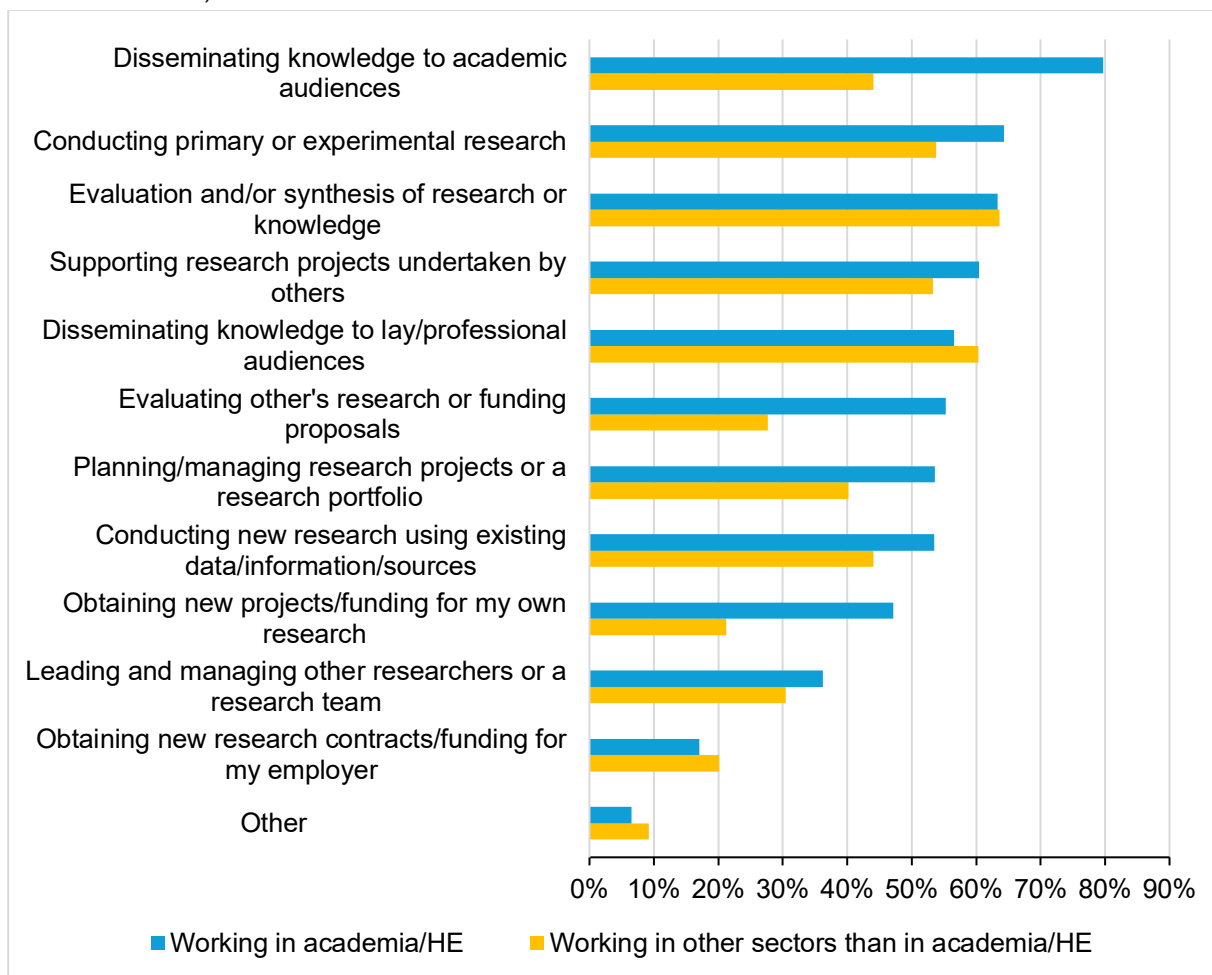

A clear difference was also evident in relation to dissemination to academic audiences, which was the most common activity for those working in academia/HE (but undertaken by half that proportion outside academia/HE). By contrast, a slightly higher proportion of those outside academia/HE disseminated knowledge to lay audiences than among academics, presumably reflecting that this was a primary professional activity for many of them (whilst it was potentially a secondary activity for academics).

5.3 Reasons for using research skills

To further assess SHAPE researchers' engagement in research activities, survey respondents were provided with a list of reasons for conducting research activities and asked to select all the options that applied to them. Figure 5.4 summarises these results for all respondents.

Figure 5.4: Reasons for engaging in research or research-related activities (Respondents working in academia/HE N=726, other sectors N=184).
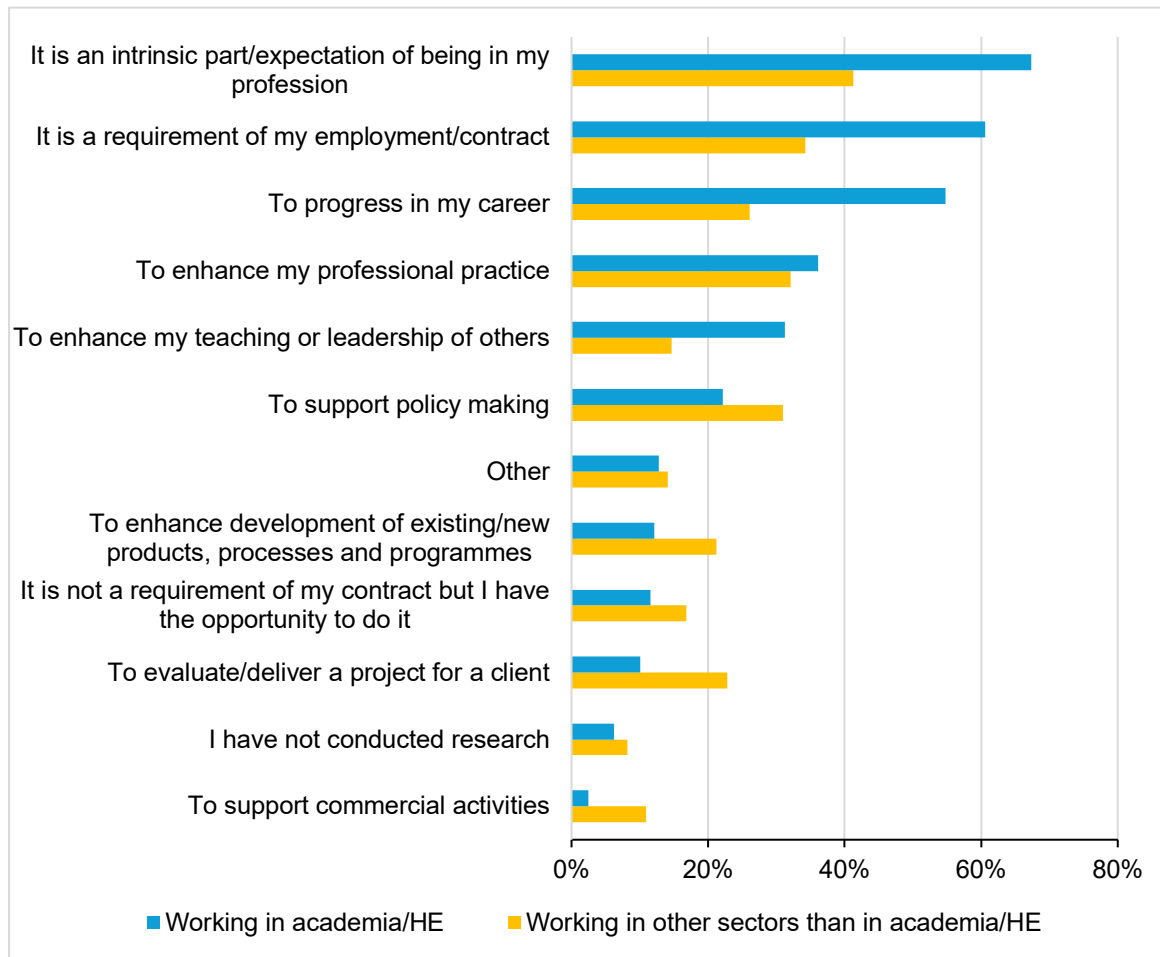
The three most chosen options by those who work in academia/HE were that conducting research is an intrinsic part/expectation of being in their profession (67%), a requirement of their employment contract (61%), and would enable progress in their career (55%). Other reasons cited included conducting research to enhance professional practice (36%) and/or to enhance teaching or leadership of others (31%). Interestingly, 12% stated that research was not a requirement of their contract, but they had the opportunity to do it, while very few (under 3%) engaged in research on a commercial basis.

A somewhat wider range of reasons was stated by respondents working in other sectors, although for 41% it was an intrinsic part/expectation of being in their profession and/or a requirement of their employment and/or contract (34%). Supporting professional practice was similarly rated to those in academia (32%) but a higher proportion indicated that research was to support policy making (31%), to evaluate and/or deliver a project for a client (23%) and/or to enhance development of existing and/or new products, processes, and programmes (21%).

Among other reasons cited for engaging in research were to support teaching/activism, contribute to the discipline/knowledge and/or to promote change, for example:

> *"To make the world a better place, to ameliorate conditions of suffering"*
>
> Male, mid-career, academia/HE

> *"In advising others on how to research, I often have to undertake some basic research in their subject area to identify what's out there, suitable strategies for finding appropriate information, and so on."* Female, mid-career, other sector

A significant number referred to enjoyment and/or personal interest, and a few commented that they did research in their spare time and/or for a specific alternative purpose, such as for an exhibition, archiving and/or publication:

> *"Because I enjoy it."* Female, mid-career, other sector

> *"My full-time role is non-academic but I conduct my own research in my spare time as an alternative-academic."* Female, mid-career, academia/HE

One key difference for the two groups was how they saw the role of research in relation to career progression. While over half of respondents working in academia/HE reported that they conducted research to progress in their career, only 26% of respondents working in other sectors cited that reason. It may be worth remembering that based on coding of job titles, only around 20% were in a directly research-focused role. This could be further evidence that career progression in other sectors might more commonly require engagement in other activities rather than research.
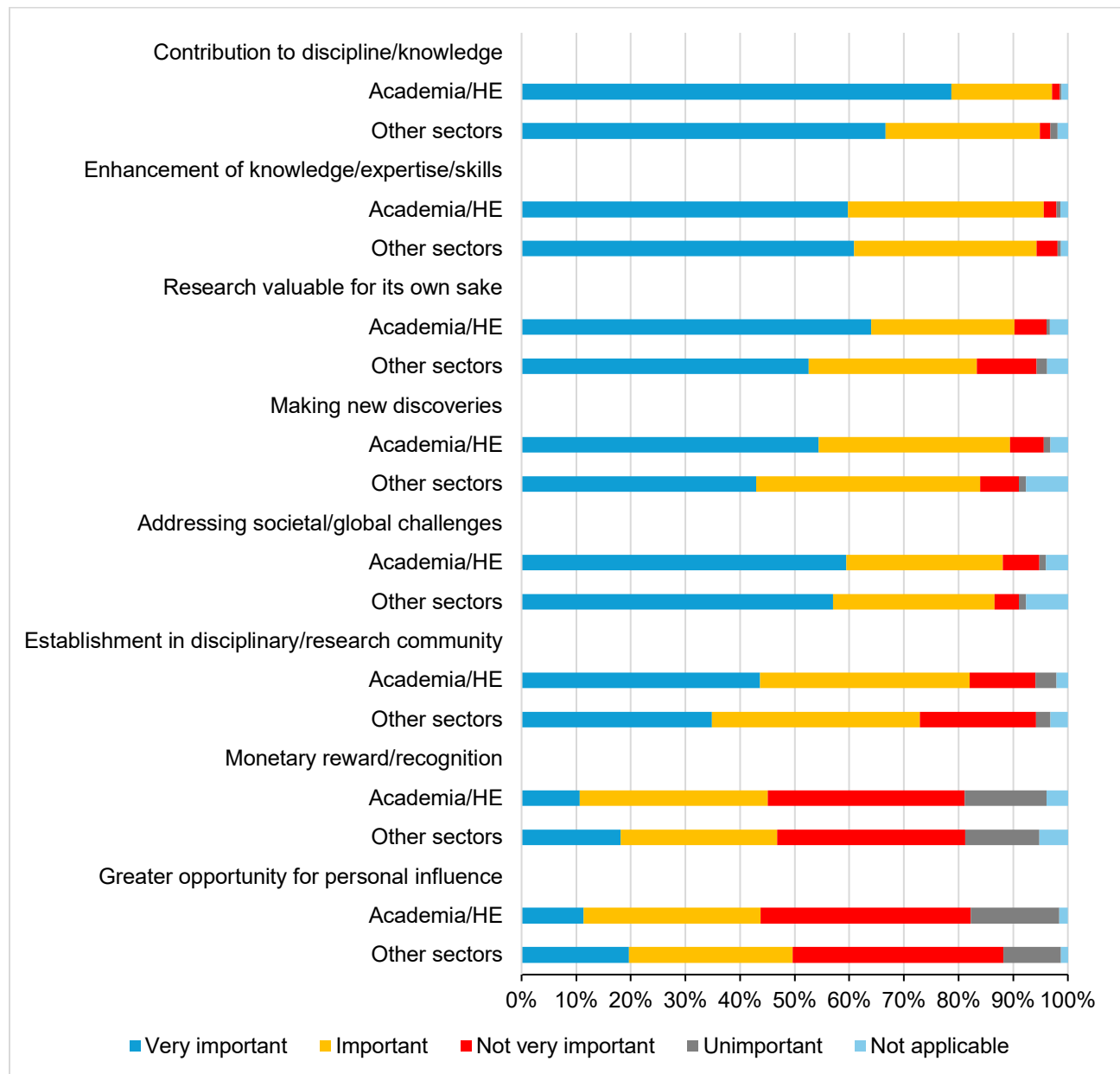
5.4 Motivations for engaging in research

From the previous section it was clear that not all the research being conducted by SHAPE researchers is the main or an integral part or requirement of their job role. To assess what motivates SHAPE researchers to engage in research, they were asked to report the importance of certain potential motivations for them personally, such as contributing to disciplinary knowledge, enhancement of their own knowledge, expertise and skills, or for monetary reward. For context, when respondents were asked whether they would like to conduct research in the future, 95% of those with a doctorate and 93% of others stated they would like to do so, so it was clearly attractive to almost all.

Figure 5.5 shows results for respondents working in academia/HE and in other sectors. The survey results revealed that SHAPE researchers had a variety of motivations, including both intrinsic and extrinsic. Very high proportions stressed the importance of making a contribution to discipline/knowledge and enhancing their own knowledge, expertise, and skills. On the other hand, over 85% of those in academia/HE or other sectors felt that addressing societal and/or global challenges was an important motivation for them to engage in research and/or making new discoveries. A slightly higher proportion of respondents working in academia/HE emphasised the importance of establishing oneself in their disciplinary and/or professional research community (82%) compared with those working in other sectors (73%), and while nine out of ten of the former felt that the opportunity to engage in something valuable for its own

sake was an important motivation for them, this was slightly lower (83%) for respondents working in other sectors. Motivations such as increased personal influence or monetary reward or other recognition were rated by far fewer as important, especially by those in academia (although fewer than one in five rated monetary reward as important outside academia too).

Figure 5.5: Personal motivations for engaging in research or research-related activities (Respondents working in HE/academia N=726, respondents working in other sectors N=184).


Further analysis of survey data showed that while the importance of most motivations for engaging in research was consistent across the three main career stages – including the five shown uppermost in Figure 5.5, there were some differences. Thus, for 90% of early-career and 88% of mid-career respondents working in academia/HE, establishing themselves in their

research/disciplinary community was very important or important. Meanwhile, this was the case for a lower proportion (but still 66%) of later-career respondents.

Similarly, a higher proportion of early-career (54%) respondents stated that monetary or other rewards were an important or very important motivation for engaging in research, compared with around 47% of those in mid-career or 27% later-career academic positions. On the other hand, a slightly higher proportion of mid-career (47%) and later-career (42%) academics than those at early-career stage (39%) were motivated by the opportunity for personal influence.

Figure 5.6 illustrates the motivations for which differences by level appeared to be substantive, among those working in academia/HE. This analysis was not carried out for those working in other sectors due to the relatively small sample size available.

Figure 5.6: Personal motivations for engaging in research or research-related activities, with level of position (where different by level: respondents working in HE/academia N=620).
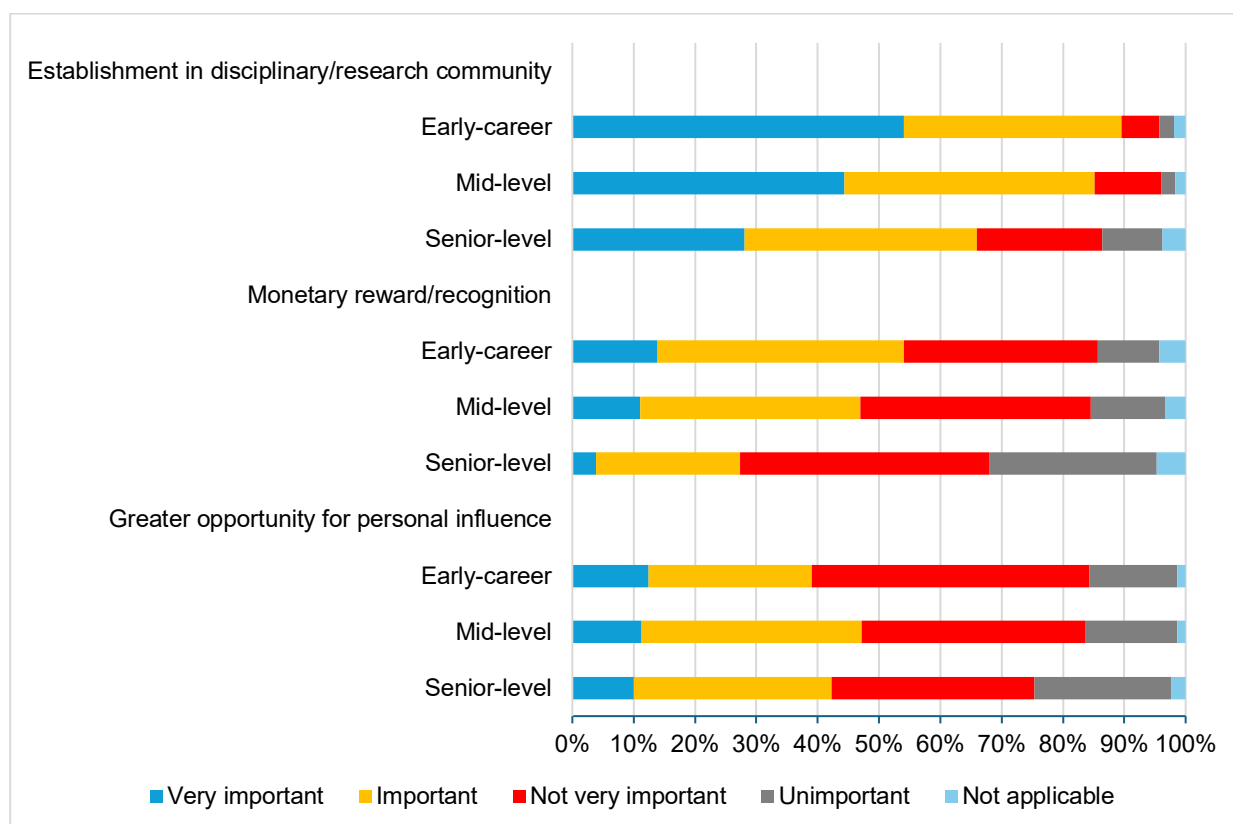
6. Mobility in a career: motivations, barriers and experiences

In this chapter, we discuss results emerging from the survey in relation to respondents' experiences of mobility, both geographic and intersectoral, including motivations for it and challenges or barriers to it. By doing so, this chapter sets out to shed light on the nature and extent of sectoral mobility in particular, and the porosity within the careers of SHAPE

researchers in this respect. We also present results on perceptions more generally about barriers to progression in a research career.

As context, it is worth remembering that 20% of all respondents were working in a sector other than academia/HE when surveyed, and hence those respondents had arguably experienced sectoral mobility 'outwards' from their HE studies. The survey provided respondents' nationality as well as their current location of employment. Table 6.1 summarises the employment locations of respondents according to their nationality, revealing that although overall 13% of respondents were working outside the UK when surveyed, this was the case for only 6% of UK nationals. By contrast, a higher proportion of those with an EU country nationality were working outside the UK (21%, comprising 15% in an EU country and 6% elsewhere), and this was higher still among those of other nationalities (31%, comprising 7% in an EU country and 23% a country outside the EU). The survey results do not reveal the location of respondents' HE studies, but it seems safe to assume that the majority studied in the UK, because participation in this survey was promoted in large part through channels related to UK HE. Either way, summation of the subset of these results that indicate mobility suggests that, at very minimum, around 280 respondents or 30% have undertaken at least some international mobility to date.

Table 6.1: Survey respondents' location of employment, by UK, EU or non-EU status.

Nationality	Employment location			*N*
	UK	EU country	Non-EU country	
UK	96%	2%	2%	*514*
EU nation	80%	15%	6%	*162*
Non-EU nation	69%	7%	23%	*156*

6.1 Experiences of mobility

As part of the survey, we asked respondents to report their experiences of mobility. Figure 6.1 presents the results of a question which aimed to investigate the extent of mobility. The results, differentiated by current main sector, show that almost one quarter (22%) of those currently working in academia/HE had worked solely at their current institution, but 60% had moved between academic institutions. Almost one quarter had moved into academia after working in another sector, while small proportions had made several sectoral shifts.

Figure 6.1: Experiences of mobility (Respondents working in academia/HE N=726, other sectors N=184).
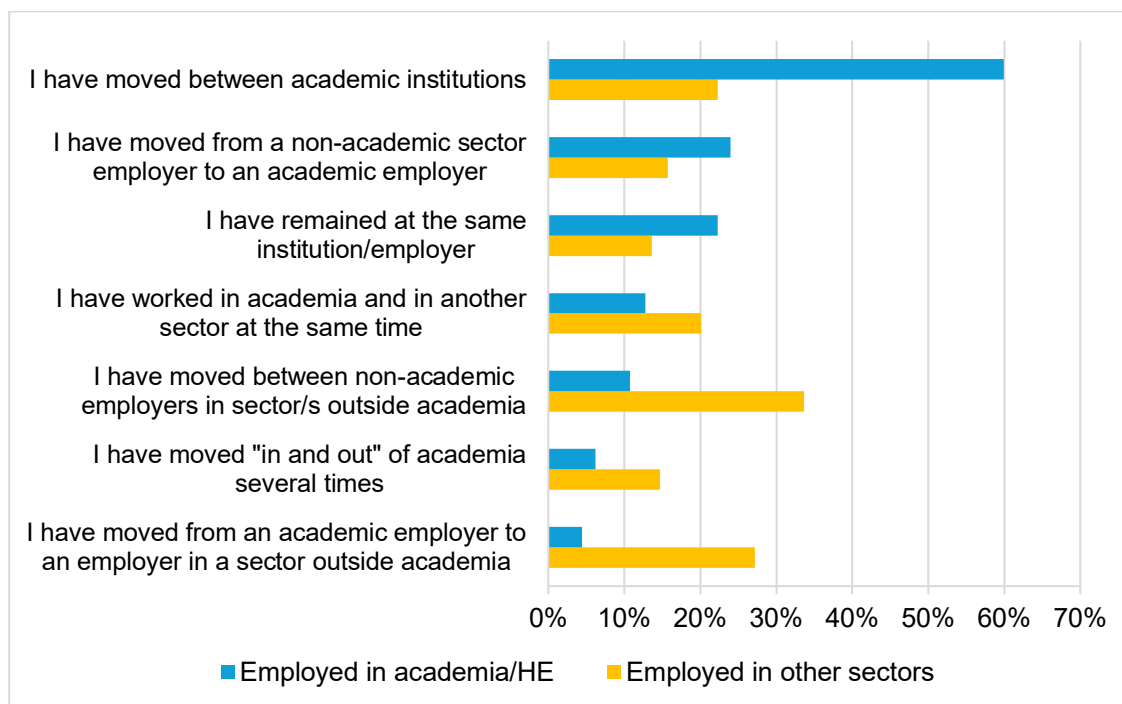
Not surprisingly, among those currently working in other sectors, the proportion who had moved between academic institutions at some point was lower (22%), but they had more experience in moving between employers in sectors outside academia (34%). 27% had moved from employment in academia/HE to employment in another sector. A lower proportion (14%) had remained at the same non-academic institution/employer (than the proportion currently in academia/HE who had remained at the same institution throughout).

Up to one in five of those now working outside academia/HE (20%) reported some experience of having employment both in academia/HE and in other sectors at the same time (i.e. portfolio employment), while 15% of them reported multiple moves 'in and out' of academia. These experiences were somewhat less common for those currently working in academia/HE.

Taken together, these results confirm the broadly held perception that some sectoral mobility is relatively common for SHAPE researchers. To our knowledge, there have been very few studies revealing the extent of individuals' sectoral mobility such as this, so it is hard to benchmark these results. However, the MORE3 study suggested that one in five researchers in UK HE had worked outside academia at some point.[16] The UK Research and Innovation Workforce Survey recorded that 25% of UK HE staff have worked in another sector, and 44% of private sector researchers have worked in HE at some point.[17]

---

[16] European Commission (2017), *MORE3 study: Support data collection and analysis concerning mobility patterns and career paths of researchers*.

[17] Department for Science, Innovation and Technology (2023), *Insights from the UK-wide survey of the Research and Innovation Workforce 2022*.

More detailed analysis did not reveal substantive differences in these extents of mobility for those with humanities or social science backgrounds, for those working currently in academia/HE. However, there was some evidence for more mobility of certain types among those in early- and mid-career stages than those in later-career; for example, 7% of the former reported multiple moves in and out of academia (while this was very rare for those in later-career), and around 15% of the former had had both an academic and another position simultaneously, while this was 9% among those in the latter.

For the smaller group of respondents who were currently working in other sectors, there was some evidence of both these two forms of mobility being more common for those with a humanities background (24% multiple moves; 28% multiple positions simultaneously) than social sciences (14%, and 20%, respectively). However, the numbers of cases were small due to the restricted sample size for these sub-groups, so these differences may not be representative, and differences were not evident for many of the other mobility variants probed.

Intersection of geographic and sectoral mobility
In addition, respondents were asked in more detail about their experiences of geographical mobility (i.e. that required relocation) and how these intersected with sectoral mobility. Results in Figure 6.2 show the extent of geographical mobility for those who had *not* changed sector. This shows that 20% of respondents currently in academia/HE had changed institution requiring an international move, and 33% of them had changed institution within the same country requiring relocation. 22% of these respondents who had worked solely in academia had changed institution but without relocation, i.e. continued to work locally.

In comparison, the extent of geographical mobility for those working in other sectors was lower: fewer had moved country and/or region within the country, than their academic counterparts, while slightly more have changed employer locally. Arguably, this could be evidence that an academic career may require more geographic mobility than a non-academic career.

When considering moves that also involve sectoral mobility (e.g. movement between academia and other sectors, Figure 6.3), one thing that stands out is that the most common form of mobility for those now working outside academia/HE was to change sector while not moving geographically. This presumably in part reflects outward moves from academia, some of which may have been made to avoid relocation. However, there is also evidence for lower but still significant extents of combined sectoral and geographical mobility, including 10% who had moved between academia and other sector/s *and* relocated to a new country. Again, taken together, this seems to be evidence of just how much mobility has been taking place.

Figure 6.2: Experiences of geographic mobility while remaining in the same sector (working in academia/HE N=726, working in other sectors N=184).
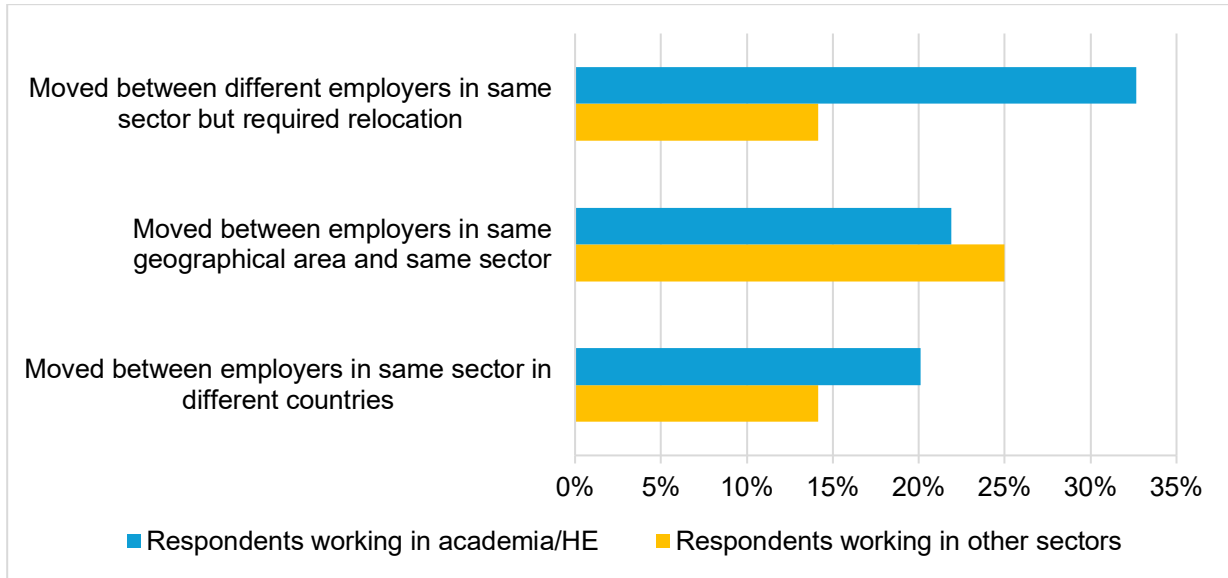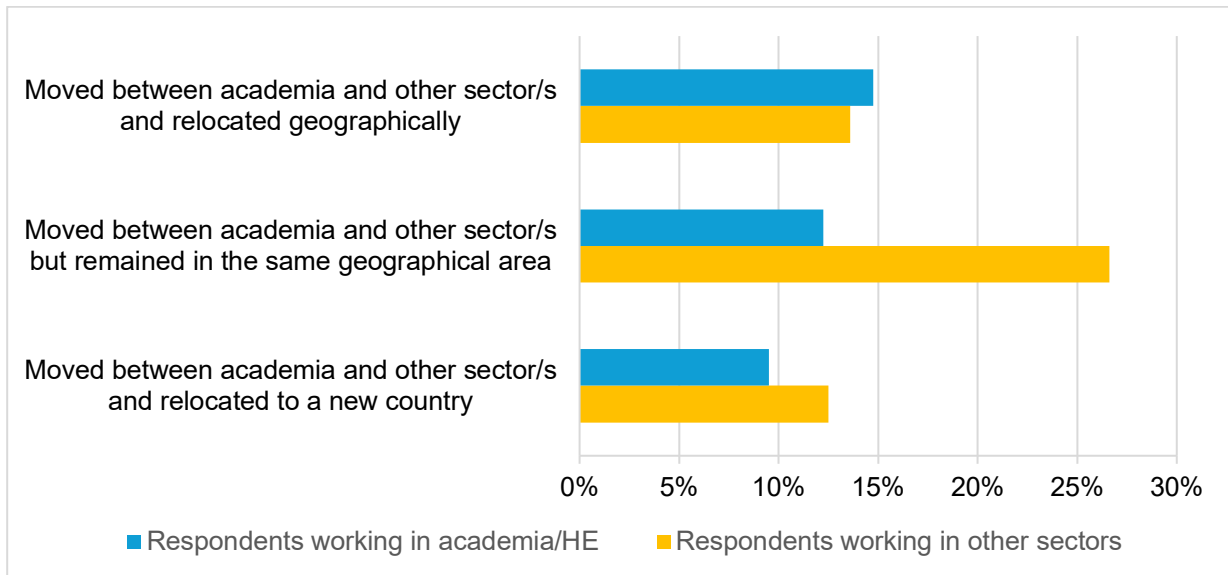

Figure 6.3: Experiences of geographic and sectoral mobility (working in academia/HE N=726, working in other sectors N=184).

Mobility differences with gender

Results emerging from the survey also show interesting but complex gender differences in the experiences of geographic and institutional mobility. Among those working in academia/HE, a greater proportion of male respondents had remained at the same institution (30%) compared with females (22%), whereas this gender difference was not seen for retention among those working in other sectors.

Further, a higher proportion of male respondents (regardless of sector) reported a change of employer while remaining in the same sector which required within-country relocation (for example, 41% of male respondents working in academia/HE, compared to 32% of females). This difference was more pronounced for those in other sectors; 40% of males working in other sectors had experience of relocation while remaining in the same sector, while this was the case for only 12% of comparable female respondents.

Shifting the focus to international mobility – i.e. changing employers in the same sector in different countries – there were virtually no differences between the results for male and female respondents working in academia/HE. However, more of the male respondents working in other sectors (26%) reported international relocation while changing employer, compared with female respondents working in other sectors (13%).

These results, while complex, appear to suggest that while male respondents working in academia tended to be more able to retain employment with their employer and avoid relocation, they also tended to be more prominent within certain key types of mobility, such as international moves to other employers. This could be an area where some qualitative research might provide additional understanding of trends and their drivers.

6.2 Motivations for sectoral mobility

To understand what could motivate and/or has motivated respondents to change sectors (i.e. to move from academia to another sector, or vice versa), they were asked to rate the importance of certain motivations (such as increased job satisfaction, work/life balance etc.) for them personally when considering changing sectors. Figure 6.4 shows results for all respondents, as there were only minor differences between respondents working in academia/HE and in other sectors. Hence, the following discussion focuses on the overall results, with some attention to areas where there appeared to be minor differences for different groups.

Over 80% of respondents rated increased satisfaction (88%) and work/life balance (84%) as important motivations for changing sectors, whereas 70% of respondents referred to career progression (79%), enhanced job security (78%), and family and/or personal circumstances (77%) as important motivations when considering changing sectors. Motivation such as colleagues at a new institution/employer and reputation of employer were also mentioned by over half of respondents.

Among the few differences by current employment sector, a higher proportion of respondents working in other sectors referred to role enhancement as an important motivation for sector mobility (85%), compared with those working in academia/HE (67%). In this context, an 'enhanced' role was intended not to refer to career progression (which is addressed separately)

but an enhancement or change within the current role or a different role in terms of the type of work. Similarly, more respondents working in other sectors felt that improving earnings was a motivation when considering changing sectors (77%) compared to those working in academia/HE (68%).

Figure 6.4: Survey respondents' motivations for sectoral mobility (N=910).

Differences in motivations with gender and career stage
Further analysis of survey responses showed some gender differences in motivations for changing sectors. Slightly more female respondents reported career progression (82%) and family circumstances (80%) as important motivations, compared with male respondents (72% and 70% respectively).

On the other hand, there were larger differences by career stage. Nine out of ten (90%) of early-career and eight out of ten (80%) mid-career respondents referred to enhanced job security as an important motivator for moving sectors, and this was also reported by just over half of later-career respondents (56%). Intuitively, this seems a worrying finding, with such high proportions of those established in careers worrying about job security. Similarly, higher proportions of early- (87%) and mid-career (81%) respondents ranked career progression as an important motivation, compared with later-career respondents (63%), with a similar difference being seen for work/life balance as a motivation (92% of early-career and 87% of mid-career respondents, compared with 66% of later-career respondents).

6.3 Barriers to sectoral mobility

Respondents were also asked about barriers they perceived that might prevent a career shift from academic employment to another sector, or vice versa. Figure 6.5 presents the results in terms of how they perceived barriers for shifting from academic employment to another sector, whereas Figure 6.5 summarises results for the reverse career move (e.g. a shift from employment in another sector to academia/HE).

One of the key findings is that when considering a potential move from academic employment to another sector, a higher percentage of those who currently worked in academia felt that every potential factor was a barrier, compared with the perceptions of those who worked in other sectors. As noted in the context to this section, this may reflect that many of those in academia/HE have not experienced any such mobility and therefore have more concerns, while those who are now outside academia/HE have, by definition, moved 'out' from HE at some stage, even if only immediately after HE study. International mobility studies suggest that any mobility experience reduces many of the concerns that may be held by those who have not had such experience.[18]

Figure 6.5: Perceived barriers to sectoral mobility: moving from academic employment to another sector (working in academia/HE N=726, working in other sectors N=184).

---
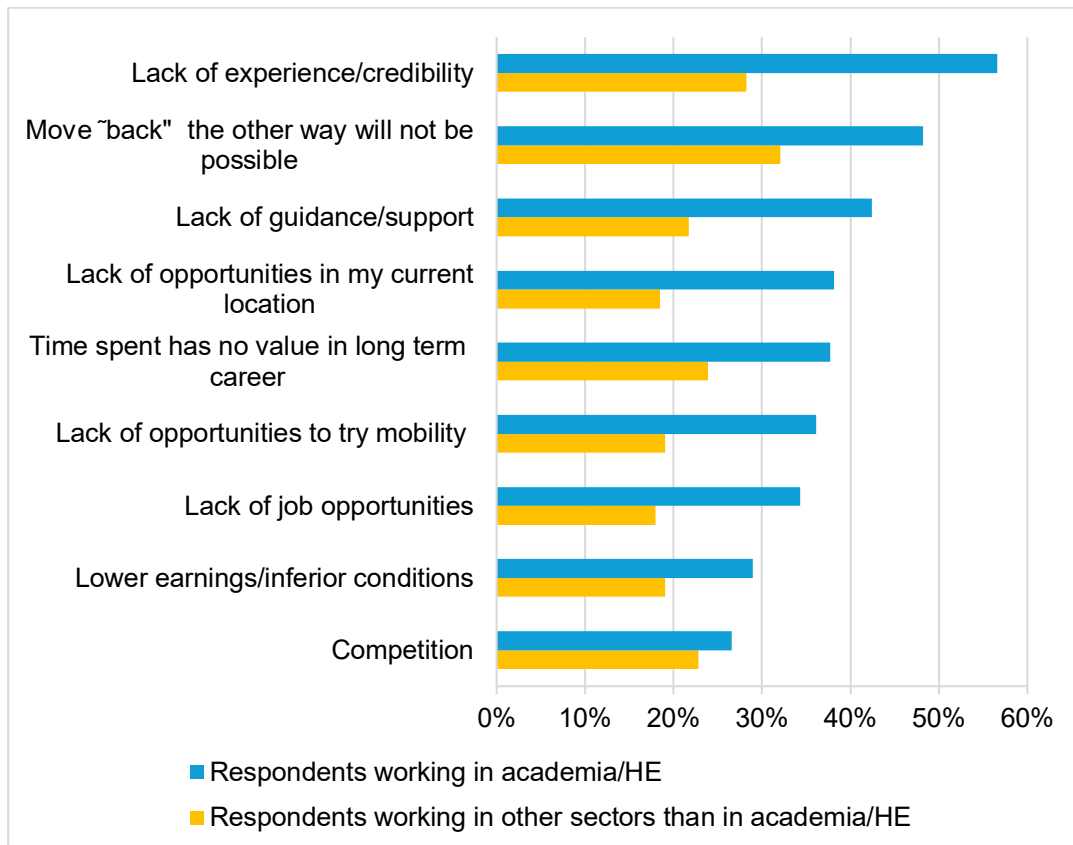
[18] British Council (2015), *Student perspectives on going international*. CRAC report for British Council and UUK International.

When considering a move from academic employment to other sectors, over half of respondents working in academia/HE felt that a lack of experience or potential credibility in another sector context would be a barrier, twice the proportion (28%) of those working in other sectors. Examples included:

> *"Previous applications to roles outside of academia have been largely met by some confusion on the part of interviewers, who have needed to be informed about the transferable skills I could bring from academia and particularly my specific discipline (and remained largely unconvinced)."*　　　　Female, mid-career, academia/HE

> *"I would consider a move out of academia, but the types of roles and organisations I would be interested in (e.g. policy and research in charity/third sector) tend to be short contracts and comparatively poorly paid. It took me a long time to get a secure and well-paid academic job and I would be reluctant to jeopardise this security."*
> 　　　　Female, mid-career, academia/HE

Another barrier perceived by almost half of the respondents in academia/HE (48%) was fear of not being able to move "back" (to academia) if they did move to another sector. Related to this, almost 40% feared that time spent or achievements in another sector would not be perceived as valuable if they resumed an academic career.

> *"Many academic posts do not credit previous experience elsewhere. I think it would be more difficult now, when top universities require a strong publications record, to move from another sector into academics."*　　　　Male, later career, academia/HE

> *"Leadership experience in cultural sector and transferable skills not taken sufficiently seriously by universities."*　　　　Male, mid-career, academia/HE

Substantial proportions of those currently in academia felt that a lack of guidance and support (about mobility, 42%), a lack of opportunities locally (38%) and/or a lack of opportunities to try it out (36%) were all barriers to moving from academia/HE to another sector. Lower but still significant proportions felt there were other barriers, including lower earnings or less favourable (such as less flexible) working conditions outside academia (just under 30%) and that there was competition for roles In all cases, lower proportions of those working outside academia – many of whom would have experienced such mobility at some point – saw each of these as a barrier.

> *"I have often considered leaving academia for something more stable, but I'm unsure how to do this, or what to do instead."*　　　　Female, early-career, academia/HE

> *"I'm very curious and interested in opportunities outside of academia but don't know how to go about finding them and suspect my skills and expertise don't translate across."*
> 　　　　Female, later career, academia/HE

> *"Fear of working in a 9-5 job after more flexible schedules in academia"*
> 　　　　Female, later career, academia/HE

Figure 6.6: Perceived barriers to sectoral mobility: moving from another sector to academic employment (working in academia/HE N=726, working in other sectors N=184).
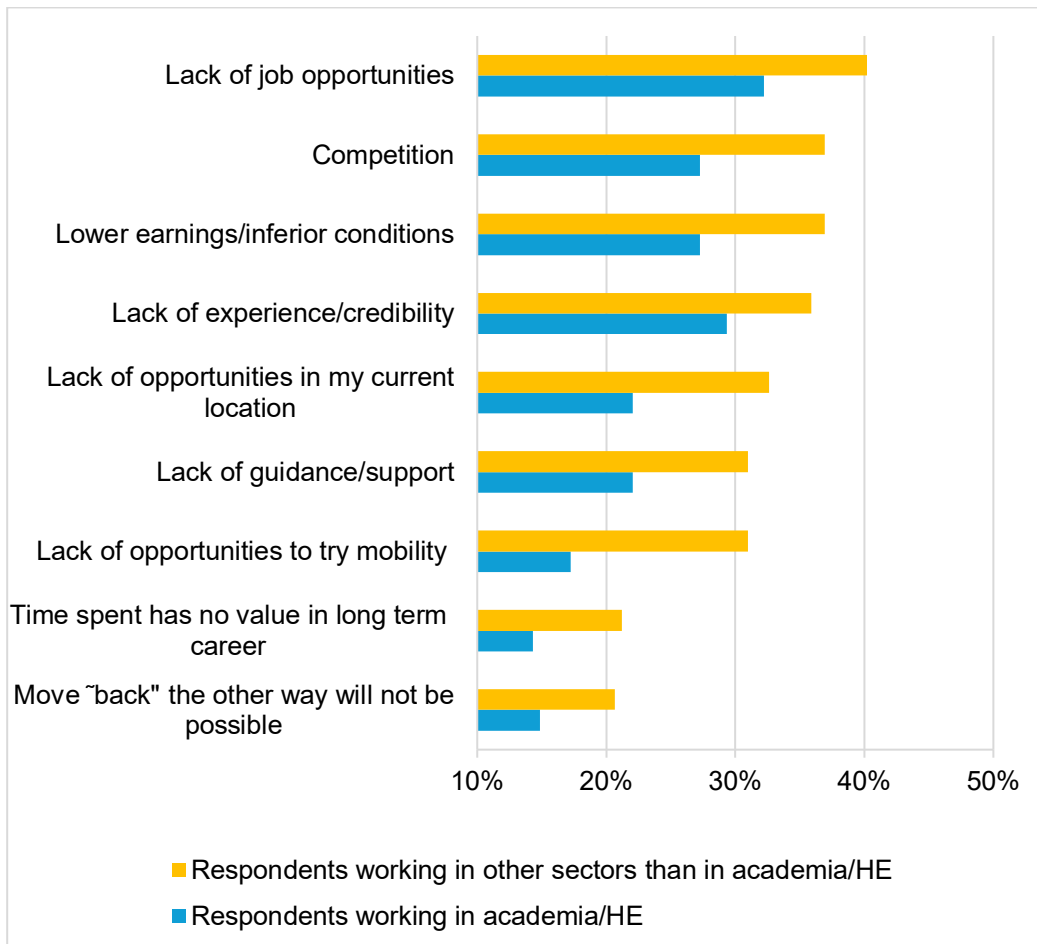
In contrast, when asked to consider barriers to movement from other sectors to academia, the differences in results between these two populations were the reverse (Figure 6.6). For all potential issues, somewhat higher percentages of respondents working in other sectors perceived them as barriers, than among those who worked in academia/HE. Relatively high proportions of them (around 40%) worried about a lack of job opportunities in academia, the competition for them and whether they would be credible in applying for them. 21% of respondents felt that a move back from academic employment to another sector would simply not be possible.

> *"Working outside academia it's almost impossible to get paid to publish in academic journals or books, so it is very had to demonstrate a research portfolio."*
>
> <div align="right">Female, mid-career, legal services</div>

> *"Once you've left academia (esp. in research and teaching roles) it's incredibly hard to move back. Job apps require teaching and research plans, and experience of winning funding, and it can be hard (if not impossible) to know what's required here, even if you bring experience of researching in the real world."*
>
> <div align="right">Male, early-career, unspecified other sector</div>

"Although I have published quite extensively, I do not have a doctorate which is a prerequisite for nearly all research positions in academia."

<div align="right">Female, mid-career, health and social care</div>

Gender and career stage differences in perceived barriers

Further analysis showed some gender- and career stage-related differences in how respondents perceived barriers to movement from academic employment to other sectors. For example, more of the female respondents (49%) perceived lack of guidance/support as a barrier, than of male respondents (36%).

Far greater differences were seen by career stage. Over half of early-career respondents (53%) stated that the fear of not being able to move back into academia after working in another sector was a barrier to leaving academia/HE, compared with 31% of later-career respondents. Similarly, more of the early-career respondents (45%) referred to lack of guidance and support as a barrier, compared with later-career respondents (28%).

Perceived barriers to a move in the other direction, i.e. into academia, were more widespread for those earlier in their career. For example, twice as many early-career respondents (40%) felt that lower earnings or inferior conditions were a barrier to such mobility, compared to 18% of later-career respondents. Similarly, far more early-career respondents feared a lack of job opportunities (45%) compared with 21% of later-career and 33% of mid-career respondents, with a similar trend for perceptions about competition.

These sorts of differences in the perceptions about barriers between early-career and other respondents may reflect a lack of experience and/or confidence in one's skills and credibility as a potential employee, either in academia or another sector. There are also clearly widespread concerns over whether sector changes could offer stability, in terms of job security, career progression and work/life balance, which can all be motivations for changing sectors as much as barriers. Arguably, all these concerns could to some extent be addressed by guidance, through which SHAPE researchers might understand more about how others would value their skills, as well as better-informed insights into issues such as job security, career progression and work/life balance, which are the sorts of factors that will influence how SHAPE researchers will view opportunities for sectoral moves.

Further reflections on mobility

Respondents were also asked to provide comments on mobility. Analysis of open-ended responses from participants working in academia showed that personal circumstances, such as family, visa status and/or consequences on career/finances limited many respondents' options when considering career moves (33 references). One respondent brought up the influence of sectoral mobility on career progression:

"Moving between sectors seems to involve a step back in career progression because of lack of experience in that sector, despite wider experience; but also a step back in pay and seniority. I've done that too many times and cannot afford to do that any more."

<div align="right">Female, mid-career, academia/HE</div>

Another theme commonly brought up was anticipated circumstances of employment (17 references), including a lack of job opportunities or the ability to maintain certain skills that would support sectoral mobility. One respondent noted the difficulties in retaining sufficient professional standing that would allow them to find employment back in academia:

> *"After my doctorate, I had to decide how long to continue trying to get an academic post or whether to retrain in another field. Later, having in fact retrained (as an [profession]), I had to decide whether to take a fixed term academic job with an uncertain future and how far I could maintain my [..] professional standing to provide a potential way back. In the end, I could NOT maintain that standing, so was hostage to a series of fixed term contracts in academia. I only got a permanent post late in my career."*
>
> Male, later-career, academia/HE

Responses provided by those currently in other sectors also referred to personal circumstances, such as family or socioeconomic background (8 references), so these could equally be barriers for those considering a move into academia. Others reported that the conditions or requirements of work outside academia (7 references) were such that it was difficult to continue to conduct sufficient research or maintain research skills that they felt would be necessary to secure employment in academia. Again, some referred to a lack of support or guidance about returning to academia, quite apart from concerns about a lack of opportunities for employment in academia.

6.4 Barriers to progression in research careers

The survey also investigated respondents' perceptions more broadly about barriers to progressing in research careers. Figure 6.7 summarises the results for all respondents as, overall, these results were rather similar both for those working in academia/HE and in other sectors. The most commonly cited barrier to a research career was the difficulty in securing funding for research (95%), with other very widespread perceptions being about insufficient opportunities for suitable posts and excessive competition for research roles (or roles involving research), both stated by over 90% of respondents. For many of the potential factors, slightly higher proportions of those working in academia/HE identified it as a significant factor than of those working in other sectors. For example, 97% of those in academia felt that securing funding was a barrier, and 92% felt that excessive competition for jobs, while these were identified by 88% and 84% of those working outside academia/HE, respectively.

Other widely held barriers across all respondents were the expectation of poor reward or work/life balance (78%), family/personal circumstances or responsibilities (77%), the requirement for geographical mobility (72%), and a lack of sponsorship (70%). While not quite so widespread, between half and two thirds of respondents referred to unsupportive line-management, an insufficient or lack of record of achievement that would be required, lack of skills or disciplinary background, and absence of or insufficient relevant professional networks.

Figure 6.7: Survey respondents' perceptions of extent of significance of potential barriers to progression in a research career (N=910).
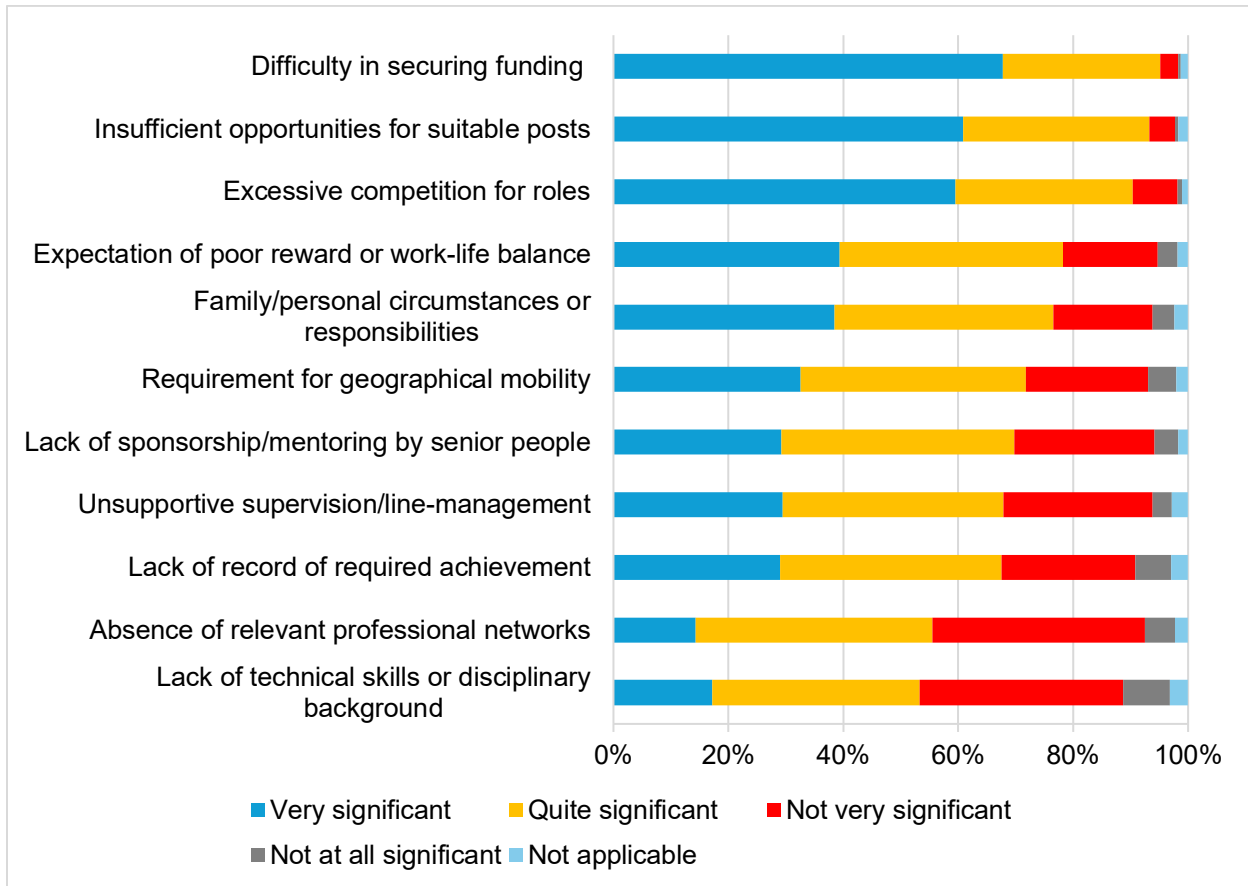
Differences in perceptions with gender and career stage

Closer analysis of survey results showed some gender differences in how respondents perceived career barriers. For example, 80% of female respondents referred to family circumstances as a barrier which was somewhat higher than among male respondents (69%). Similarly, 75% of female respondents saw (the need for) geographical mobility as a barrier whereas this was somewhat lower (66%) among their male counterparts.

These results also showed some career-stage related differences. While 84% of early-career and 79% of mid-career respondents felt that family and/or personal circumstances or responsibilities formed a barrier to progression, this was lower (65%) for later-career respondents. Similarly, 87% of early-career respondents referred to expectation of poor reward or work/life balance as a career barrier, which was higher than among later-career respondents (65%). However, it is interesting to note that almost two thirds of even later-career respondents were seeing these as barriers.

Other reflections on career progression

Respondents were also asked to provide comments in relation to research career progression, of which the most common are illustrated below with an idea of their relative frequency. One of the topics raised by respondents was precarity and how early-career positions tended to be characterised by (contractual) precarity and/or employment conditions that are not sustainable for many people (24 references).

> *"Precarity is the biggest barrier to research progression. If you want to raise a family and have a stable home, part-time temporary research contracts are usually not the way to go."*   Female, early-career, academia/HE

Others referred to a lack of opportunities (12 cases) and some a lack of support (6). Another theme was the conditions of work, such as workloads in academia/HE, that prevented progress in a research career (23 references):

> *"In my current employer, producing research is seen as the key criteria for promotion. However, working conditions have deteriorated to the point when colleagues have to fit research into evenings, weekends and annual leave - as if it is a hobby. Instead, it should be a core part of our duties during regular working hours and research time should be better protected."*   Female, mid-career, academia/HE

On the other hand, some respondents referred to wider conditions and values in the HE sector that underpinned research career progression, including specific comments from some in teaching-focused universities (22 references):

> *"The pressure to publish and secure funding is unsustainable and is not resulting in better research. It is simply resulting in lots of very tired, very stressed people. If I could work at a more research-intensive university or in a different sector with better work/life balance, I absolutely would."*   Female, early-career, academia/HE

> *"UK academia is increasingly treated as a business. There is a greater focus on teaching, with little support and time allocated to research."*
>   Gender not disclosed, early-career, another sector

Another theme brought up by a few respondents was the requirement for mobility that could exclude those with caring responsibilities, additional needs and/or those who did not have the additional resources to support geographical mobility:

> *"[Progression is] more haphazard rather than something that can be planned. In early career those who are able to be mobile and move easily from place to place, do not have a permanent home of their own and can move back to the parental home in between contracts, have more opportunity of employment. Those who do not have this ability have less career prospects and have often taken other non-academic/ non-subject employment resulting in skills loss from the sector."*
>   Female, later-career, another sector

"I am deeply aware that the system and culture are built heavily around networking events, such as conferences, or residential fellowships, that are difficult for those from financially limited backgrounds, those with significant caring responsibilities, and those with disabilities that may make travel challenging. That is, there are in-built cultural and systemic factors that effectively favour the economically privileged, normally abled person who doesn't have care requirements."   Male, mid-career, academia/HE

In summary, this chapter has considered mobility – including geographical but especially intersectoral – from a series of different angles. The survey data suggests that there may be quite extensive mobility undertaken by those working in research or with research qualifications in these disciplines, although it is hard to assess whether this is more common than for researchers in other disciplines. There is evidence that once a researcher has some experience of another sector, they are more likely to consider or undertake further mobility. Motivations for mobility are varied but broadly consistent independent of sector – mostly to support aspirations for better job satisfaction and/or work/life balance, and for personal or career progression. Barriers to mobility include personal and family commitments such as caring responsibilities, but also a lack of confidence about success or acceptance in another sector and, for academics especially, a fear that time spent in another sector will prevent a potential 'return' to academia and/or make eventual progression within academia more difficult. Although many academics perceive especially geographical mobility to be a prerequisite for career progression within academia/HE, they do not appear to view sectoral mobility to have the same benefit.

7. Overall findings

The overall aims of this study were to explore the themes of identity, mobility, and porosity within the careers of SHAPE researchers. To address these themes, the three main objectives were to investigate and understand better:

- Who SHAPE researchers are and what they do, within and beyond academia;
- The nature and extent of mobility and porosity within careers for SHAPE researchers;
- The motivations for and barriers to progression in research careers across the SHAPE disciplines.

In this study, we defined a SHAPE researcher as someone who has undertaken research training in one of the SHAPE disciplines and/or identifies as a SHAPE researcher and/or uses research skills founded in these disciplines in their current role.

Where SHAPE researchers work and what they do

While the majority of our survey respondents worked in academia/HE, the survey shows that SHAPE researchers work in a range of sectors, within which education and training, the third sector, and development work were prominent. SHAPE researchers that work in sectors beyond academia were employed by a wide variety of organisations, including over half working for a public sector or third sector organisation. These results suggest that SHAPE skills are in demand across various sectors and organisations outside academia/HE.

Furthermore, our evidence highlights that SHAPE researchers have acquired a wide diversity of roles outside academia/HE, in addition to those on academic career pathways. SHAPE researchers have found employment not only in researcher and directly research-focused roles, but also in managerial and professional/technical roles, many of which are in some way research-related. Many report that their expertise and skills have enabled them to gain and succeed in these roles.

There is some evidence to suggest that more of those with a SHAPE doctorate are in research or management roles than those whose highest qualification is at a lower level, a trend which parallels academia/HE where, again, those with a doctorate are more able to access career progression. This seems to confirm that at least some employers outside academia/HE value not only the disciplinary expertise of SHAPE researchers, but also the high-level skills that are fostered through completing a doctorate. Research directly with employers could be beneficial to understand more robustly how they value a doctoral qualification.

At the same time, we also found evidence that a higher proportion of SHAPE researchers working in other sectors held multiple employment positions (including self-employment), compared with those working in academia, and more of them worked part-time. Portfolio and part-time work were somewhat more prevalent for female SHAPE researchers than their male counterparts. Despite the prevailing narrative suggesting that employment in academia is highly precarious, and potentially more so than in other sectors, the survey evidence is more nuanced. Overall, a higher proportion of respondents working in academia/HE had an open-ended (permanent) employment contract than among respondents working in other sectors. This

reflects the relatively high proportion of respondents at mid- and later-career job levels in the survey, of whom almost all have an open-ended contract, whereas most of the early-career respondents do not (of whom many overtly referenced precarity when considering mobility and barriers to progression). It also reflects that the nature of the labour market outside academia is complex, and that many of the roles or opportunities open to SHAPE researchers may not be available on a permanent basis.

The relevance of research skills and engagement in research in current role
Results emerging from the survey suggest that research skills have been relevant in securing and succeeding in respondents' current roles, regardless of the sector in which they now work. On the other hand, there were differences in how respondents working in academia/HE and in other sectors perceived the relevance of research skills in future career progression. Fewer respondents working in other sectors felt that research skills were essential for their future career progression. Similarly, fewer of them also stated that conducting research was a requirement of their employment contract and/or that their reason for conducting research was to progress in their career, compared with those working in academia/HE for most of whom research was a requirement for progression. These differences reinforce the idea that SHAPE researchers working in diverse roles outside academia need skills beyond research in order to have career progression, either acquired when they developed as researchers or subsequently as professional development.

Professional identity and motivations for research
Our study suggests that most respondents working in academia/HE, perhaps unsurprisingly, identified primarily as an academic (rather than a disciplinary or occupational label), while most working in other sectors tended to align with a more occupationally focused or professional identity (such as researcher, or curator). This could be interpreted to suggest that the notion of an academic identity is the most relevant for SHAPE researchers working in academia, whereas those working in other sectors do not have a similar overarching professional identity but tend to identify with more specific occupational titles.

The survey shows that SHAPE researchers both within and beyond academia widely engage in a range of research activities. Over half of those working in other sectors had evaluated and/or synthesised existing knowledge or research, disseminated knowledge to lay/professional audiences, conducted primary and experimental research and/or supported research that was carried out by others. There were minor differences in the nature and extent of research activities by sector, such as more respondents working in academia engaging in disseminating knowledge to academic audiences, peer review, and obtaining funding for research, compared with those working in other sectors, all of which are fully understandable. Conversely, a slightly higher proportion of respondents working in other sectors conducted research to support policy making, to evaluate/deliver a project for a client and/or to enhance development of existing/new products, processes, and programmes, compared with their academic counterparts. However, many activities core to and related to research were common across several sectors, although the diversity of roles and sectors in which SHAPE researchers are working means that it is perhaps too simplistic to consider a single unified conception of what research looks like

'beyond academia'. Instead, the range of activities that these SHAPE researchers engage in are reflective of the contexts in which they work.

The evidence here suggests that regardless of the different professional identities and the differences in how SHAPE researchers engage in research activities, in different settings, there are only minor differences in their motivations to conduct and engage in research in the first place. The majority of respondents were motivated by the opportunity to contribute to their disciplinary field as well as enhancement of their own knowledge, expertise, and skills. What it also suggests is that some of the motivations are linked strongly with career stage. Thus, more early-career and mid-career respondents saw research as the way to establish themselves in their research/disciplinary community, and some as a means to monetary and other rewards, while these were far less important motivations for those later in their careers.

The nature and extent of mobility and porosity within careers of SHAPE researchers
One of the aims of this study was to assess the nature and extent of the mobility of SHAPE researchers to shed light on the porosity of the research eco-system in which they work. The results emerging from the survey suggest that experiences of mobility do vary according to the sector in which the respondent works, and to a certain extent also by gender. Over half of those working in academia have moved between academic institutions, and for a third of them this has involved geographical mobility (i.e. relocation). By comparison, overall, a higher percentage of those working in other sectors have changed employers and/or sectors – with or without geographic relocation – in addition to their original move out of HE when they concluded their education or research qualification.

Gender differences are most evident in relation to geographical mobility. The least mobile respondent group was female respondents working in sectors other than academia/HE. They reported fewer experiences of geographical mobility (both within their country and internationally), whilst they had more experience of changing employer (and sector) locally. There was also some evidence for a higher proportion of female respondents working in academia having changed institutions while remaining local, compared with men working in academia. On the other hand, there were no major gender differences in relation to international mobility of those working in academia.

In terms of porosity (e.g. the ability of the system to allow movement between academia and other sectors), there is evidence of quite extensive movement of SHAPE researchers between academia and other sectors. However, the extent of such mobility was not symmetrical. Fewer of those now working in academia/HE had experienced sector mobility than those working in other sectors, not only in terms of moving from academia outwards to a non-academic employer but also multiple sector moves. Those whose main work was outside academia also had more experiences of portfolio working both in academia and in another sector at the same time. Enhancement of total porosity would seem to require more incentives and opportunities for SHAPE researchers working in academia to undertake steps in sectoral mobility.

Motivations for sectoral mobility seemed to be broadly similar for those in academia/HE and others alike. Most commonly they cited increased job satisfaction and/or better work/life balance as motivations, while many also mentioned career progression, enhanced job security,

family/personal circumstances and an enhanced personal role. It was noteworthy that many of these motivations – presumably based upon perceptions about work in other sectors – were common for potential mobility either out of or into academia, or between other sectors. There were, however, some slight differences between respondents working in academia/HE and other sectors in respect of the attractiveness of an enhanced personal role and/or improved earnings, which were slightly more highly emphasised by those working outside academia/HE.

There was also evidence for some gender differences in the motivations for changing sectors, with a higher proportion of female respondents citing career progression and family circumstances as important motivations for changing sector. However, in practice, career stage was also a key factor. More of the early- and mid-career career respondents rated enhanced job security, career progression, and work/life balance as important motivations for changing sector, than did later-career respondents. This perhaps reflects the importance of becoming established in a career, particularly finding a secure position with opportunities for career progression while retaining work/life balance. Some of these issues and factors also emerged in considerations of barriers to mobility discussed below.

Barriers to sectoral mobility
Many different barriers were identified in relation to potential mobility outwards from academia/HE. However, one key observation from the survey results is that, for every barrier listed, a higher proportion of those working in academia identified with it than did those who currently worked in another sector. Over half the respondents working in academia referred to lack of experience and credibility as barriers, as well as the fear that a move 'back' (to academia) would not be possible, while a lack of guidance and support was also brought up by many. Although respondents working in other sectors referred to the same barriers, in all cases it was less frequently. We infer that this trend results from the mobility experience of SHAPE researchers who left HE after their education to work in another sector. Having undertaken that mobility step in practice they may have overcome many of the perceived barriers and are more confident in their employability.

Conversely, this trend was reversed when it came to perceptions about movement from other sectors to academia. In this case, respondents working in other sectors saw more barriers to moving to academic employment than those who already worked in the sector perceived would be the case. Barriers such as a lack of job opportunities, competition for jobs, lower earnings and inferior conditions were brought up by many respondents working in other sectors, if they considered a potential move "back" into academia. These barriers were also mentioned by those currently working in academia, but less frequently. Presumably this reflects their greater familiarity with the academic environment, but perhaps also that fewer of them have these experiences in practice.

Analysed by career stage, more early-career respondents were concerned about not being able to move back to academia after employment in another sector and more of them saw a lack of guidance as a barrier (compared with later-career respondents). Understandably, more of these respondents were more concerned about issues such as earnings, conditions of work, and a lack of job opportunities as potential barriers to mobility, than their counterparts who were more established in their careers.

Barriers to progression in research careers

Exploration of perceived barriers to progression in a research career suggested that these were broadly similar irrespective of sector. The most common challenges to progression were considered to be difficulties in securing funding, insufficient opportunities for suitable research posts and excessive competition for them.

As with barriers for sectoral mobility, the survey showed gender differences in how respondents perceived various career barriers. More female respondents referred to their family commitments and how these limited their options for geographical mobility, which they saw as necessary for progression, hence those responsibilities were a barrier, compared with male respondents. This seems to reflect mobility experiences, wherein more of the female respondents had undergone a sector or employer change while staying in the same locality. However, again, career stage was also influential in how they perceived barriers. More early- and mid-career respondents felt that family and personal circumstances were a major barrier to progression, and somewhat more were concerned about poor rewards or work/life balance, compared with later-career respondents.

Appendix 1: Survey response sample - descriptive statistics

Disciplinary background

	N	%
Sociology, Social Policy and Anthropology	135	15%
History and Archaeology (including Classics)	102	11%
Other (please specify)	83	9%
Languages and Area Studies	64	7%
Creative Arts (including Art and Design)	48	5%
Law	46	5%
Business and Management	36	4%
English Studies	35	4%
Philosophy and Religious Studies	32	4%
Politics	31	3%
Psychology	31	3%
Education and Teaching	25	3%
Combined Humanities, Liberal Arts etc.	22	2%
Media, Journalism and Communications	22	2%
Social Care and Health Studies	19	2%
Economics	15	2%
Unknown	164	18%
Total	*910*	

(Self-identified) Career stage

	N	%
Early-career	282	31%
Mid-career	413	45%
Later-career	190	21%
Not yet in a career position	20	2%
Unknown	5	<1%
Total	*910*	

Level of highest qualification

	All respondents		Employed in academia/HE		Employed in other sectors than in academia/HE	
	N	%	N	%	N	%
Doctorate	640	70%	560	77%	80	43%
Postgraduate	111	12%	60	8%	51	28%
Graduate	14	1%	9	1%	5	3%
Unknown	145	16%	97	13%	48	26%
Total	*910*		*726*		*184*	

Gender

	N	%
Female	528	58%
Male	211	23%
Other	28	3%
Unknown	143	16%
Total	*910*	

Nationality

	N	%
UK or British national	444	49%
National of an EU member state	162	18%
National of another country	156	17%
Prefer not to say	8	1%
Unknown	140	15%
Total	*910*	

Employment locations where outside the UK

	N	*%*
EU / Europe	55	48%
Oceania	15	13%
South Asia /Southeast Asia	13	11%
North America	9	8%
Middle East	8	7%
East/Southern Africa	4	3%
East Asia	2	2%
South America	2	2%
Not known	7	6%
Total	*115*	

Year of birth

	N	%
1996-2000	17	2%
1991-1995	71	8%
1986-1990	109	12%
1981-1985	116	13%
1976-1980	121	13%
1971-1975	101	11%
1966-1970	83	9%
1961-1965	45	5%
Before 1960	66	7%
Not known	175	19%
Prefer not to say	6	1%
Total	*910*	