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Association of Research Managers and Administrators

ARMA Research Office Survey 2020

Benchmarking UK Institutional Research Offices

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ARMA Research Office Survey – Benchmarking UK Institutional Research Offices

Report commissioned by:

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Foreword

On behalf of ARMA, I am delighted to share with you the analysis and insights from ARMA's first ever national survey of research offices. We hope to update the survey periodically to gain further insights, monitor trends and track changes in the profession.

When we designed and conducted the survey, the world was very different to the one we find ourselves in now. Responses were submitted before the onset of the coronavirus lockdown which has had enormous impact in so many ways, not least the operations of universities and research support. In the pre-COVID 19 period, the future was all to play for: the outcome of the Brexit negotiations were imminent; regional disparities were to be addressed through the levelling up agenda; and the chancellor had just announced an immediate £400 million investment in research followed by an increase of £22 billion per annum in R&D by 2024-25.

We won't know the full impact of the pandemic on the economy, the sector and research for a while yet but let's hope the forthcoming Comprehensive Spending Review enables the sector to play a central role in finding a solution, rebuilding public trust and reinvigorating the economy. Staff in research offices are already playing a key role in supporting (albeit remotely) collaborative solutions to COVID-19 and working to mitigate the disruption to research and Research Excellence Framework (REF) timelines.

Our survey reflects the challenging and evolving landscape for the research management profession, driven by complexity, scale and a hugely varied set of compliance requirements. Our profession has developed to support demand-led innovation. Research offices and business innovation teams are converging to support mission-oriented research and innovation, as set out in the UK's Industrial Strategy Grand Challenges (ageing society, clean growth, artificial intelligence, and future mobility). Responses to the survey also show how professional support is set to grow for international collaborations to deliver the UN's sustainable developments goals, given the compliance and due diligence requirements associated with official development assistance funds.

Society and the economy are undoubtedly set to change, in ways we perhaps cannot fully understand right now, and this will impact on the sector and profession. This survey provides a useful benchmark of the landscape of UK research offices pre-COVID-19 and hopefully will provide a useful resource for the sector. For those leading research and innovation teams it provides understanding that may help shape their teams, lobby for resource and reflect on the structures and priorities emerging from the changing shape of the profession. In future years we may see an increased reliance on digital platforms to support research collaborations and more teams working virtually.

The survey would not have been possible without those leading research teams taking the time to complete it, so thank you to everyone who took part and completed the survey. I would also like to thank the steering group members who liaised with Directors of Research from various mission groups: Andrew Jackson, Bishop Grosseteste University; David Bembo, Cardiff University; Peter Hedges, University of Cambridge; and Sally Puzey, Coventry University. Thank you also to the ARMA executive office for the support and coordination especially Hamish Macandrew our COO and finally a special thanks to the team at Research Consulting for the survey design, data analysis and insights, and this final report, including Rob Johnson, Mattia Fosci, Dan King and Lucia Loffreda.

Stephanie Bales

Director Research and Innovation Services, Teesside University and Immediate Past Chair, ARMA

ARMA (UK) is the professional membership association for Research Managers and Administrators in the UK. It currently has over 3,000 individual members from around 250 organisations, ranging from Universities and Funding Bodies to the National Health Service and independent Research Institutions. Membership provides access to knowledge and expertise, and a range of opportunities to network, develop skills, shape policy, and more. All our members – leaders, managers and administrators – share information and good practice through Special Interest Groups, Annual Conference and professional development events.

Executive Summary

Executive Summary

Context

ARMA is the professional membership Association for Research Managers and Administrators in the UK, supporting professional development and good practice. In 2019 ARMA commissioned Research Consulting to support a first ever survey of UK research offices, covering structures, remits, staffing and key trends affecting the sector. This report is intended to improve the understanding of the role that institutional research offices in the UK play within universities, and gain insights into the challenges that they face.

Benchmarking research offices

This public report summarises the findings of a study that has examined and benchmarked the structure of research offices at 54 UK higher education institutions (HEIs), representing around one third of UK HEIs. The survey captured the roles, remits and salary brackets of over 2,000 full-time equivalent research support staff, alongside insights into typical research office structures, trends and challenges, and key performance indicators (KPIs) within these professional service functions.

Purpose of this report

The report's primary purpose is to support strategic decision-making by directors and senior managers within UK research offices. It will also be of value to a wide range of other stakeholders with an interest in the development of effective research support structures.

What the study shows – our overall findings

A demanding and complex environment

Throughout the survey comments indicated the challenge for directors of research in balancing their staff against a broad and demanding set of external requirements, specialist skills and internal service expectations.

The alignment of research and enterprise / innovation support functions is pervasive

Nearly 60% of the research offices responding to the survey are part of a joint office supporting research and innovation (R&I) or research and enterprise (R&E) activities. Directors of research and innovation (or enterprise) are also the most frequently reported senior officer for research management (54%). Stand-alone research offices account for 40% of the responding HEIs and just 22% of reported leadership roles are directors, or associate directors, of research.

There are ~4,700 FTEs in UK university research offices

An extrapolation of the survey results indicates that over 4,700 full-time equivalent staff members work in UK university research offices. The majority of these (58%) are based in HEIs with research incomes greater than £30m per annum, but the smallest HEIs (research incomes under £5m per annum) collectively account for over 600 FTEs.

Research support is mainly delivered through centrally-based and managed services

Over 60% of respondents report that research support is delivered through central service approaches, but we see a divergence from this at the very largest and smallest scales (of research income). Combined approaches, with both centralised and devolved staff under research office management, were identified in 33% of cases overall. Only the largest participants reported predominantly devolved support arrangements. For the smallest we observed approaches that were evenly split between central and combined. In determining the best operational approaches directors reported a range of considerations, including: maintaining consistency and coherence of service provision, proximity to and engagement with academic research staff, the need to develop specialist skills within research office teams and the multiple interfaces needed across the university.

Defining the role of the research office: challenge and change

The survey examined the remits of responding research offices, observing areas of both consistency and difference between institutions' responses. Core research office functions include support for the Research Excellence Framework (REF), policy and strategy, research governance and research systems. Over 70% of respondents have primary responsibility for these activities, with most also having responsibility for a range of operational functions including pre-award and costing, contracts and business development. Less than 25% of respondents report primary responsibility for doctoral schools, post-award project management, public engagement and scholarly communication.

Measuring the performance of the research office

In most cases research offices are held accountable for measures that reflect institutional research performance, rather than measures specific to their own delivery performance. The relative lack of reported KPIs used at the level of the research office to monitor quality of service was surprising. There is however evidence of academic feedback surveys being adopted by some research offices as a systematic approach to understanding performance and the experience of stakeholders. Other individual examples included completion times for ethics review or research contracts and research accounts still open 3 months past the end date. This suggests an area where good practice support facilitated by ARMA may be welcomed.

The reported FTEs associated with research offices are strongly correlated with research income

The survey covers research offices with over 100 full-time equivalent staff members (FTEs) and under 1 FTE. A clear trend in staffing levels emerges when research offices are clustered based on research income. Institutions with the largest research incomes (over £100m) have an average of 80 FTEs. For those with the smallest research incomes, (under £5m), the average is just 12 FTEs and many report fewer than this. The challenge for HEIs with lower levels of research income is to cover the breadth of requirements with far fewer staff: in many cases the compliance and skills requirement are the same as for much larger institutions, but they must support this with staffing levels an order of magnitude smaller.

Institutions with the smallest research incomes report the highest numbers of FTEs per £1m research income.

When the FTE data is normalised by research income, we see that, proportionally, institutions with the smallest research incomes are carrying the highest levels of research office staff per £1m of research income. On average, the values reported are 16 times higher in institutions with the smallest research incomes than those found in the largest institutions. This suggests there are significant economies of scale in the provision of research support. However, the survey results do not take account of the number of research support FTEs located outside the central research office, which will vary significantly between institutions. As a result, these comparisons should be treated with care.

The highest numbers of FTEs work in research development, pre-award and costing

Research business development contains the greatest number of reported FTEs overall, but most are concentrated in universities with the larger research incomes, as are research contracts professionals. Pre award and costing staff are also found in significant numbers, and are more evenly distributed across the sector, as are individuals working in impact, REF support and post-award.

Compliance, complexity and competition driving growth

Over the past three years a total increase of 11% in staffing, or over 200 FTEs, is reported by the respondent institutions. The most significant gains are in REF support, research business development, research contracts and research governance, ethics and integrity. Drivers of this increase include rising expectations from major funding organisations and institutional senior management, alongside an increased emphasis on non-financial returns from research. These specialist support areas typically need high levels of skill and experience, reflecting the increased professionalisation of research management.

Frequent restructuring is reported, and expected in the near future

A notable feature of the survey responses is the extent of change in research support structures and management. ~80% of Directors responding to the survey identified experiencing restructuring in recent years and half anticipate structural changes in the next 12 months. The anticipation of change was largely consistent when considering the size of institutions (40-50%), but notably higher for those with research incomes in the range £30m-£100m (67%).

Regulatory burden and political instability are the top challenges facing the profession

Respondents identified the increasing compliance and regulatory burden and an unstable political environment in light of Brexit as the primary challenges facing the research management profession. Directors must also contend with budgetary and resourcing pressures, wider concerns over the financial sustainability of research and difficulties in staff recruitment and retention.

Conclusions

A detailed view on the current shape of the research management profession

The survey, a first in the UK, provides a comprehensive view of the research management profession and staff employed in the associated areas. The survey covered over 2,000 FTEs across 19 functional areas of research offices. This provides an important knowledge base in meeting the development needs of the profession, an area where ARMA plays a key role in supporting development, new skills and good practice.

Towards a new model of research management: beyond the traditional view of the research office

The survey gives a strong indication of research management as a profession in transition. The need for specialist skills, knowledge and new requirements for compliance is driving a need for breadth and depth in the skills of research managers. The survey identified high numbers of FTEs in functional areas with distinct high-level skills and experience requirements: business development, contracts, finance and research governance, ethics and integrity and support for doctoral schools/PGRs.

This study focused largely on the traditional remit of research offices, partly to allow for a manageable survey length for respondents. In analysing the responses, however, it is clear that the distinction between 'traditional' functions of a research office and an expanded set of requirements driven by funding, partnerships and collaboration is increasingly artificial. This suggests a need to look more closely at the relationship between research and knowledge exchange functions and resources in any future survey.

Weighing the impact of COVID-19

The benchmarking survey was completed by responding institutions just a few weeks before normal services were hugely disrupted by the COVID-19 pandemic. As such no questions directly addressed the impact of this on research offices. A subsequent small survey, in May 2020, addressed this gap and its findings are reflected in an Annex to this report.

These additional survey findings show that budgetary pressures and the financial sustainability of research now top the list of challenges faced by directors of research. However, they also illustrate the research management profession's flexibility and resilience in the face of challenging circumstances.

As the UK government has observed in its UK Research and Development Roadmap1: 'R&D will be critical to a swift economic and social recovery from the impacts of COVID-19, for a greener, healthier and more resilient UK'. Research managers have a crucial role to play in safeguarding the health of the UK research base over the pandemic period, and ensuring researchers can effectively contribute to the future recovery.

Beyond 2020: professionalisation in an era of budgetary constraint

Many of the trends highlighted in this report, such as a growing demand for higher level professional skills and experience, appear likely to continue in the coming years. Operational functions retain their importance, but are now characterised by greater complexity and diversity of requirements. Though beyond the scope of this survey, new technologies like artificial intelligence and big data will lead to far-reaching changes to both research and research management practices. The forced move to home and flexible working will have longstanding implications on the working practices of both researchers and research managers. Budgetary pressures may open the door to increased use of outsourced services and more collaborative approaches to certain areas of research management than have been contemplated up till now.

We hope the insights contained in this report will assist directors and heads of research in overcoming the challenges presented by COVID 19, and ensuring the research management profession continues to play a full and active part in ensuring the success of the UK research endeavour.

[1] https://www.gov.uk/government/publications/uk-research-and-development-roadmap

Contents

1 Introduction

1. Introduction

About this report

This report summarises the findings of a survey of 54 university 'research offices' across the UK higher education system. It seeks to provide an evidence base on typical structures, resource levels, trends and challenges within these professional service functions. The report's primary purpose is to support strategic decision-making by directors and senior managers within UK research offices. It will also be of value to a wide range of other stakeholders with an interest in the development of effective research support structures.

1.1 Background

What is a research office and what does it do?

This report explores the role, structures and functions of research offices within UK higher education institutions (HEIs). Research offices are institutional professional services with responsibility for providing support across the lifecycle of research projects, from proposal-writing, through to contracting, project management, reporting and dissemination of the results. Research offices also play a central role in the development of institutional strategies, policies, processes and systems for research, working closely with academic leaders and relevant institutional committees. As this report shows, research support activities are often closely associated, and may be under common management, with university innovation, enterprise and/or knowledge exchange functions. With the input of the Steering Group we have identified 19 functional areas common within research offices. These are listed in Appendix B, including the abbreviated titles for these functions which are used in certain charts throughout this report.

The role of ARMA

ARMA is the UK's professional association for research leadership, management and administration. It has around 3,000 members from across the UK, from higher education institutions, the National Health Services, independent research institutions, research funders and charities. ARMA's work focuses on creating opportunities for its members to develop their professional skills and play their part in a positive and dynamic research culture.

Terminology used in this report

There is no universally accepted definition of the terms 'research support' and 'research management'.[2] For the purposes of this report, 'research support' is used as a catch-all term describing the functions performed by the research

[2] For further discussion of relevant terminology, see Andersen et al (2018), *Research Management: Europe and Beyond*, Academic Press, London

office, while 'research management' is used to refer to the profession which undertakes this work. In other words, the *research manager* works in the *research office* to provide *research support*.

Why is this study needed?

The role of institutional research offices is becoming ever more complex, with delivery of an effective and efficient service requiring directors and heads of service to manage multiple internal and external demands and interfaces. Organisational structures for supporting research are frequently subject to review and reorganisation. New functions and responsibilities are emerging (such as research impact and scholarly communication), while others (such as research contracts and clinical governance) are coming under increasing pressure as the volume and complexity of work increases.

In responding to these challenges, directors of research and the wider ARMA community would benefit from access to reliable information on research office structures and resourcing levels at comparable institutions, as well as common trends and issues faced by research offices. The development of an improved understanding of research office organisation and functions is also consistent with the increased professionalisation of research management seen in recent years.

1.2 Scope of work

Research Consulting's role

Research Consulting (www.research-consulting.com) was commissioned by ARMA to develop a survey for completion by directors of research offices at UK HEIs, analyse the results and produce this report. The survey was intended to gather reliable insights into the structures, resourcing levels, common trends and issues faced by institutional research offices. It is the intention for the findings to be used as a valuable resource and reference point for ARMA members and other stakeholders. Moreover, the study provides a benchmark for the profession which could be periodically updated in the future, to track relevant changes in the profession over time.

Scope of the project

Research managers can be found in a wide variety of organisations across the UK research landscape. However, in order to achieve a reasonable level of consistency and comparability the scope of the survey was limited to research offices based within higher education institutions. Within this context, the survey aimed to provide insights into the following:

1. **Organisational structures** (section 3 of this report)
2. **Roles, responsibilities and key performance indicators ('KPIs')** (section 4)
3. **Staffing and resourcing levels** (section 5)
4. **Trends and challenges facing research offices** (section 6)

The survey was designed to shed light on the relationship between the structure, size and role of the research office and volume of research activity. It excluded consideration of innovation, enterprise and knowledge exchange support functions, though it is recognised that these are closely related to research support in many institutions.

The full survey question set is published as Annex A alongside the present report, and a confidential output has been shared with all participating universities with additional insights not available in the public report. A confidential dataset containing the entire set of survey results will also be retained by ARMA, omitting any personal data.

1.3 Acknowledgements

Our thanks

The project team at Research Consulting would like to thank ARMA and the steering group for the guidance provided, and particularly Steph Bales (Immediate Past Chair, ARMA) and Hamish Macandrew (Chief Operating Officer, ARMA). A list of all the steering group members is available in Appendix A.

We would also like to thank the individuals based in the institutions listed in Appendix A who kindly contributed their time, data and insights to this project, which is the first of its kind to be undertaken in the UK.

2 Methodology

2. Methodology

A detailed national survey of research office functions

Through a survey open to all 165 UK universities, this study sought to gather contemporary evidence on the current structures, approaches, staff resources and trends affecting research offices and research management in the UK higher education sector.

Survey scoping and development

Working closely with ARMA and a steering group appointed from within the research management community (see Appendix A), Research Consulting prepared the survey in September and October 2019. Invitations to complete the survey were distributed from the 11th of October 2019, with data collection taking place until the 7th of February 2020. Survey responses were analysed by Research Consulting in February and the report was written in March/April 2020.

This public report provides a summary of the final project findings, and is the main project output. A separate confidential dataset has been prepared for participating institutions, which may also be shared with selected mission groups where HEIs consented to this in the survey.

Sample size and composition: one third of UK HEIs responded to the survey

The survey obtained responses from 54 higher education institutions, which generated over £2.6 billion of research grants and contracts income ('research income') in the 2017/18 academic year. The sample therefore represents one third of the 165 UK HEIs, and accounts for 42% of the £6.2 billion of research grants and contracts income generated by the higher education sector.[3] The research incomes for the sampled institutions ranged from just over £100k to £580m, and the number of full-time equivalent staff members (FTEs) reported in these research offices ranged from less than 1 to over 100.

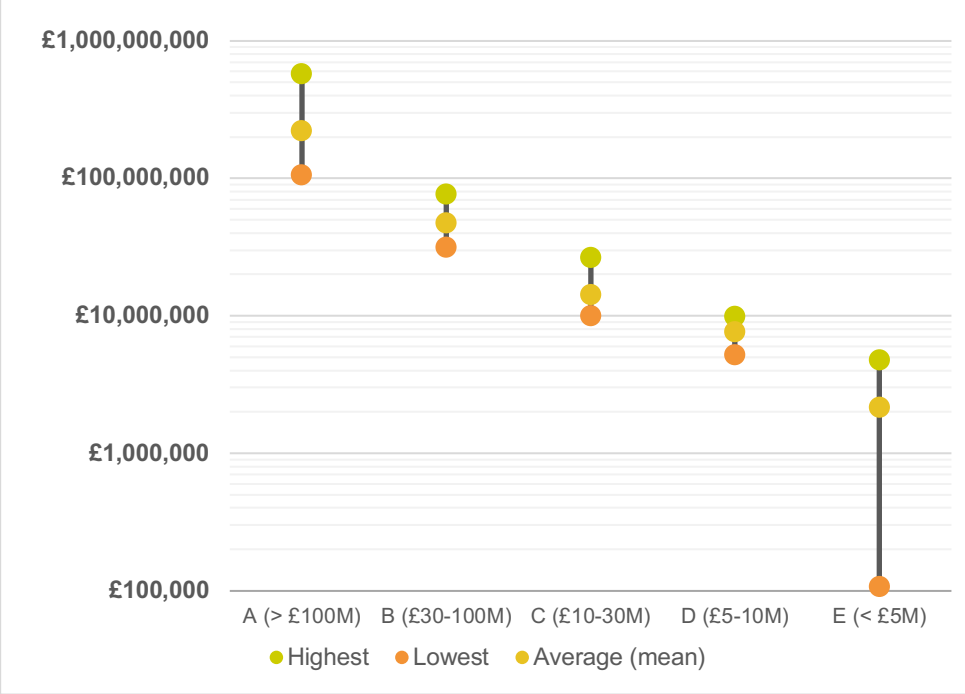
The majority of responses came from HEIs based in England (47 institutions, a response rate of 35%). Three HEIs in Scotland responded (a response rate of 17%) and also three in Wales (a response rate of 33%), while in Northern Ireland one institution responded, a response rate of 25%. For a full list of responding HEIs see Appendix A.

[3] The data on research grants and contracts income reported here and used throughout this report are derived from the Higher Education Statistics Agency (HESA), and relate to the 2017/18 academic year unless otherwise stated. See https://www.hesa.ac.uk/data-and-analysis/finances/table-5

For analysis, respondents have been clustered into 5 groups based on research income

Respondents were split into five groups, according to their total research income for 2017-18. Group A includes organisations with a research income higher than £100 million per year; group B organisations report an income of £30-100 million; group C have an income of £10-30 million; group D have an income of £5-10 million and group E organisations have incomes of up to £5 million. This grouping is relatively arbitrary and the group thresholds were selected to provide a balanced number of institutions in each group and to give comparative similarity for HEIs within that group. Each group comprises between 8 and 13 HEIs. The mean, highest and lowest research income figures for the members of each group are shown in Figure 1, which is plotted on a logarithmic scale.

Figure 1 – Research incomes for the respondents (plotted on a log scale with base 10)

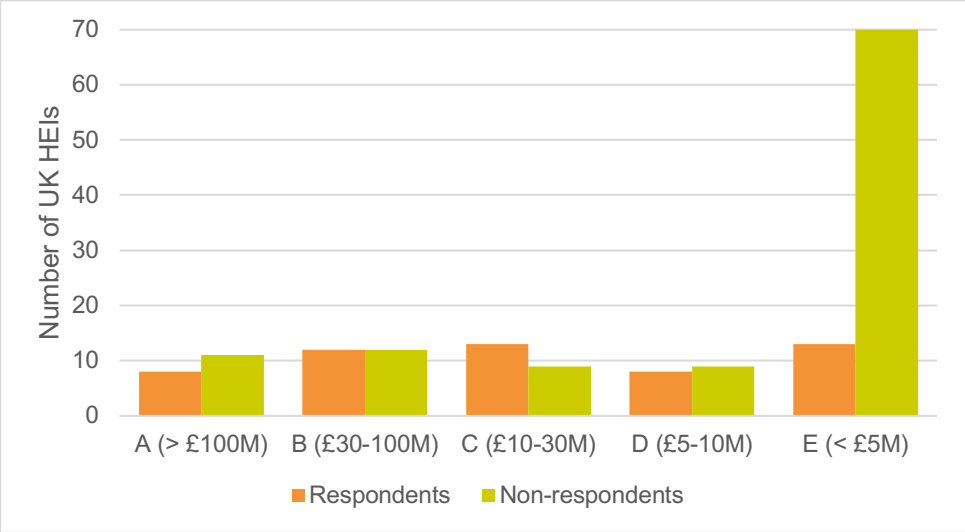


The survey sample is biased towards more research-active universities

Considering the representativeness of the study, Figure 2 shows the respondent HEIs by income group, set against the UK landscape.

For groups A to D the survey has secured responses from around half of the HEI population in each group: an excellent response. Group E HEIs are far less well represented (16% of the population), but with 13 respondent institutions are the joint largest group in the study. This low response rate reflects the lower level of research intensity of these institutions, many of which lack a dedicated research office. A full list of respondent institutions, their geographical location and their income group is available in Appendix A.

Figure 2 – Respondents grouped by total research income



Data protection and confidentiality

For the purposes of public dissemination, this report does not identify data associated with individual participating institutions. Institutions' full survey responses are considered confidential, and were accessible to members of the project team at Research Consulting and ARMA staff only. All data collected through the survey is stored in cloud servers based in the territory of the European Union, in compliance with relevant privacy regulations and with Research Consulting's Data protection and privacy policy.

HEIs who agreed to participate as contributors to the survey have received a further confidential output including information on organisational structures and resourcing levels for all other contributing institutions. The information shared in this way was indicated in the survey response rubric (see Annex A), and is limited to numeric and multiple-choice responses to the following survey questions:

- Q5 – Organisational model
- Q6 – Structure of research management and administration function
- Q7 – Nature of collaboration with the NHS
- Q13 – Functional responsibilities
- Q15 – Full-time equivalent staffing by function and salary band

Following publication of this report and completion of the study all personal data will be removed from the dataset and it will be deposited by ARMA in the Zenodo repository for preservation purposes and on restricted access terms. The file will not be made publicly available and will be deleted from Research Consulting's servers. Data sharing will be made possible only by the approval of ARMA as depositor of the original file.

The full dataset will be used solely for comparative purposes where ARMA, or another organisation of ARMA's choosing, wishes to run a future version of this survey.

Limitations and exclusions

The survey was drafted to elicit factual and predominantly quantitative responses so as to present a reasonable representation of research offices across the UK HEI landscape. However, the following limitations and exclusions on the scope of work should be noted:

- The accuracy of the data submitted as part of the survey phase of the project remains the responsibility of the participating institutions. The project team worked with participating universities to try to achieve a reliable set of results, but the submissions have not been audited and therefore could contain errors. Research Consulting and ARMA cannot accept responsibility for any inaccuracies in the data submitted.
- The survey was completed by 54 HEIs, representing about a third of all UK-based institutions. Respondents were self-selected, which, coupled with the relatively small sample size, means that one must be wary of generalisation from the findings, especially when looking at responses for each of the five groups of respondents (analysed by income level).
- The majority of survey questions were optional. While most respondent institutions completed the survey in full, some questions therefore received less than 54 responses. The actual number of responses provided to each question is indicated throughout this report in the form 'n=[number of responses]' where this is deemed relevant to the interpretation of the results.
- The survey gathered data on roles, responsibilities and resourcing levels using a prototypical list of functions performed by a research office, which may not reflect local structures and activities. Mapping the latter against the survey question format required a number of subjective judgements to be made by respondents. Furthermore, some institutions with combined research and enterprise/innovations functions indicated that it was difficult to report on research support activities in isolation, as the two functions are often closely inter-twined. As such, responses between individual institutions might not be entirely comparable.
- The survey requested data on the number of full-time equivalent staff members (FTEs) falling under the management of a central research office (or equivalent). Devolved research support functions and faculty or department-based support staff that are *not* managed through a central research office will therefore not be reflected in the data. Comparison of resourcing levels between institutions with differing operating and management models must therefore be undertaken with care.

- In order to keep the survey of reasonable length and complexity, questions concerning workloads, job satisfaction and institutional systems were not included; these are important issues that deserve separate investigation.
- Free-text questions were analysed qualitatively and coded in a way that captures the key message of the response. The analysis and coding is necessarily subjective, and some of the nuances from the free-text might have been lost. Where relevant, the report also includes quotes to give a better reflection of the respondent's perspective.

3 Organisational structures

3. Organisational structures

Summary

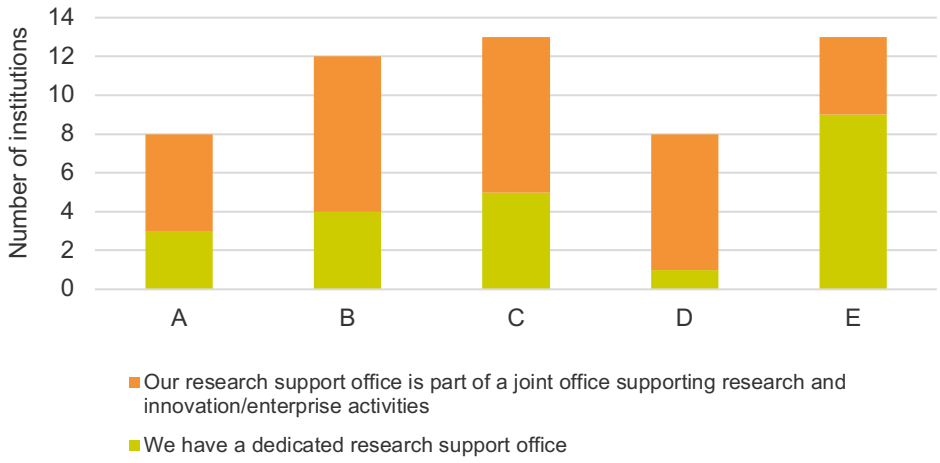
Most research offices are part of a joint office supporting innovation and enterprise activities. The most common operational model relies on a central office: combined research support with a combination of central and devolved staff is also common, whereas fully devolved models are rare. The centralised operational model enables more specialised expertise and more coordinated support, while advocates of a combined approach cite its ability to combine consistency of approach with better integration with faculty, school or departmental research strategy.

3.1 Organisational structures

Joint research and enterprise offices are the most common organisational model

32 out of 54 respondents indicated that their research office is part of a joint office supporting research and innovation (R&I) or research and enterprise (R&E) activities, whilst 22 have a dedicated research support office. The survey results show a clear preference for a combined office for institutions in groups A to D, while most group E organisations (with income of less than £5 million) have a dedicated, standalone research support function.

Figure 3 – Organisational model by income group (n=54)



Most research management professionals are based in a central support service

Respondents were asked to indicate whether the *majority* of research management professionals were based in:

- a central research support service;
- a combination of central and devolved services; or

- faculties/departments, with a central research function undertaking a coordinating role.

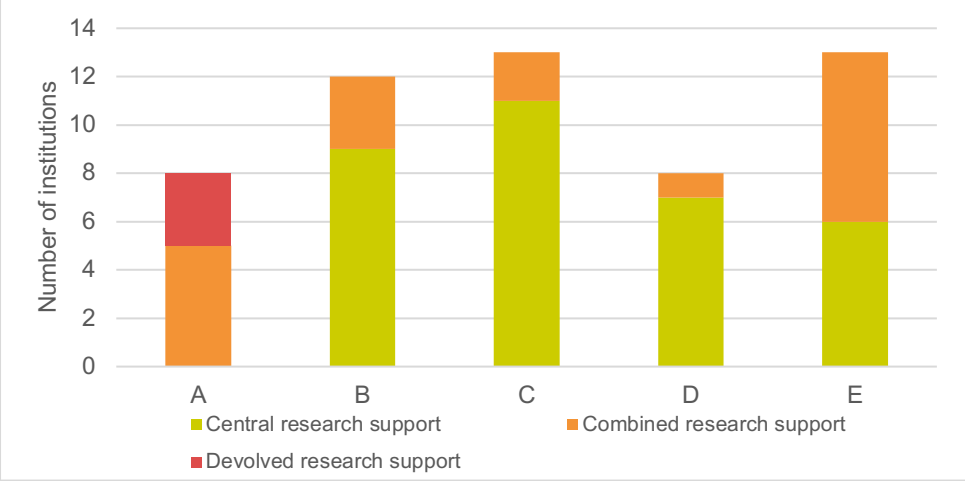
Just under two thirds of respondents (33 out of 54) indicated that their organisation delivers research support mainly through a central service, while for a third of respondents (18) research support is delivered through a combination of central and devolved services. Only in three cases is research support mainly devolved to faculties/departments, with a central research function undertaking a coordinating role. These cases were all in group A institutions, suggesting that only those with the highest research incomes consider devolved approaches to support viable or indeed, necessary. At these scales, the numbers of staff allow for a breadth of specialisms even in devolved support functions. In fact, no group A institution reports using a central research support service, with the remaining two respondents combining centralised with devolved support.

The development of a central research office relies on a critical mass of research activity

Interestingly, the smaller group E institutions also have a prevalence of combined central and devolved services, which is also the structure used by the smallest group D institution (with an income of just over £5 million). This suggests that these institutions often lack the critical mass of research activity necessary to fully resource a centralised research office. By contrast, the three middle income groups show a clear preference for centralised services.

"Support for research is dispersed across a number of central departments including the Doctoral College, Enterprise and Innovation, and Legal Services and so communication and collaboration between those are essential. Some of them have different Executive leads, which can mean that priorities do not always align." [Group C institution]

Figure 4 – Research office operational models by income group (n=54)



Beyond the 'traditional' research office: research business development benefits from a wide range of KE activities and relationships

Narrative responses from directors of combined offices highlighted the difficulty of separating the research office functions within the scope of the survey from wider knowledge exchange support, which often delivers benefits for research development. More generally, responses indicated the complexity of the support landscape and that the "research office" can frequently include elements of business engagement, innovation and enterprise support. Some respondents recognised this as an expansion of the research office remit, beyond the "traditional" view of a research office. This is borne out in later sections with evidence of moves to combined R and KE offices (section 3) and leadership roles (section 5). For example:

"…teams working locally in [business engagement, partnership and commercial activities] make a substantial contribution to our efforts in research development by supporting large scale UKRI bids with private sector partners and in bringing in translational funding."

Others identified a change from the traditional view of the research office to include the new expectations of a modern research office:

"[The] survey underplays the importance of 'new' functions of a research office (e.g. support for local economic growth; support for science and innovation policy; strategy development for research and KE; due diligence reviews for international partnerships; international engagement in KE activity; safeguarding of researchers and research subjects), it would be good to capture some or all of this information in follow-up studies, as research management is a profession in transition."

3.2 Advantages and disadvantages

Advantages and disadvantages of central research support

The survey asked respondents to identify the advantages and disadvantages of the current operational model of their research office. Figure 5 shows that, for those using a centralised model (33 of the 54 respondents), the main advantages are viewed as the ability to provide integrated and co-ordinated research support (14 responses), the availability of specialist knowledge within the team (11 responses), the consistency of support provided (7) and the ability to deploy staff flexibly (6).

"We have a small, flexible and adaptable team who are aware of the full range of research policy initiatives and issues across the university, can multi-function and provide cover where required." [Group E]

"Centralisation of administrative support is important for a small university - relationships are close enough for a central team to be known and trusted by

academic colleagues; we don't have the management capacity to manage separate teams in separate faculties." [Group D]

By contrast, the main disadvantages reported for the centralised model related to overstretched resources (10), more complex processes (11) and the lack of research management expertise in schools/departments (11). Issues relating to engagement with the academic and research community (perceived as other; inaccessible to academics) were referenced 18 times in aggregate.

"We have all of the complexity and expertise requirements of larger institutions handled by 20 individuals. We are vulnerable to staff absence and turnover. Finance responsibilities lie outside our department and quality and prioritisation of research needs leave something to be desired." [Group D]

"Having fewer locally embedded staff sometimes means that our services are seen as rather separate and difficult to navigate by academic staff." [Group B]

Advantages and disadvantages of combined research support

Combined functions, representing 18 out of the 54 respondents, have centrally-managed elements, with devolved staff providing localised support for academic schools/departments.

"Research support is mainly delivered by a central professional services research office that is managed centrally but which is deployed locally." [Group A]

"Approximately 2/3 of research support FTEs are based in academic schools, centres, institutes and colleges." [Group A]

Respondents that were part of a research office with combined centralised and decentralised functions stated that the main advantage of that model is the ability to provide integration and coordination in research support (9, 50% of responses). Consistency, specialist knowledge and the ability to share best practice were also referenced by 20-25% of respondents.

"The centrally-managed, locally delivered model does bring good levels of consistency across the embedded bid-development teams; however, the resource needs of the teams can be caught in tensions between what the College wants, and what the central Professional Services budgets will cover." [Group B]

Just under half the respondents (8) indicate no disadvantages associated with this model. The most commonly identified disadvantage is overstretched resources (6), a similar view to the central responses. But this group were more likely to identify challenges in communications outside the research office (6) than any other group.

"There is also some research support within schools and departments, but it is not consistent across the university" [Group C]

"The model carries a risk of single points of failure and departmental strategic goals can compete with centralised goals" [Group E]

Advantages and disadvantages of devolved research support

Finally, for the three institutions using a devolved model, recognising that these are all Group A HEIs (and hence have the largest support teams on average), all reported advantages around the ability to provide consistent advice and coordination of support, to take a holistic approach and to offer support close to the academic user base.

"[We are] balancing the need for critical mass of support teams with an appropriate degree of devolution to ensure proximity to researchers" [Group A]

The main disadvantages were reported as inconsistency and inability to provide a holistic service.

"[There is] difficulty in steering functions across the University as a whole given managerial fragmentation and diversity" [Group A]

"[Resource is] very dispersed with different parts of research support answering to different areas of the University" [Group A]

Figure 5 – Advantages of the current operational model (n=54)

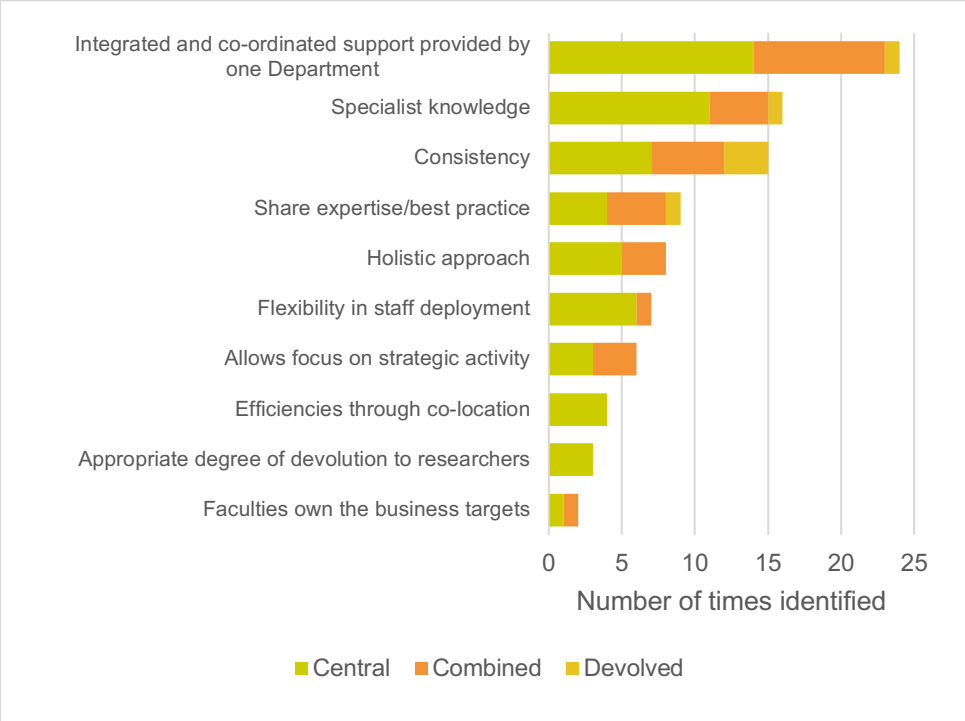
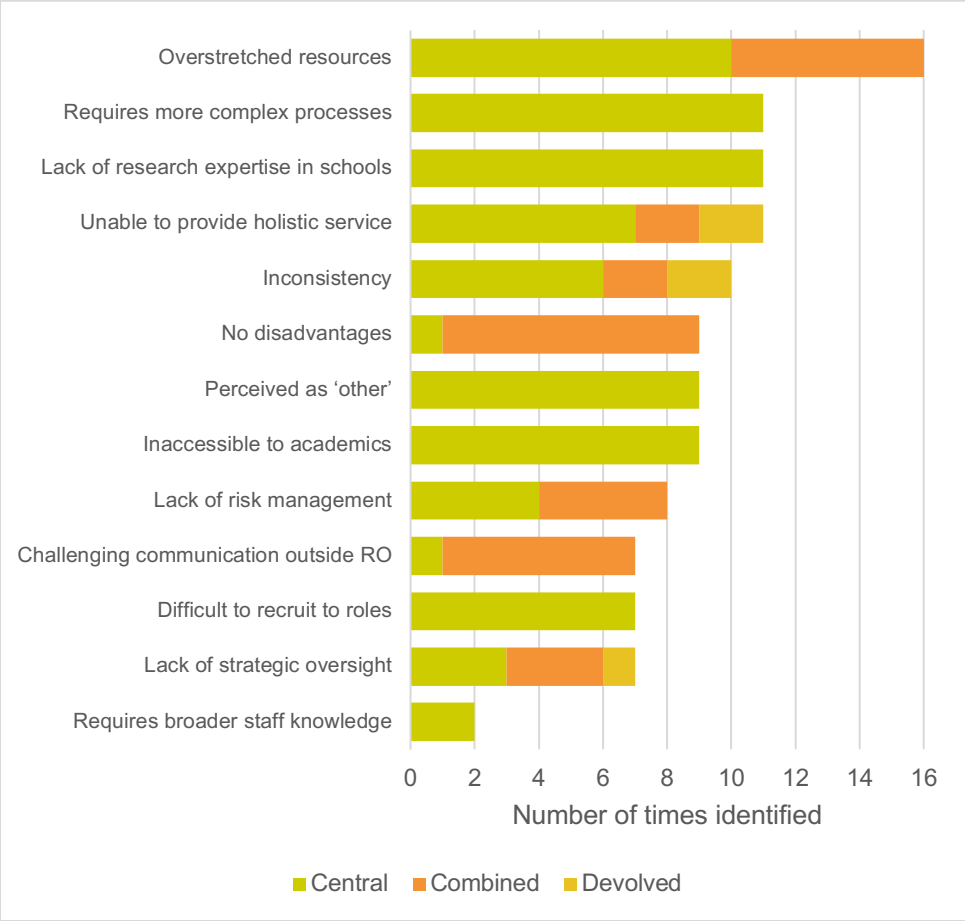


Figure 6 – Disadvantages of the current operational model (n=54)



3.3 Collaborations with the NHS

Only a minority of institutions have established joint research offices with the NHS

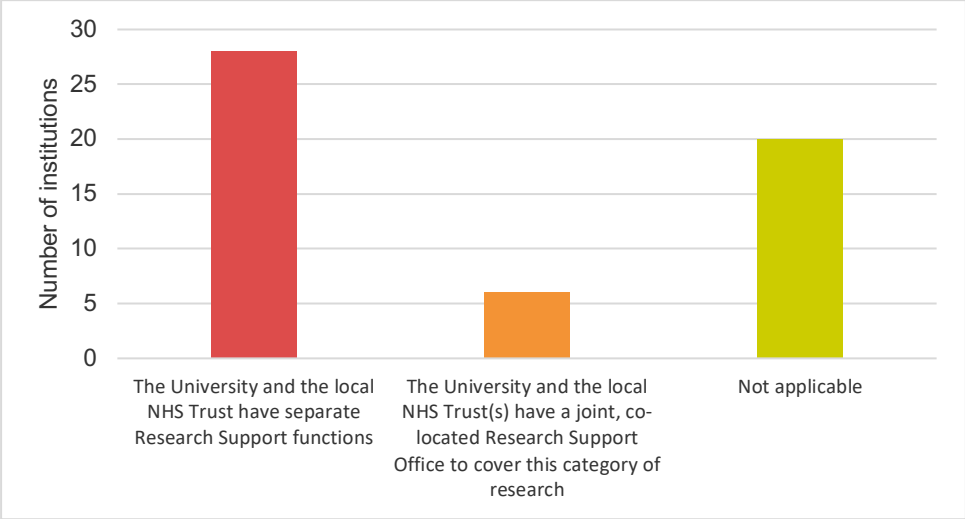
20 institutions do not undertake clinical research, and so have no formal research support relationship with the NHS. Only six institutions reported having a joint, co-located research support office while the remaining organisations have separate research support functions.

Comments indicate a variety of approaches to delivering these joint offices, with both bilateral and multilateral relationships and agreements being put in place with NHS partners, according to local needs. In one example, two universities and two NHS trusts have recently established an integrated research office function.

"The University is partly co-located with an NHS Trust and is developing a joint research office which should go live early in 2020-21." [Group A]

"The University and local NHS Trust have a virtual joint research office that signposts existing resource through a website but which doesn't have physical shared space." [Group B]

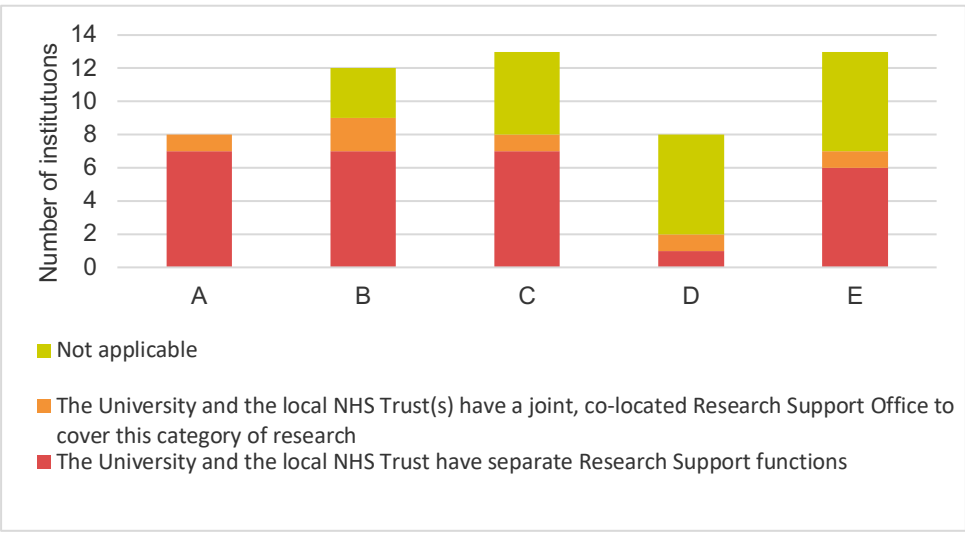
Figure 7 – The nature of research support collaborations with the NHS (n=54)



But the form of collaboration is not correlated with research income

Unsurprisingly, most of the organisations with no collaboration with the NHS are in the smaller income groups. However, there does not appear to be any direct correlation between the level of research income and the structure of the health research support function. The six joint, co-located Research Support Offices, in fact, are almost equally spread among income categories.

Figure 8 - Research support collaborations with the NHS by income group (n=54)



4 Roles, responsibilities and KPIs

4. Roles, responsibilities and KPIs

Summary

Research offices fulfil a range of functions covering operations, outreach, research governance, information management and research training. Support for REF, research policy, and governance are most commonly the primary responsibility of the research office, as is the management of information relating to research projects within an institution. Research offices also play a key role in setting and implementing institutional research strategy and ensuring that ethics and integrity policies are respected.

4.1 Roles and responsibilities of research offices

Categorising the functions of the research office

The survey identified 19 typical functions that fall within the responsibility of the research office, as shown in Appendix B, and for the purposes of this report these have been grouped into five categories:

- **Operations:** activities directly related to a research project.
- **Development & Outreach:** activities related to research development, dissemination and impact.
- **Governance:** activities related to strategic institutional objectives.
- **People:** activities related to training and development of researchers.
- **Systems:** activities related to information management

For each activity, the survey asked respondents to indicate whether their research office had primary responsibility, shared responsibility with another part of the institution, no formal responsibility but ad hoc involvement, or no responsibility at all. It is acknowledged, however, that many of these activities, and the overarching categories identified in this report, are overlapping, and can be difficult to separate in practice.

"Individual tasks themselves are not difficult, but the complexities that they present when taken as a whole, and the potential risk to the organisation if we don't get them right, are huge." [Group B]

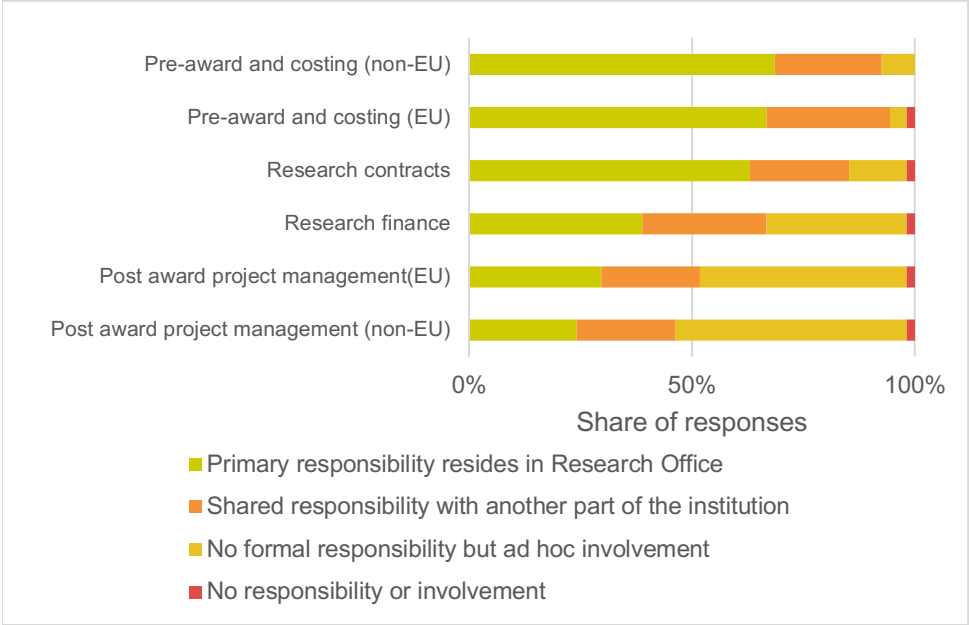
Pre-award operational activities are a core research office function

Research offices most commonly have primary responsibility for pre-award and costing activities (for both EU and non-EU projects)[4], as well as research contracts (Figure 9). They tend to be involved in research finance in most cases, but institutions in groups A and E are notably less likely to have primary responsibility

[4] Support for European Union-funded projects tends to require specialist knowledge and skills and so is often, though not always, handled by a dedicated team or individual within a research office.

for research finance than those in groups B-D. Research offices also get involved in post award project management in around half of cases, but this is rarely their primary responsibility, and is more likely to be the case for institutions in groups D and E.

Figure 9 – Responsibilities for operational activities (n=54)



Research offices have responsibility for research development and impact, but not for dissemination

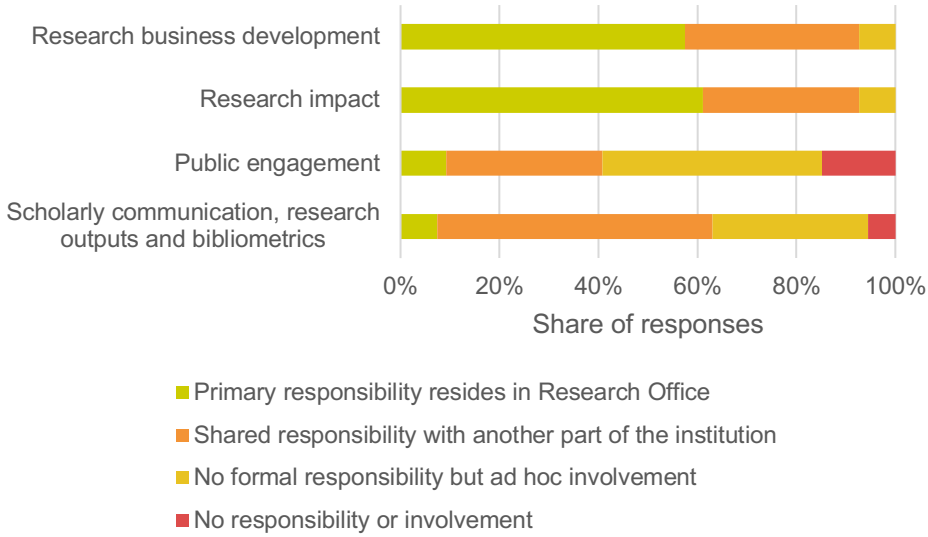
With regards to development and outreach activities, research offices commonly have responsibility for research business development and impact (especially documenting impact case studies for the Research Excellence Framework, as discussed below).

Several respondents noted the difficulty of separating research development, pre-award and costing functions, while others commented on the inter-related nature of research development, business engagement and regional partnerships. For example:

"The teams working locally in Commercial Development and Business Engagement & Partnership make a substantial contribution to our efforts in formal Research Development by supporting large scale UKRI bids with private sector partners and in bringing in translational funding" [Group A]

Research office involvement in public engagement and activities related to research dissemination and scholarly communication is frequent, but typically these are shared responsibilities with other parts of the institution, or require ad hoc input only.

Figure 10 – Responsibilities for development and outreach activities (n=54)

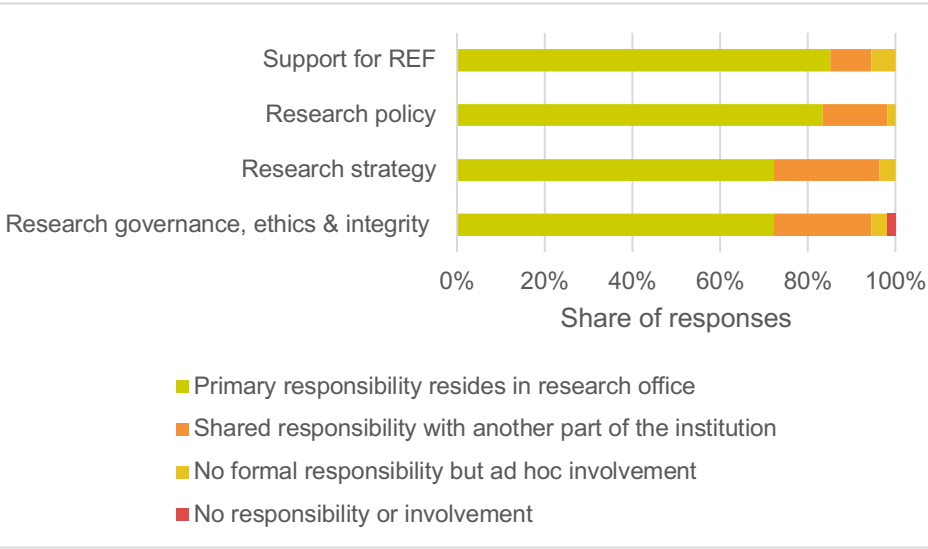


The research office is the fulcrum of research policy and governance within the institution

The policy and governance responsibilities of research offices are wide-ranging and important – placing them at the centre of research activity in an institution. They provide key support for Research Excellence Framework ('REF') submissions but are also primarily responsible for developing and implementing research policies and strategies, as well as broader issues of research governance, ethics and integrity.

We note that for research governance and ethics approvals the work also has a high operational and process component, which frequently interfaces with costing, submission and award acceptance processes.

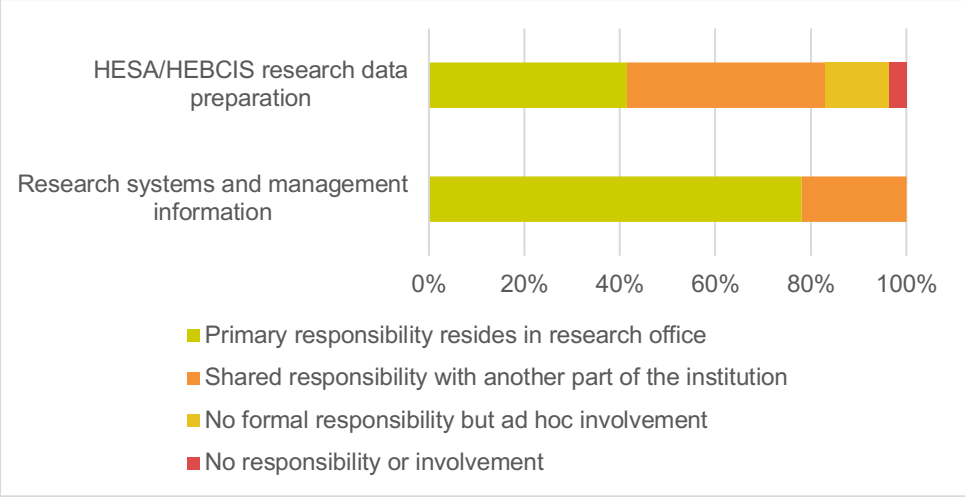
Figure 11 – Responsibilities for research policy and governance (n=54)



Research offices are primarily responsible for managing research information internally

Research offices are also commonly responsible for institutional research information systems, managing information related to research projects, funding and outputs across the university. Given their position, research offices generally get involved in the preparation of research data for HESA and HEBCIS submissions,[5] but in most cases they do not have primary responsibility for these statutory returns.

Figure 12 – Responsibilities for information management (n=54)

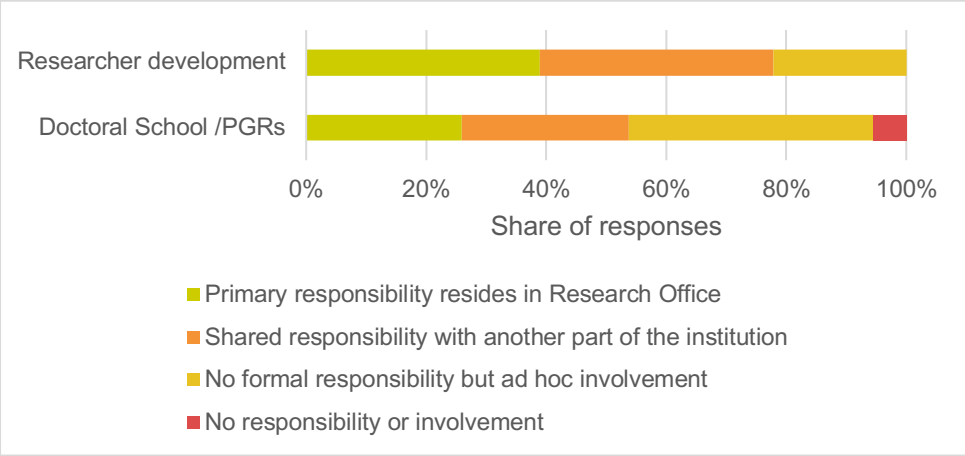


Research office responsibility for researcher training varies

Research offices commonly have some responsibility for researcher training and professional development, but it is relatively unusual for them to have primary responsibility for these functions. The survey responses show particularly high variations between HEIs in terms of the FTEs associated with these functions, discussed further in section 5.

[5] For more information on these annual data collection processes see https://www.hesa.ac.uk/data-and-analysis/finances and https://www.hesa.ac.uk/support/definitions/hebci

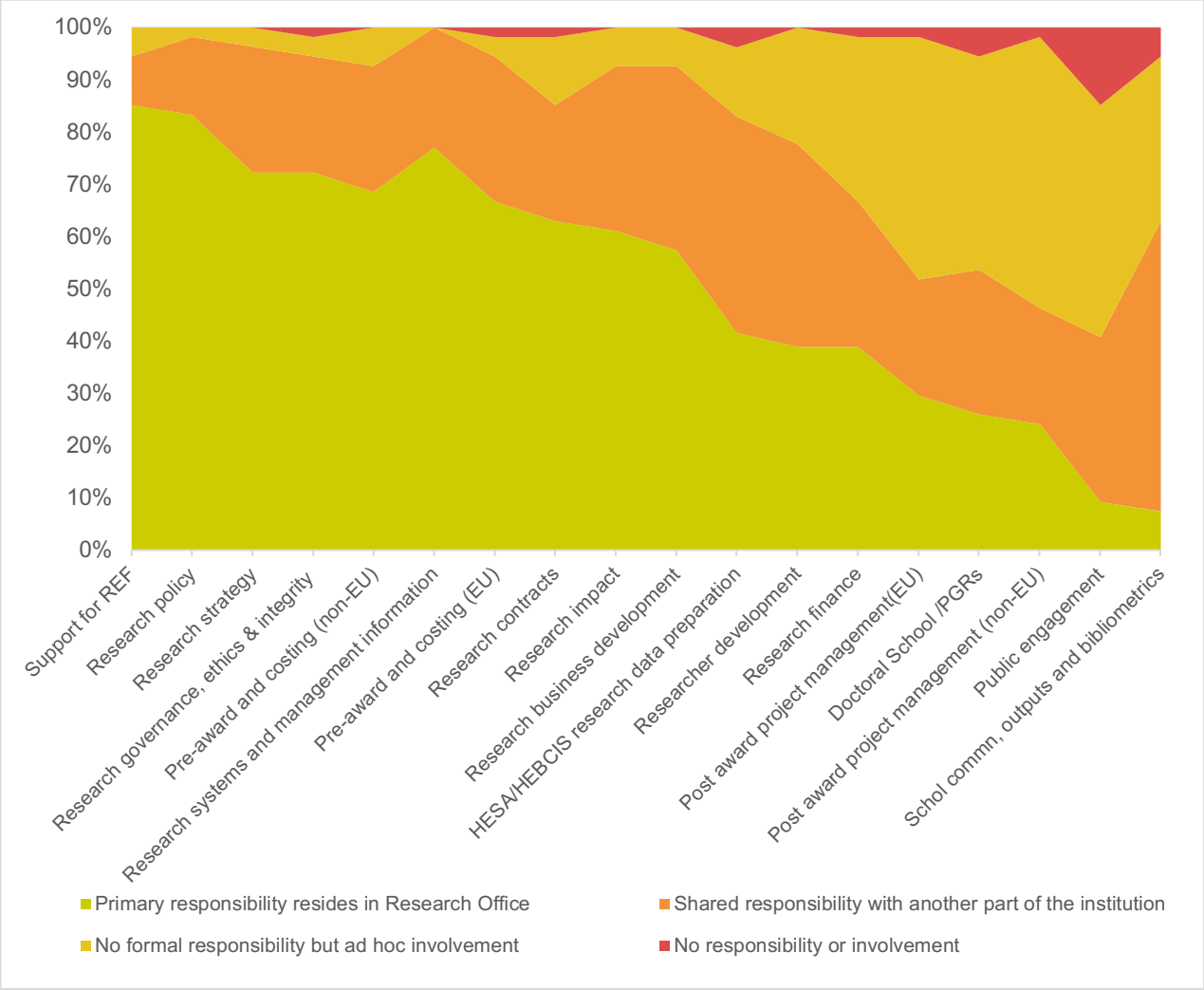
Figure 13 – Responsibilities for training and professional development (n=54)



In aggregate, the data points to a set of core, and more peripheral, research office functions

When all functions are considered together, it is clear that support for REF, research strategy, policy and governance represent core functions for virtually all research offices. Most also assume significant responsibility for research information and operational functions, though with some variation evident within our sample. Doctoral schools, project management, public engagement and scholarly communication are the functions that are most likely to be led elsewhere in the institution.

Figure 14 – Distribution of responsibilities by function (n=54)



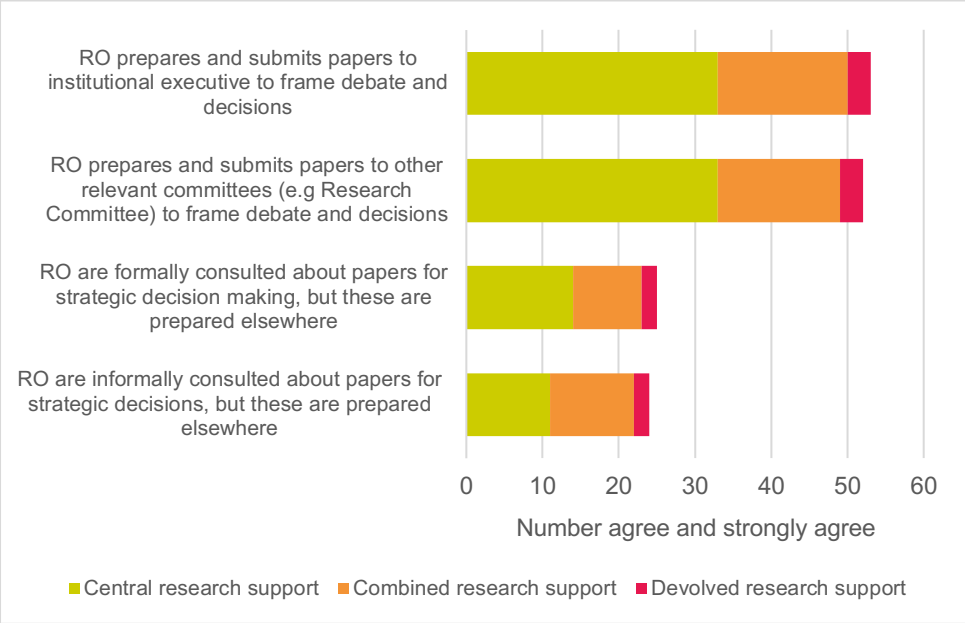
4.2 The research office's role in REF preparation

Involvement in REF and strategic decision making

Respondents were also asked to what extent they were involved in formulating institutional strategy in areas such as REF, research resource allocation and research funding strategy (such as matched funding criteria and where to apply). Almost all respondents (53 out of 54) indicated their research office prepares and submits papers to the executive decision-making body within their institution, and 52 respondents also send them to other relevant committees. Research offices are often also consulted about papers for strategic decision making prepared elsewhere, and this happens both formally (25) and informally (24).

No significant differences were evident between research offices with different organisational models (central, combined or devolved).

Figure 15 - The extent to which research offices are involved in formulating institutional research strategy (n=54)



Most institutions are able to absorb additional REF work internally

Respondents were asked what strategies they adopted to manage additional resource needs associated with the REF preparation and submission process. The most frequently reported approach was to absorb such activities into existing roles within the team. This was particularly the case for income Group C. When research offices need additional support for REF preparation, they tend to acquire additional staff from other parts of the research office or from other parts of the institution. Sixteen respondents also indicated that temporary staff are hired for this purpose, with four hiring external consultants.

"For REF 2021 the open access requirements created resourcing needs early in the process (from 2015) whereas previously resource needs have been end-loaded in the final 18-24 months" [Group B]

"We have appointed a REF Manager and a Research Impact Fellow to support REF2021" [Group E]

"The Impact element introduced in 2014 led to temporary REF impact roles in the run up to REF 2021 and an ongoing need for resource in this area." [Group B]

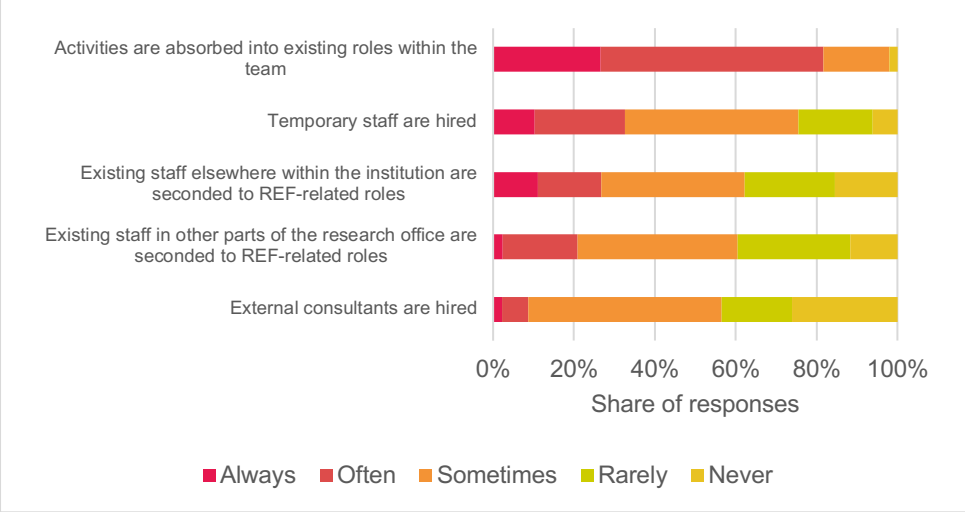
While approaches to REF resourcing were broadly similar between research offices with different organisational structures, centralised research support services were notably more likely to absorb REF workloads within the existing

team. Free text comments indicated, that, as we approach the second REF cycle, longer-term thinking about research office roles and REF support is emerging.

"Some core REF activities are part of existing roles , not just absorbed within them." [Group C]

"Research Managers have REF as part of their day to day tasks regardless of where in the REF cycle we are to facilitate institutional memory and continuity. This is welcomed by academics." [Group B]

Figure 16 – Approaches to meeting additional resourcing needs associated with REF preparation and submission (n=49)



4.3 KPIs and performance measures

Research offices are commonly judged on institutional research performance measures

The survey asked respondents to identify the top five indicators or measures used to assess the performance of the research office. 36 HEIs provided at least one response, with half of these providing at least four responses. A total of 118 measures were reported. These are shown in Figure 17, showing coded responses and the grouping of common responses. The high-level groupings were:

- measures of the performance of the research office;
- research scale and activity measures, including numbers of active research staff;
- research income and associated measures;
- national data or assessments; and
- publications.

Of the 118 measures, 73% related to two higher level groupings: research income, with 39 instances reported (33%), and research scale and activity, with 34 instances (29%).

Measures reported typically aligned to institutional performance measures: research and KE income (33%), the number and value of awards (17%), REF performance (10%) and numbers of published outputs or citations (7%). Income is the main measure consistently identified by research offices, both for research and, in many cases, for KE income. Other common measures included application volumes, income and success rates in specific areas (e.g. international, large, industry) and, as part of income measures, a focus on overhead recovery / contribution (5%).

Interestingly no specific measures relating to *impact* were reported, although we note that this is (in part) included within measures for REF and KE income. Measures around doctoral students and early career researcher (ECR) recruitment were reported in few responses, and focused on postgraduate research students (recruitment, awards, completion).

Surveys of academic satisfaction / feedback are reported as the leading measure addressing performance of the research office itself

Although the question asked about the *performance of the research office itself*, there were relatively few examples of measures being reported that were directly linked to this. Only 10 responses addressed measures relating directly to the performance of the research office itself (under 9% of the responses). This was acknowledged by some respondents who noted that their KPIs measure institutional research performance rather than the research office's own performance.

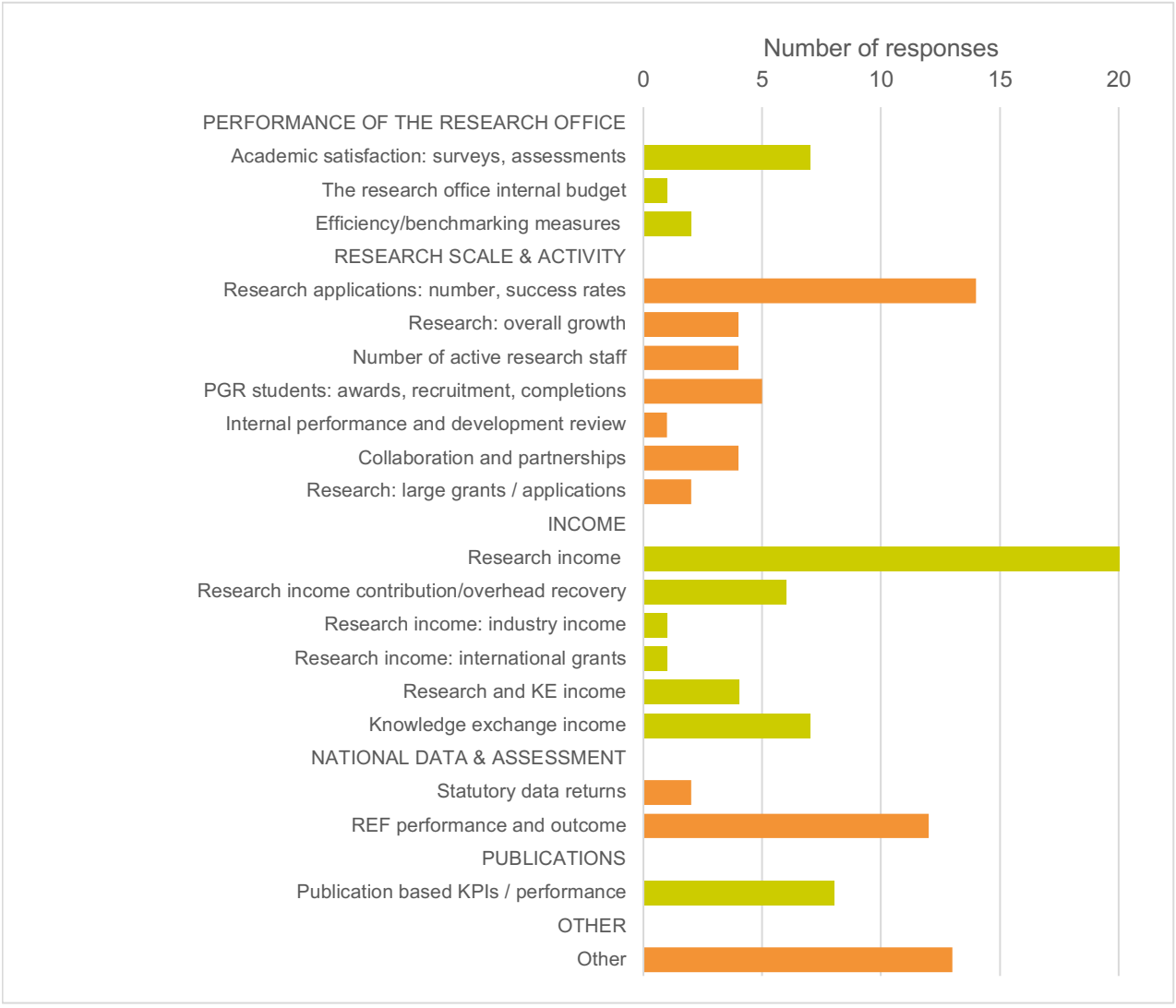
The most commonly reported measure in this area, "academic satisfaction", was reported by seven HEIs (6% of reported measures), and usually captured through some form of survey.

"We survey PIs after their research account goes live to gather feedback on their experience of the grant set-up stage." [Group A]

A number of other measures were reported in isolated cases which relate to the performance of the research office itself including:

- performance against the operational budget for the research office;
- delivery of reports to committees and management;
- ethics review – completion times;
- completion times for research contracts, with KPIs set for work of differing complexity; and
- the number of research accounts still open 3 months past the end-date (as an indicator of workload within the research finance team).

Figure 17 - The top indicators used to assess the performance of the research office (n=118)



5 Staffing and resourcing

5. Staffing and resourcing

Summary

The survey included a detailed assessment of over 2,000 FTEs and their functional areas within the research office. This section considers leadership roles and reporting lines for research offices, salary levels and the relative proportion of staff in each research office functional areas. It identifies, for example, research business development as the single biggest staff group by FTE. The results indicate significant differences in overall FTE numbers and FTEs per £1m of research income, linked to the relative scale of research income.

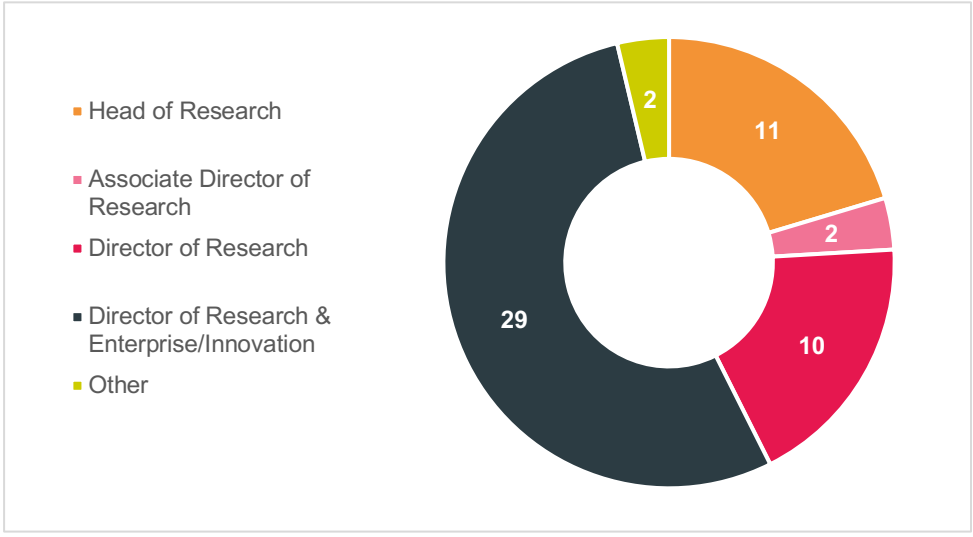
5.1 Leadership roles in research support

The most senior research support professionals are usually directors of research and enterprise/innovation

Over half of respondents (54%) report that a director of research and enterprise or innovation is the most senior professional for research support in their institution, Figure 18.

Leadership roles focused on research alone (directors, associate directors or heads of research) collectively account for around 40% of reported role titles. However, directors of research (only) are reported in under 20% of cases.

Figure 18 – role titles for the most senior professional responsible for research support (n=54)



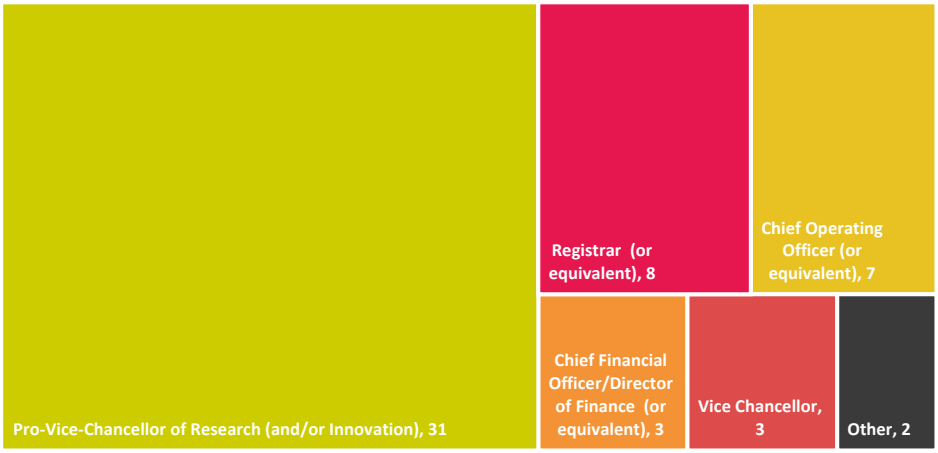
5.2 Reporting lines to senior management

Research directors most commonly report to the PVC for research

Respondents were asked to indicate who the most senior research support professional in their institution reported to. Out of 54 responses, 31 report to a pro-vice-chancellor (PVC) for research or equivalent. The remainder typically report to senior administrators, such as registrar or chief operating officer (COO), though three report directly to the vice chancellor.

Reporting in dedicated research offices is most likely to be to the pro-vice-chancellor (PVC) for research (15/22 responses). For those working in R&I and R&E functions reporting was evenly split between reporting to the pro-vice-chancellor (PVC) for research and senior administrators.

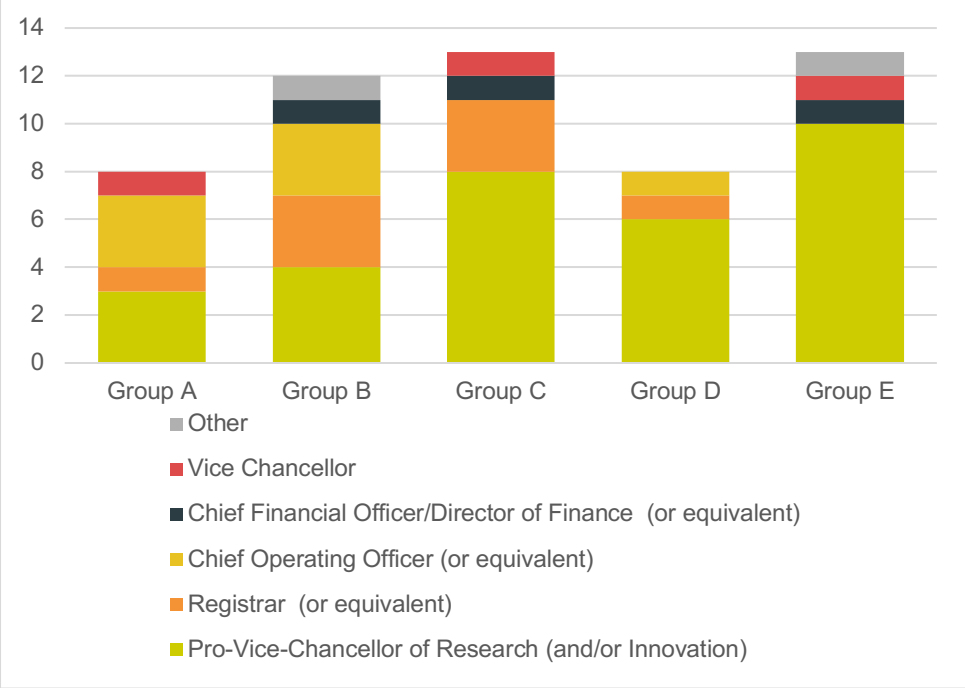
Figure 19 – Reporting line for the most senior research support professional (n=54)



…with some evidence reporting lines vary in line with research income levels

There is some evidence that reporting lines vary based on the level of HEIs' research incomes. Figure 20 shows the reporting lines by income group, with a reduced likelihood of senior research support professionals reporting to a pro-vice-chancellor (PVC) for research or equivalent as income increases. Equally, reporting to senior administrative leaders, e.g. registrar or COO roles, increases as research income increases.

Figure 20 – Reporting lines by research income (n=54)



5.3 Resourcing levels by income group

There are ~4,700 FTEs in UK university research offices

The survey participants represent around one-third of the UK's 165 HEIs. When the results of the survey are extrapolated to the national level, accounting for the proportions responding in each income group, then this suggests that research office functions nationally account for ~4,700 FTEs.

The majority of FTEs involved in research offices are located in HEIs with research incomes >£30m…

The majority of these FTEs (58%) are within the Group A and B scale HEIs (i.e. those with research incomes in excess of £30m) – and are estimated at ~2,750 FTEs. A further ~ 1,330 FTEs are estimated to be based in Group C and D scale HEIs, with research incomes of between £5 and £30m.

…but significant numbers (over 600) work in HEIs with research incomes under £5m per annum

The Group E scale HEIs are the most numerous by number (83/165 HEIs), but account for only 13% of the estimated total number of FTEs. This is equivalent to an estimated ~630 FTEs. For Group E, the responding HEIs within the survey were representative of the range of research incomes but were weighted towards those with higher research incomes. The average research income for participants (~£2.2m) was around twice that of the wider non-participating Group E scale population (~£1.2M).

Research offices typically range in size between 12 and 80 FTEs depending on research income

In order to calculate the average size of each FTE office, respondents were asked to break down their research office by number of FTEs and their associated functional areas. This section discusses the overall FTE numbers reported by research offices. Subsequent sections examine the distribution of FTEs across functional areas.

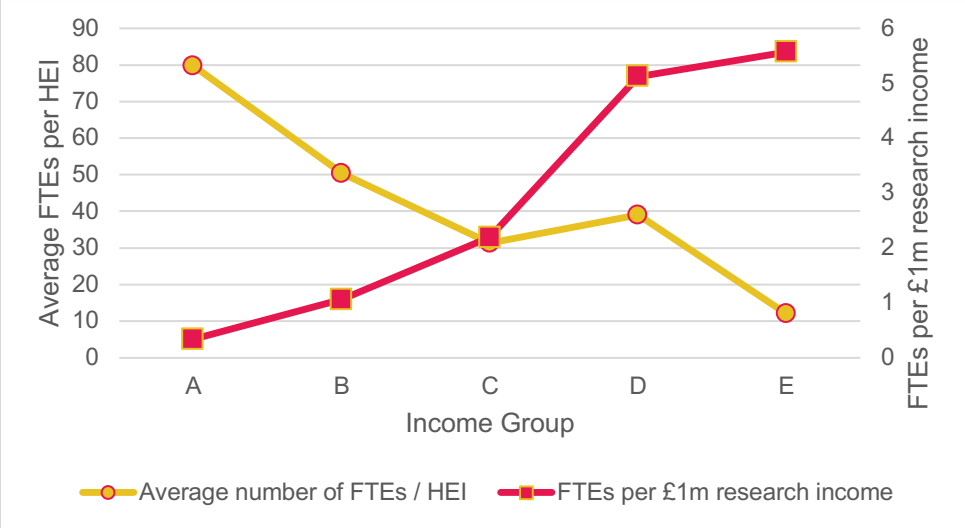
Unsurprisingly, the broad trend seen in Figure 21 indicates that the higher the HEI's research income, the greater the number of FTEs working in the research office. Research offices in group A institutions (with a research income of over £100 million) have an average of 80 FTEs, whereas for group E (under £5m) the average is just 12.

Figure 21 also presents the level of FTE normalised by research income. This presents a value for the number of reported FTEs per £1m of research income. Whilst the group A HEIs have the highest absolute numbers of FTEs, they appear to benefit from economies of scale, with the lowest numbers of FTEs per £1m research income. For group A institutions 0.34 FTEs per £1m research income are reported, which contrasts with 5.6 FTEs for the group E institutions. The effect of normalisation on functional areas within the research office is explored further in section 5.6 of the report.

Variations between income groups reflect differing levels of centralisation in research support

Comparisons between income groups are however complicated by variations in the level of centralisation of research support functions. Many large, research-intensive HEIs have significant numbers of research support staff located in faculties, departments, institutes and centres, who would fall outside the scope of this exercise. By contrast, in many less research-intensive HEIs there will be few, if any, research support professionals located outside the central research office.

Figure 21 – Number of FTEs by organisations' income group, and normalised FTEs (FTE per £1m research income)



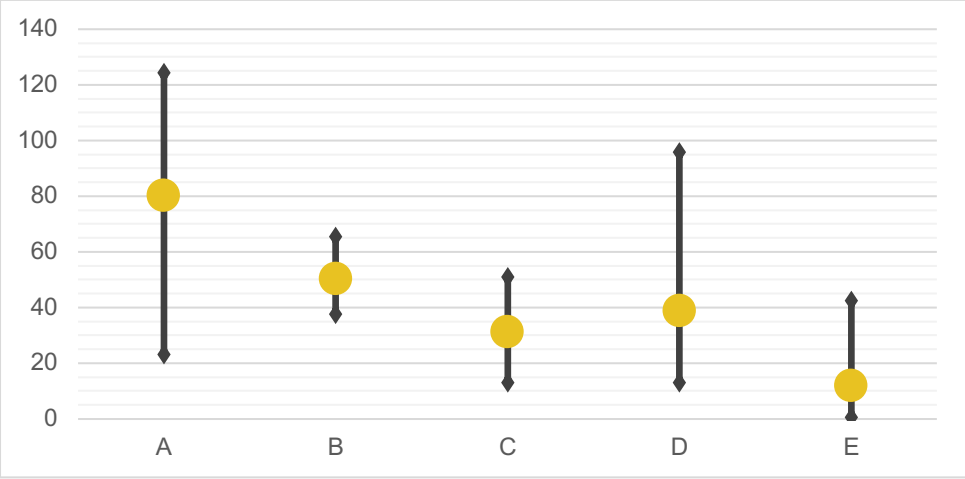
Whilst the overall trends are clear based on average FTEs in each income group, the range can be significant

The range of reported FTE numbers is shown in Figure 22. This shows the average (mean) value for each income group, with bars indicating the highest and lowest reported FTE numbers. For income groups B and C, FTE numbers reported were closely clustered around the mean value. For groups A and, particularly, D there was much greater range in reported FTE numbers.

One group D HEI reported an exceptionally high number of FTEs, which has influenced the overall average values for this group, and this puts the average higher than the group C HEIs. Discounting this one HEI sees the average return to a level comparable to group C. Similarly, for income group E, the average value for FTEs was 12, but six HEIs (of the 13) reported FTE numbers that were less than half of the average group value. In these institutions research is, quite literally, supported by a handful of people.

"We have all of the complexity and expertise requirements of larger institutions handled by 20 individuals. We are vulnerable to staff absence and turnover." [Group D]

Figure 22 – FTE numbers reported showing the mean and the range of reported FTEs in each group



5.4 Distribution of staff across functional areas

About this section

In total 2,011 FTEs were reported by 52 institutions.[6] This section examines the total number of reported FTEs, against the functional areas and salary bands of the reported staff. It provides an overview of numbers and levels of staff working in research office functions.

[6] Two institutions did not respond with FTE numbers in this part of the survey

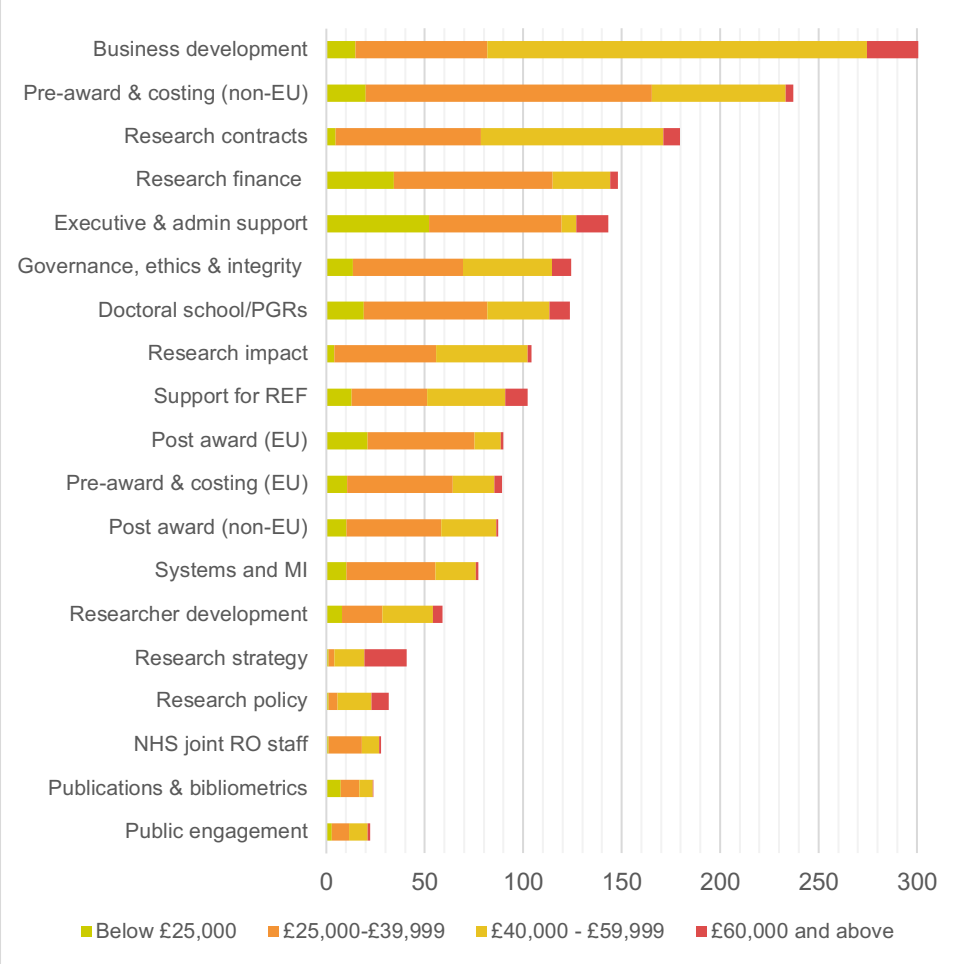
Respondents were asked to provide a breakdown of the full-time equivalent staff members (FTEs) carrying out each function listed above under the management of the central research office. These have been divided into salary bands of below £25,000, £25,000-£39,999, £40,000-£59,999 and £60,000 and above.

The highest numbers of FTEs were reported against roles in research business development and pre-award and costing

Figure 23 shows the distribution of FTEs by function and salary band. Across all responding institutions, the greatest number of reported FTEs work in research business development (300 FTEs, 15%), followed by pre-award and costing (non-EU) (237 FTEs, 12%) and research contracts (180 FTEs, 9%).

When taken together, the *non-EU* and *EU* pre-award and costing functions emerge as the largest functional area by FTEs, accounting for 326 FTEs (16%) and evidence the ongoing importance of this function for research offices. Research finance accounts for 149 FTEs, and the specialist area research governance, ethics and integrity accounted for 124 FTEs.

Figure 23 - Number and salary band of FTEs, by function



The proportion of staff in higher salary brackets is highest for research business development and strategy

The functions with the greatest number of FTEs paid over £60,000 were in research business development (26 FTEs) and research strategy (21 FTEs). These areas, with the addition of research policy, also saw a higher *proportion* of FTEs in the higher salary bands, with over 75% of reported roles in the two higher salary bands (i.e. >£40,000).

Research contracts, REF support and research governance, ethics and integrity also show a relatively high proportion of higher paid staff within the overall responses for that area.

For roles addressing "operations", roles in the £25-40k bracket are most prevalent, typically accounting for the majority of FTEs reported for that functional area. For example, in pre-award and costing (non-EU) 145 of the 237 reported FTEs are in this salary band, representing 61% of reported FTEs.

5.5 Staff levels by function and income group

About this analysis – the average FTEs reported in each income group

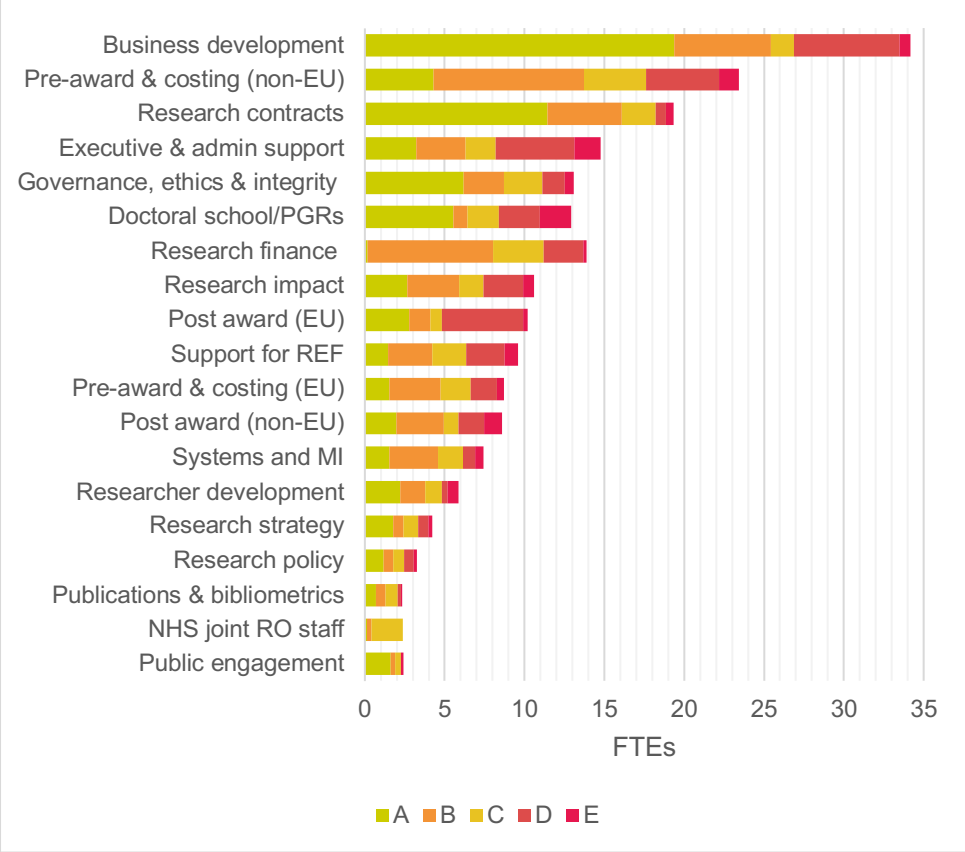
In this section the average FTEs reported for each income group are considered. The charts therefore indicate the distribution of FTEs between functions for the 'average' Group A institution, and so on for each income group (A to E). The analysis and charts show the relative differences in resourcing research office functions when size (research income) is taken into account. For example, in Figure 24, Group A institutions report an average of 19 full-time equivalent research business development staff and Group B reports an average of six.

The level of research income influences the shape of the research office

In particular, Figure 24 shows the concentration of research business development and research contracts FTEs in the Group A institutions. In research contracts, the Group A average indicates that they deploy a larger share of staff on research contracts compared to other institutions, possibly reflecting in house research contracts teams (compared to shared legal services common in those with smaller research incomes). By contrast the Group E institutions report an average of less than 1 FTE in research business development and research contracts, respectively.

Across all income groups, the lowest number of FTEs was assigned to scholarly communication (research outputs and bibliometrics), consistent with the finding that scholarly communication is not seen as a primary responsibility of the research office (see section 4.1).

Figure 24 – Average number of FTEs dedicated to each function, by income group



In researcher development and doctoral schools, the FTEs reported by research offices are more variable

Inevitably the average values for income groups can mask differences in individual research office remits and staffing. In particular this affects the researcher development and doctoral schools functions, and is aligned to the remit and responsibilities identified in Section 4, Figure 14, where relatively few research offices have primary responsibility for these areas. The data suggests that when research offices do have primary responsibility the FTEs involved can be high, but frequently zero otherwise. In all but one of the Groups (Group B), at least one respondent identified a combined FTE greater than 10 (in total six respondents indicated more than 10 FTEs). But in all Groups at least one respondent reported zero FTEs for these two categories and in total 11 HEIs reported zero FTEs in these two areas.

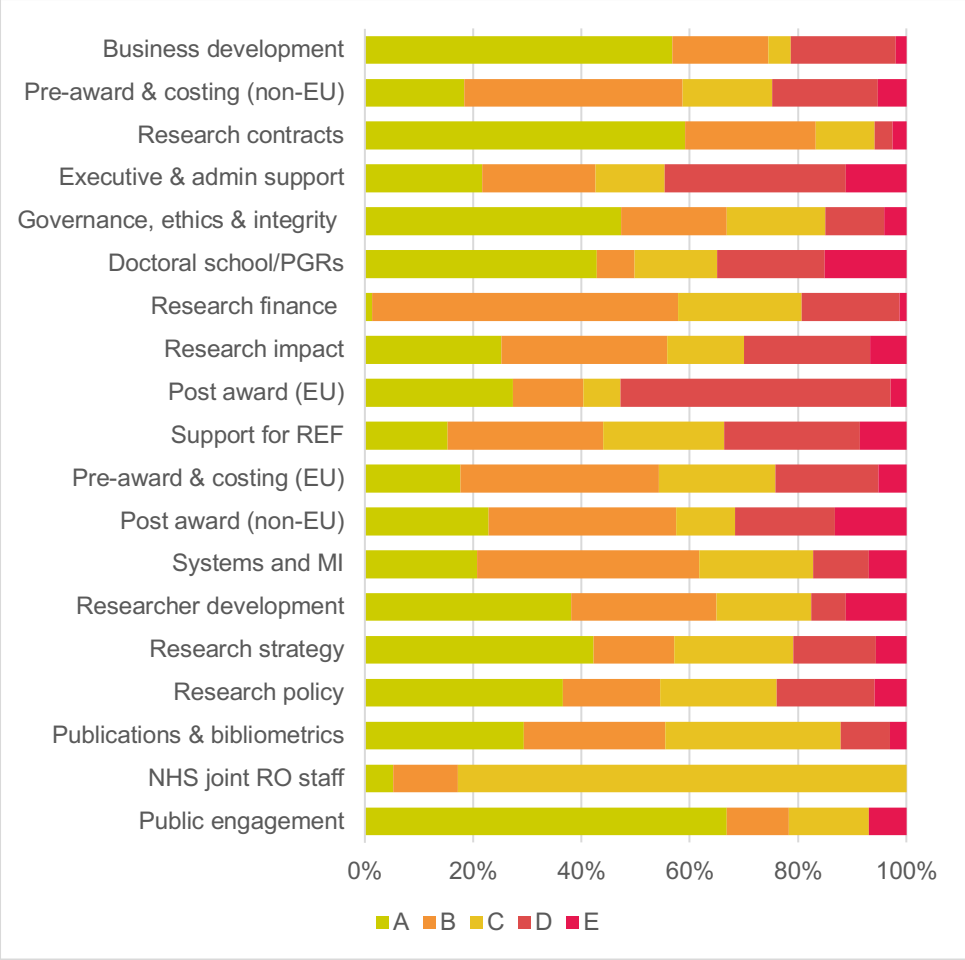
In some functional areas the reported FTEs are more evenly distributed across income groups: impact, REF support,

Figure 25 below presents the total FTE data for each function as a 100% stacked bar chart, showing the relative distribution of FTEs for each function across the income groups. It is based on the total number of FTEs reported in Figure 23. This shows more clearly the distribution of those FTEs in each functional area. A relatively even distribution of reported FTEs in impact, REF support and pre-

pre-award and post-award

award and costing function is evident, indicating that these are core functions that must be delivered by almost all offices, irrespective of income level.

Figure 25 – The proportion of total FTEs reported in each functional area, by income group



5.6 Normalisation of FTEs in functional areas by research income

The relative number of FTEs in research office roles varies significantly when normalised by research income

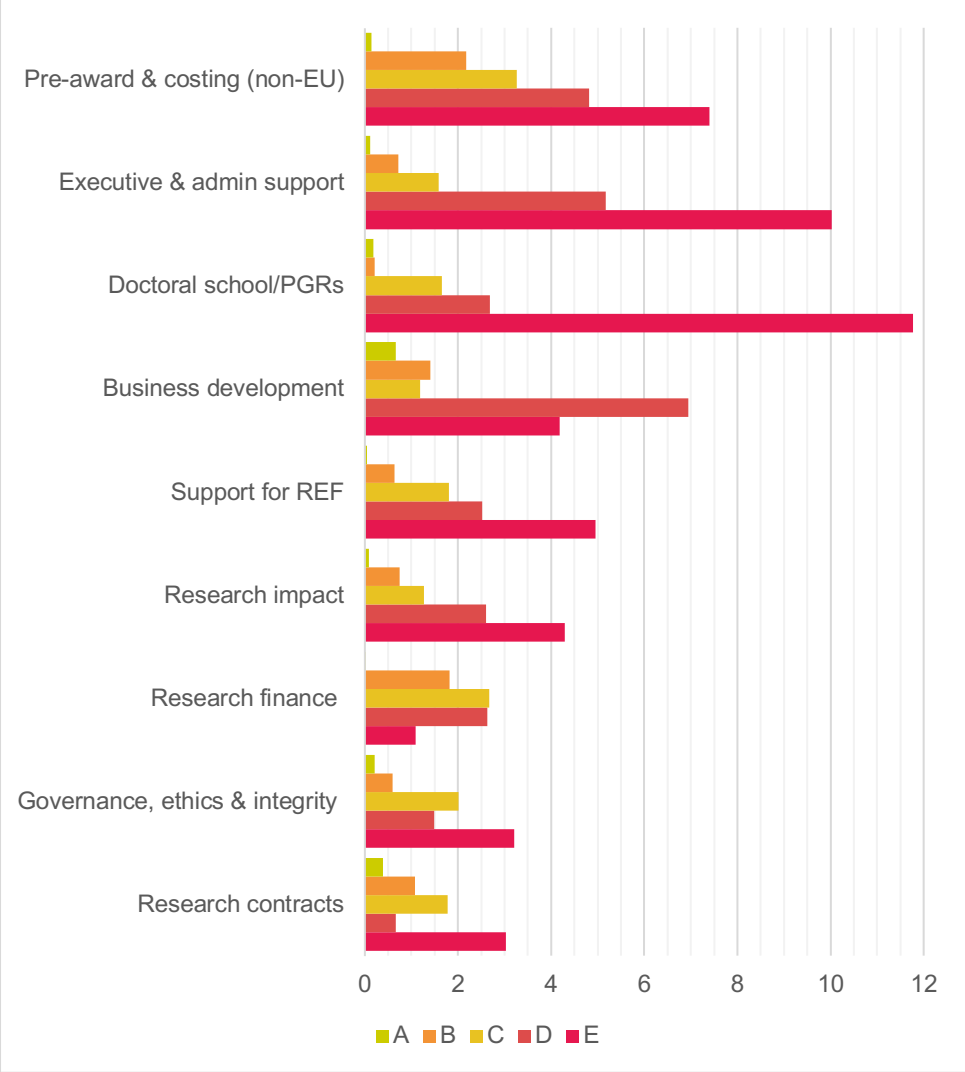
Figure 21 in section 5.3 illustrates the overall position in terms of the reported FTEs and 'FTEs per £1m research income'. This section expands the analysis to consider the research office functional areas and associated FTE staff numbers, as shown in Figure 26. For data robustness, the analysis focuses on the nine functional areas reporting ~100 or more FTEs in total (refer to Figure 23 for the total FTEs per functional area).

For each HEI income group (A to E) the average research income was used to normalise the number of reported FTEs for each functional area. This produces a

figure for the average "FTEs per £1m research income" for each functional area in each HEI income group (A to E).

The effect of scale is highly visible in this analysis, with smaller HEIs supporting a much higher FTE count per £1m research income. This is particularly evident for doctoral schools, pre-award costing, research business development and support for REF.

Figure 26 – FTEs per £1m research income, for each HEI group.



6 Trends and changes in the profession

6. Trends and changes in the profession

Summary

In recent years around 80% of research offices in the survey reported significant changes or developments affecting the research office structure. Most commonly these were around merger (or de-merger) with KE, enterprise or innovation functions. Looking forward, half of the responding directors expect further significant changes in the next twelve months, including restructuring, increased integration with business, enterprise and finance, and more centralisation of support functions.

6.1 Experienced changes and trends

The research office has seen significant changes over the past three years

51 respondents provided additional comments on whether there had been any significant changes or developments affecting the institutional research management function's structure in the past 3 years. Analysis of the free text response provides an overview of the changes experienced by research offices.

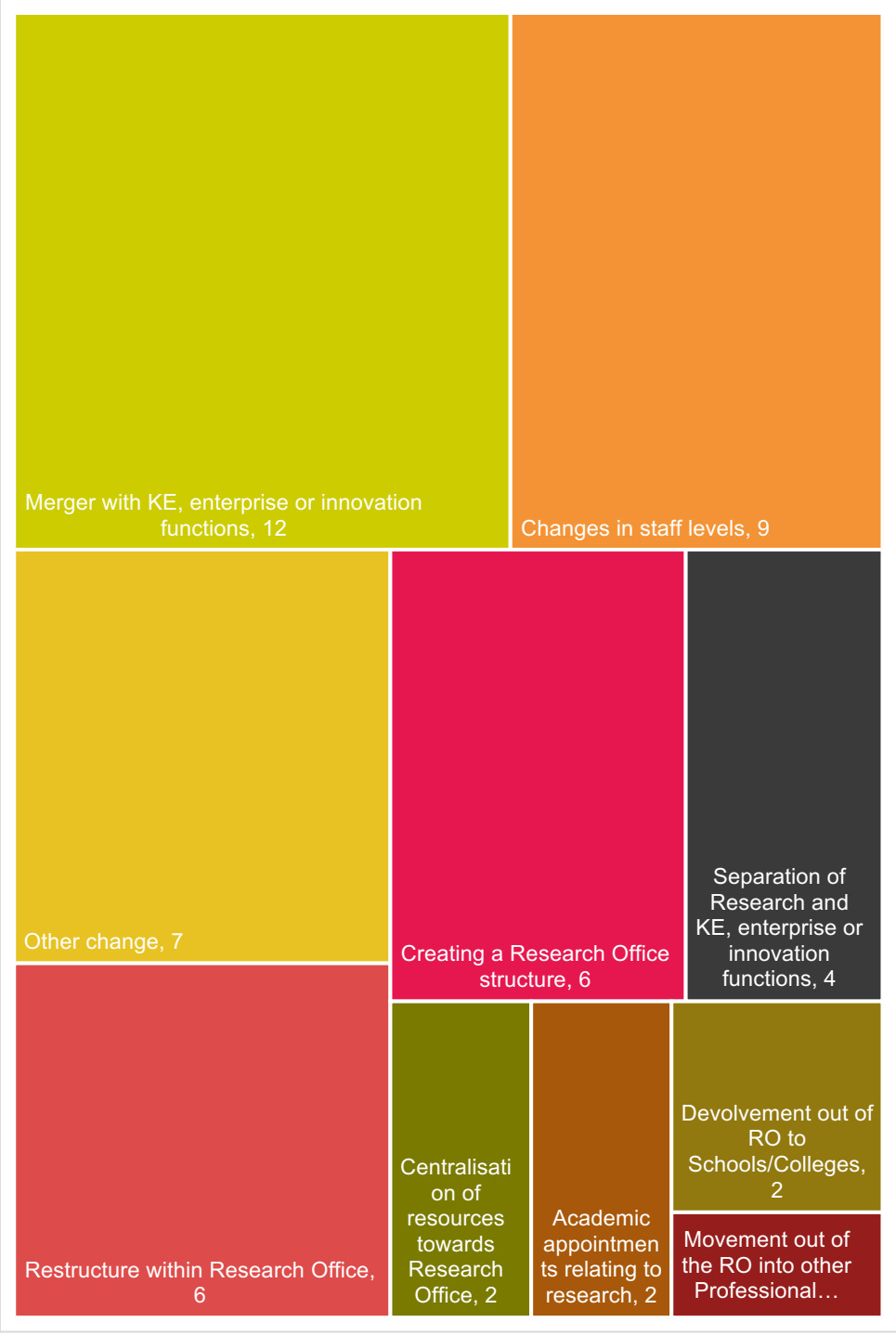
Responses were grouped into 11 types of reported change, and the 51 respondents identified 65 changes (11 respondents identified 2 or more types of change in responses). Figure 27 shows the responses, with the most frequent being (i) *merger with KE, enterprise or innovation functions* (12), (ii) *no change* (11) and/or (iii) *changes in staff levels* (these generally being additional staff).

The frequency of merger with KE, enterprise or innovation functions is consistent with trends seen elsewhere in the study, for example the role titles for the most senior research support professional, and the structure of offices (the majority reported being research and enterprise or innovation).

80% of respondents reported restructuring in recent years

The comments also indicate the extent to which research office functions are subject to restructuring. The creation, or restructuring, of research offices were reported six times each. Only 11 HEIs reported experiencing no change, with the responses indicating ~80% of research offices experiencing some restructuring in recent years. One respondent identified that as a result of consecutive reviews the research office merged and then separated from the ‘enterprise’ function within the space of two years. And whilst mergers with KE functions were most frequently reported, four HEIs reported separations of previously joined research and knowledge exchange functions.

Figure 27 – Recent changes to the research office (n=51)

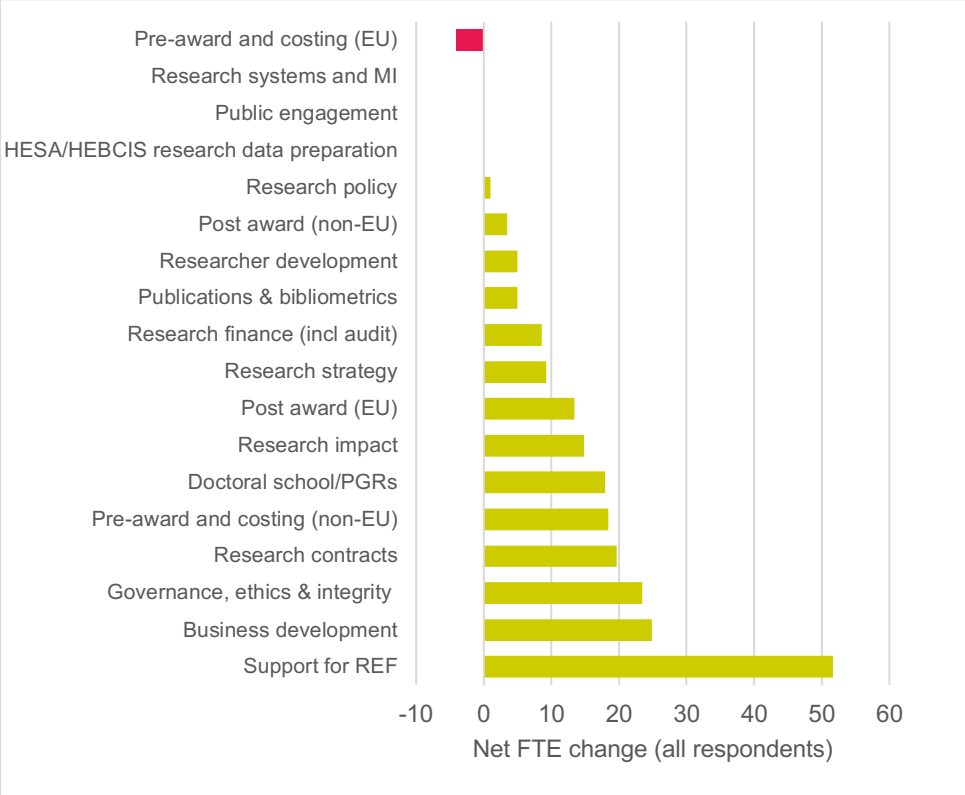


Research office staff levels are generally increasing

The survey asked research offices to report significant changes, in terms of FTEs, in the last three years and the functions to which these related. Respondents reported a total of 2,011 FTEs currently within their research offices, and the reported changes (positive and negative) accounted for 335 FTEs (or 17% of the current total). The *net* change reported was +212 FTEs (or 11%).

Participants reported the most significant FTE gains in terms of REF support, with further evidence of gains in business development and support for research governance, ethics and integrity. Only pre-award and costing (EU) emerged with a (small) *net decrease* in FTEs.

Figure 28 – Changes in FTEs by function in the last 3 years – all respondents (n=54)



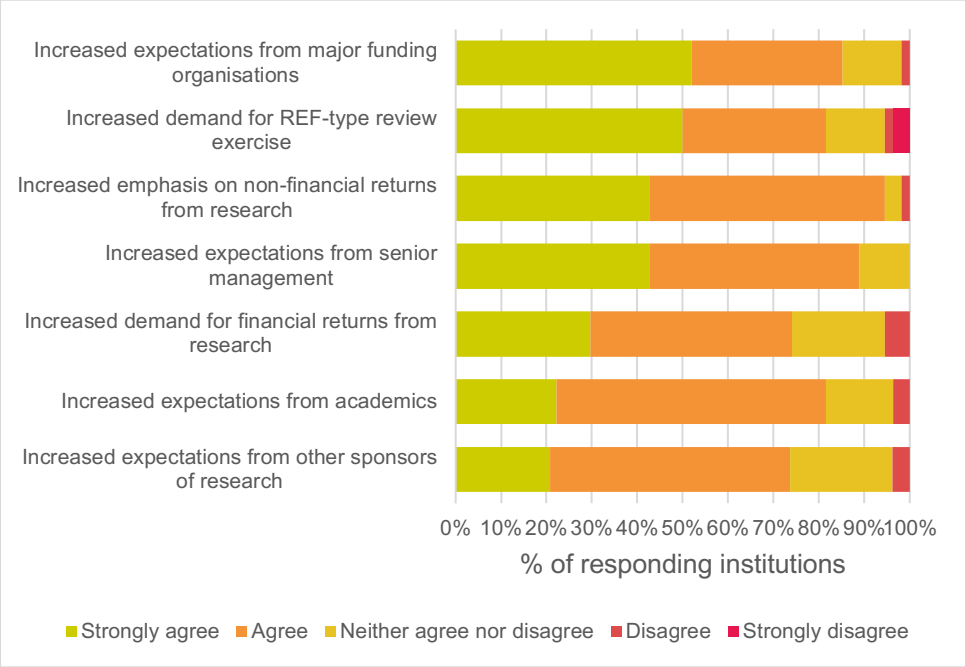
Changes in staff level are driven by increased demand for research support

The survey also sought to explore what forces are shaping the changes affecting the research office. Respondents indicated that increases in staff levels were mostly driven by internal demand for functions like research contracts, governance and post award project management, and by funder requirements for functions like REF support. Strategic investments by the institution are also a significant factor when it comes to staff increases, particularly in relation to REF, impact, researcher development and doctoral schools. Where decreases in staff FTEs were reported, the drivers for this were most frequently cited as cost savings.

Funders are driving changes to the research management function

The survey then asked to what extent directors agreed that their research office had experienced certain changes or developments in the past 3 years. Respondents most strongly agreed on experiencing increased expectations from major research funders (28 respondents strongly agreed) and increased demand for REF-type exercises (27). But overall the highest levels of agreement (strongly agree, agree) were experienced in terms of demonstrating non-financial returns from research (such as research impact) and expectations from senior management. The responses also indicated a consistent perspective across income groups.

Figure 29 – Extent to which research office has experienced changes or developments in the last three years (n=54)



6.2 Expected changes and trends

Half of respondents expect significant changes to the research office structure in the next 12 months

Exactly half of the responding institutions expect significant changes to the research management function over the next 12 months (equally half did not). For those *not* expecting future changes their comments commonly indicated that recent changes either had been made, recently were currently in progress, or were expected on a longer-term basis (e.g. after REF 2021).

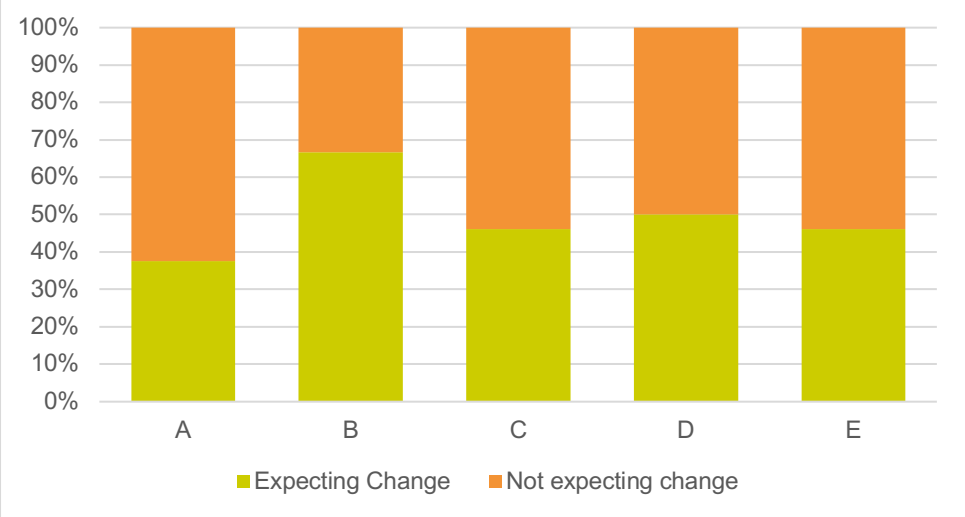
"A review of research finance management may see some activities brought up out of the departments, where smaller departments can struggle with managing a diverse funding portfolio given the complexity and differences across funders." [Group A]

Expectations of significant change are largely consistent across income groups.. with the exception of Group B

There was no clear correlation between the institution's research income and whether they foresaw significant changes to the research management function in the next twelve months. But whilst the expectation of change was largely consistent when considering the size of institutions (40-50% of respondents), it was notably higher for those with research incomes in the range £30m-£100m (67% of the Group B respondents).

"We are likely to grow our infrastructure around the research & integrity function, and look to expand our research development activity" [Group B].

Figure 30 – Proportion of respondents expecting significant changes to the research management function's structure in the next 12 months (n=54)



Respondents expect further restructuring of their research office

The most frequently identified upcoming change was a possible general restructure of the research office (12 responses). Of these, eight respondents identified that they had recently undergone, or were undergoing, a review and anticipated changes following this. Four repondents observed that they would be further integrating with business enterprise or finance departments. One institution explained that this was aimed at improving collaborative working on bidding, impact and postgraduate opportunities.

"We are co-locating with the business enterprise team and will explore opportunities for cross working in relation to bidding, impact and post graduate opportunities." [Group E]

Three respondents were actively recruiting a new VC or PVC for research, and anticipated further changes once the individual had settled into the role. Two respondents identified that they were developing a new research management system (which, in one case, entailed the development of a new research contracting risk framework).

Figure 31 - Anticipated changes to the research management function in the next 12 months

6.3 Challenges facing the research management profession

Identifying challenges facing the research management profession

The survey asked respondents to identify up to three key challenges, issues or causes for concern facing the research management profession. These were captured in order of perceived significance: most significant, second most significant and third most significant. The 151 open text responses to the questions were then grouped into areas of high frequency responses and are summarised in Figure 32.

A growing compliance and regulatory burden tops the list of concerns

Respondents identified an increased compliance and regulatory burden as the most significant challenge facing the profession. Due diligence requirements associated with Official Development Assistance and the UK Government's Global Challenges Research Fund were the most commonly-cited example. Other compliance challenges include safeguarding, research integrity, bullying and harassment and the growing number of concordats being adopted within the sector.

"[We face] increased complexity of awards and internationalisation, leading to increased compliance checking and due diligence requirements, without the corresponding increase in resources to deal with this." [Group C]

Political instability and Brexit contribute to a complex external environment

A large number of respondents also expressed concerns over the unstable political environment, and particularly the impact of the UK's departure from the European Union on access to European framework programme funding. Others commented on the increased complexity of the external funding environment, with greater diversity of funding sources, increased competition for funding and the move to open science all placing additional pressure on research managers.

"Brexit and government uncertainty means that it is difficult to plan for the medium to long term" [Group E]

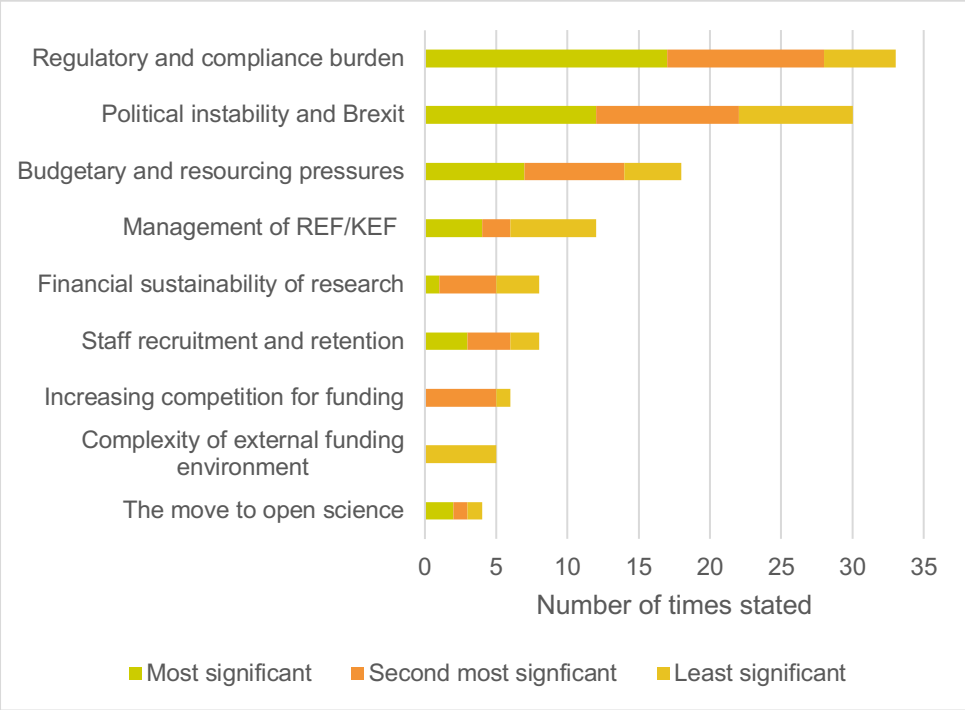
Research directors must contend with a range of internal management challenges

Other challenges related to the internal management of research offices. Budgetary and resourcing pressures feature heavily, often exacerbated by the external reporting obligations associated with the Research Excellence Framework (REF) and Knowledge Exchange Framework (KEF). Several respondents observed the growing challenge of recruiting and retaining staff with the skills needed to flourish in the changing wider environment.

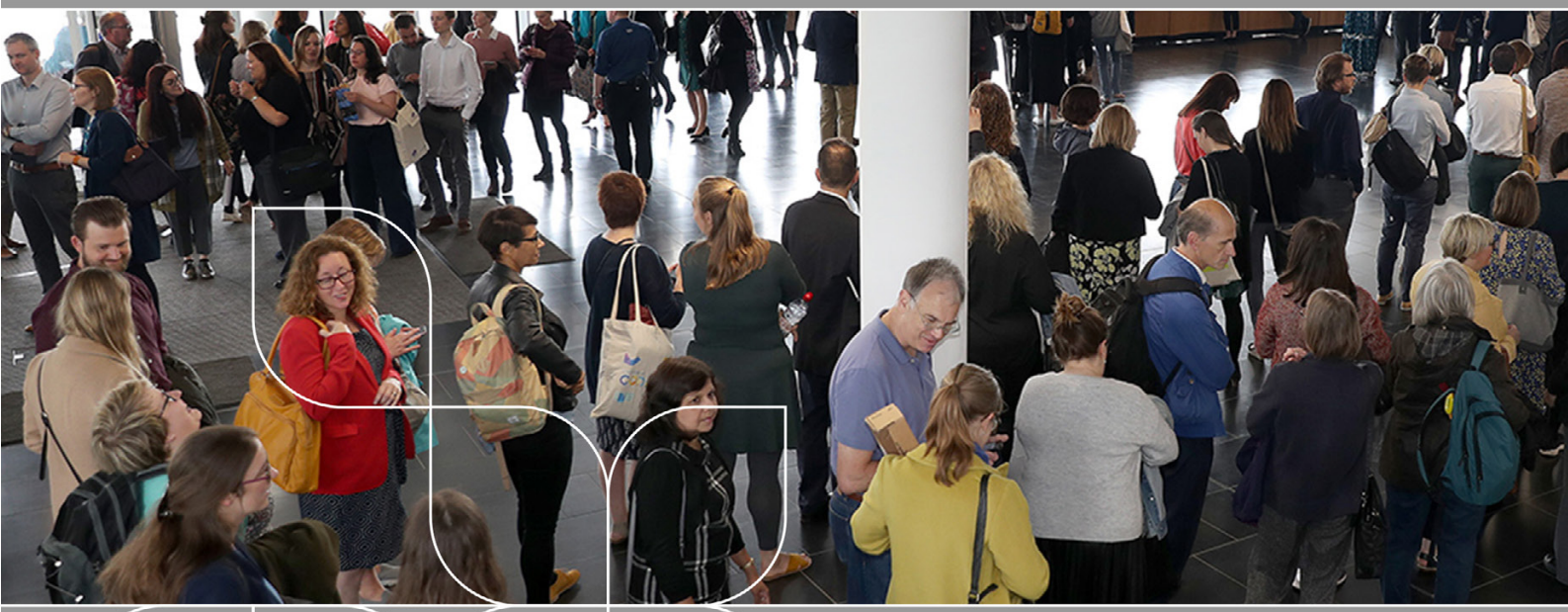
"Financial pressures elsewhere in the university are adding extra burden on research office staff to support more school level activities." [Group E]

"Leadership of research offices increasingly requires multi-skilled professionals working across the research-enterprise divide. Such people are in short supply." [Group C]

Figure 32 – Key challenges facing the research management profession (n=151)



Appendix



Appendix A – Survey respondents and steering group

The survey was completed by respondents from 54 UK-based research organisations. Organisations were divided into five groups based on their research income. Group A institutions have a research income higher than £100 million per year; group B organisations report an income of £30-100 million; group C have an income of £10-30 million; group D have an income of £5-10 million and group E organisations have an income of £0-5 million. The table below lists all the responding institutions and their respective income groups.

Institution	City/County	Country	Income Group
Cardiff University	Cardiff	Wales	A
The University of Birmingham	Birmingham	England	A
The University of Bristol	Bristol	England	A
The University of Glasgow	Glasgow	Scotland	A
The University of Manchester	Manchester	England	A
The University of Oxford	Oxford	England	A
The University of Sheffield	Sheffield	England	A
University of Nottingham	Nottingham	England	A
Liverpool School of Tropical Medicine	Liverpool	England	B
Loughborough University	Loughborough	England	B
The University of Bath	Bath	England	B
The University of East Anglia	Norwich	England	B
The University of Lancaster	Lancaster	England	B
The University of Leicester	Leicester	England	B
The University of Reading	Reading	England	B
The University of Surrey	Woking	England	B
The University of Sussex	Sussex	England	B
The University of York	York	England	B
University of Durham	Durham	England	B
Heriot-Watt University	Edinburgh	Scotland	B
Birkbeck College	London	England	C
Royal Holloway and Bedford New College	London	England	C
St George's, University of London	London	England	C

Institution	City/County	Country	Income Group
The Open University	Buckinghamshire	England	C
The Royal Veterinary College	London	England	C
The University of Huddersfield	Huddersfield	England	C
The University of Kent	Canterbury	England	C
The University of Stirling	Stirling	Scotland	C
Ulster University	Belfast	N. Ireland	C
University of Hertfordshire	Hatfield	England	C
University of the West of England, Bristol	Bristol	England	C
Keele University	Newcastle Under Lyme	England	C
The University of Hull	Hull	England	C
Coventry University	Coventry	England	D
Liverpool John Moores University	Liverpool	England	D
SOAS University of London	London	England	D
The Nottingham Trent University	Nottingham	England	D
The University of Bradford	Bradford	England	D
The University of Brighton	Brighton	England	D
University of Northumbria at Newcastle	Newcastle	England	D
Anglia Ruskin University	Cambridge	England	D
Bath Spa University	Bath	England	E
Cardiff Metropolitan University	Cardiff	Wales	E
Kingston University	London	England	E
Leeds Beckett University	Leeds	England	E
Oxford Brookes University	Oxford	England	E
Teesside University	Teesside	England	E
The University of the West of Scotland	Renfrewshire	Scotland	E
University of Bedfordshire	Bedfordshire	England	E
Bishop Grosseteste University	Lincoln	England	E
Wrexham Glyndwr University	Wrexham	Wales	E
Newman University	Birmingham	England	E
Southampton Solent University	Southampton	England	E
The Royal Central School of Speech and Drama	London	England	E

The report was prepared with the guidance and support of the project steering group, whose members are listed below:

Name	Affiliation
Andrew Jackson	Bishop Grosseteste University
David Bembo	Cardiff University
Peter Hedges	University of Cambridge
Sally Puzey	Coventry University
Jessie Kennedy[7]	Edinburgh Napier University
Steph Bales	Teesside University
Hamish Macandrew	ARMA

[7] Contributed to the initial scoping and survey design phases only.

Appendix B – Research office functions

The survey considers 19 functional areas commonly held within the management remit of research offices.

Functional area	Short name used in charts
Operation of the research office	
Executive (leadership) and admin support	Executive & admin support
Research systems and management information[8]	Systems and MI
Operations: activities directly related to a research project	
Pre-award and costing (non-EU)	Pre-award & costing (non-EU)
Pre-award and costing (EU)	Pre-award & costing (EU)
Research contracts	Research contracts
Post award project management – excluding finance (EU)	Post award (EU)
Post award project management – excluding finance (EU)	Post award (non-EU)
Research finance	Research finance
HEI-employed staff in NHS Research Office	NHS joint RO staff
Research governance, ethics and integrity	Governance, ethics & integrity
Development & Outreach: activities related to research development, dissemination and impact	
Research business development	Business development
Public engagement	Public engagement
Research impact	Research impact
Scholarly communication, research outputs and bibliometrics	Publications & bibliometrics
Governance: activities related to strategic institutional objectives	
Research policy	Research policy
Research strategy	Research strategy
Support for Research Excellence Framework	Support for REF
Activities related to training and development of researchers	
Doctoral school/PGRs	Doctoral school/PGRs
Researcher development	Researcher development

[8] In section 4 a further function of 'HESA/HEBCIS research data submission' is included alongside 'research systems and management information'. As this is a seasonal activity, and does not constitute a formal job role in most institutions, it is excluded from the staffing and resourcing analysis in Section 5.

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