

Fit for the Future: Research Leadership Matters

A Review of Research Leadership in the Social Sciences by Professor Matthew Flinders, University of Sheffield







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Executive summary

The United Kingdom is home to a world-class community of social scientists who in recent years have made major contributions in relation to, for example, understanding social and political change around the world, supporting economic development and industrial growth, exploring the social implications of major advances in relation to science and technology and – more generally – helping to shape public policy and inform public debate through the provision of cutting-edge research and insights.

These contributions have played a highly significant role in underpinning the quality, impact and reputation of the UK science base. However, the extent and pace of both technological and social change underline the need for science to reflect upon the need to change and adapt to new challenges and opportunities. Approaches, procedures and ways of working that may have been 'fit for purpose' in the past are in no way guaranteed to ensure that any discipline or field of inquiry is 'fit for the future'.

One part of this need to adapt and keep pace relates to the recognition that major scientific discoveries with the potential to deliver positive social benefits are, in the future, unlikely to emerge within any one specific field but are far more likely to develop at the intersection or nexus between disciplinary boundaries. Added to this is an awareness of the benefits of 'open knowledge networks' that utilise different forms of expertise and knowledge, and that serve to focus attention on the existence of a complex 'research ecosystem' which reaches across the public, private and voluntary sectors. The creation of world-class research environments is therefore increasingly associated with the effective and efficient facilitation of the mobility of people, ideas and talent across traditional disciplinary, institutional and professional boundaries. And yet facilitating and managing mobility in a research environment demands a fresh approach to nurturing, incentivising and rewarding research leadership.

Research leadership refers to the activity of supporting and facilitating the production of research in an inclusive manner that maximises the scientific quality and social impact(s) of that endeavour.

It takes many forms and there is no 'one-size-fits-all' approach to either nurturing or practising research leadership. It includes individual development (self-leadership) but is more commonly associated with

supporting and facilitating the research careers of others. As such, it occurs across a number of levels from the supervision of PhD students and post-docs, to the mentorship of mid-career staff, to overseeing a specific project, programme of research or research centre, through to far broader roles concerning the governance of funding frameworks or fulfilling a leadership role within a learned society or academy. It is also important to acknowledge that research leadership occurs in a number organisational and professional contexts and is in no way restricted to academe.

The need to think about research leadership in the social sciences is, to a large extent, driven by a distinct shift in the research funding landscape in the United Kingdom and beyond. An increased emphasis on facilitating the insights of inter-disciplinarity and inter-sectoral mobility has led to a shift towards funding projects that exhibit the following characteristics: (1) they tend to be large and ambitious; (2) international in scope and interdisciplinary in nature; (3) they may be resourced through a consortium of funders; (4) they are challenge-orientated and solution-focused with a twin emphasis on both knowledge-creation and knowledge-production; and (5) they seek to exploit the insights generated by intersectoral mobility through engaging with research-users through forms of co-design and co-production. Taken together, these five characteristics combine to highlight a clear shift towards funding a new model of what might be called 'collaborative research' or 'team science'. This shift creates a need to better equip our future research leaders with the skills and incentives required to work collaboratively across sectors. As these skills and talents take time to develop and mature, there is an urgent need to reflect upon how we develop not only a healthy and diverse pipeline of talented research leaders who can seize opportunities and galvanise diverse teams, but also a broader talent framework that facilitates mobility in-and-out of academe in ways that reflect the changing nature of work, non-traditional career patterns and the needs of those with caring responsibilities.

The need for bold and fresh thinking was underlined in UKRI's 2019 Delivery Plan which called for a 'paradigm shift' in the approach to research careers, research infrastructure and the research environment. This challenge was accepted by the ESRC and its own Delivery Plan included an explicit commitment to investing in 'talent, methods and leadership' as a foundational pillar of its strategy for the future. This review was commissioned by the ESRC and is intended to inform their thinking in this area.

The starting point for this review was an acknowledgement – as underlined in the evidence review, national consultation and through institutional visits – that the social sciences have not historically cultivated a coherent or explicit approach to research leadership.

That is not to say that the skills and talents which the notion of research leadership focuses attention on have not existed but simply that they have emerged largely through a mixture of trial-and-error, osmosis and luck.

The scholarly culture of the social sciences is generally also highly individualised and, as result, the shift towards 'collaborative research' is a particular challenge for the social sciences because the emergent research environment is increasingly demanding skills and talents that have simply not been facilitated, rewarded or incentivised in the past. Very few social scientists, for example, have had the opportunity to work in large inter-disciplinary projects, gain experience in relation to complex project management or work in research-related environments beyond academe.

What the social sciences does possess, however, is a significant number of senior scholars with successful experience of leading major ERC, ESRC and UKRI funded projects and investments (centres, programmes, doctoral training partnerships, nexus networks, 'what

works' centres, etc.) and who have played a role in other cross-council initiatives or projects funded through other sources. This body of existing talent creates a significant opportunity for the social sciences to think not in terms of there being a research leadership challenge but in terms of how to exploit the existence of a research leadership opportunity.

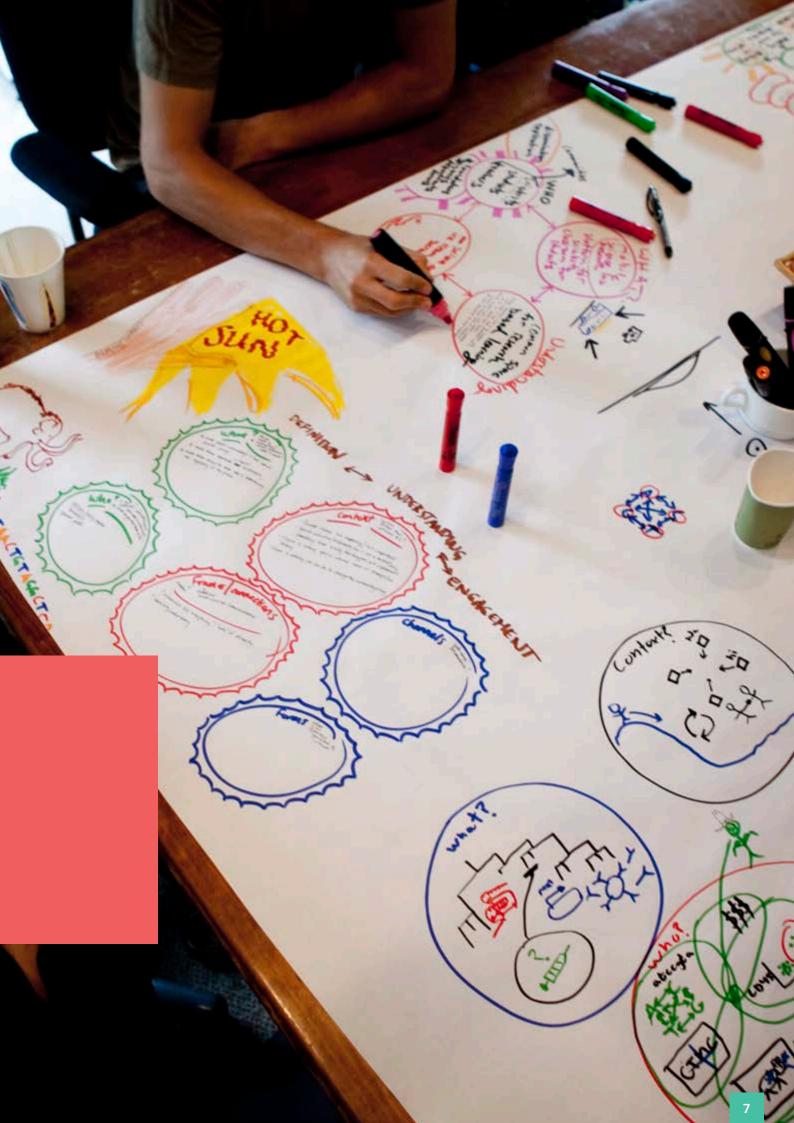
The potential opportunities exist at a number of levels. First and foremost, in terms of ensuring that the social sciences possess the skills and talents that will be needed in the future given changes in the funding landscape and that will be central to underpinning a vibrant, engaged and flourishing intellectual community.

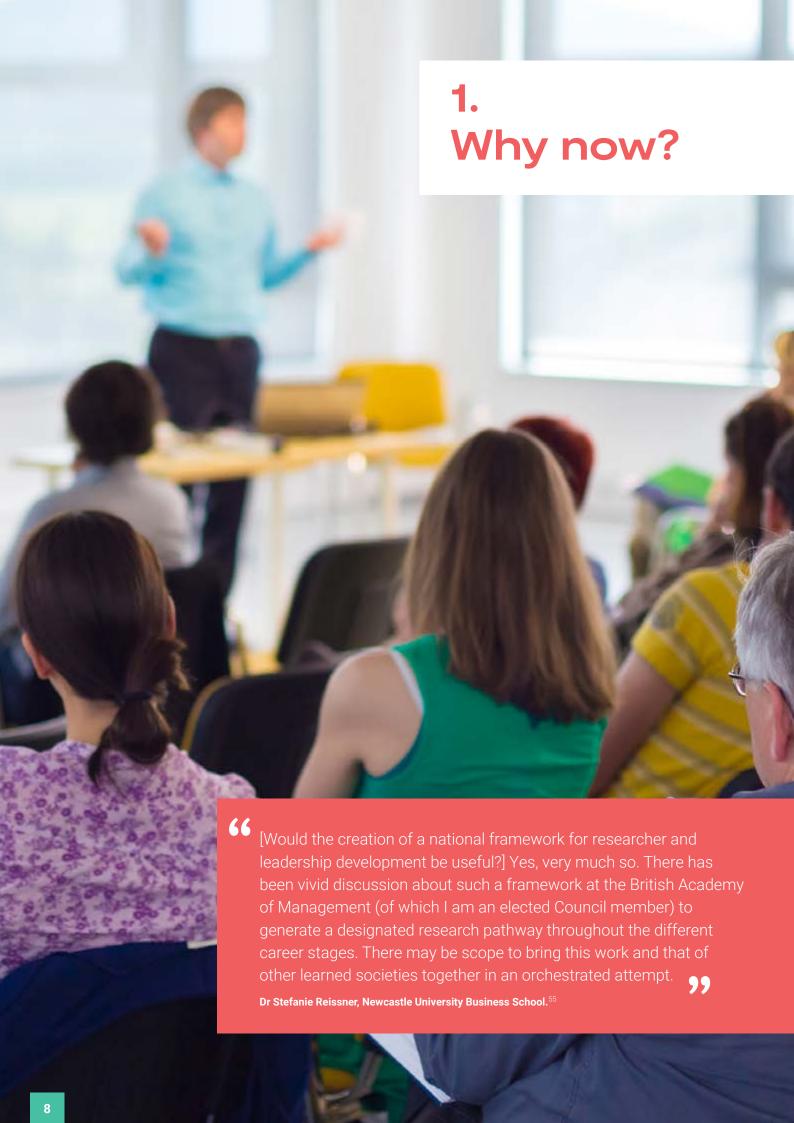
A second and related opportunity emerges in the potential this agenda offers in terms of demonstrating the basic value of the social sciences across the full scientific spectrum. This includes the use of social science techniques and insights to inform and underpin the talent-focused and leadership-related agendas adopted by other councils.

Thirdly, to increase the general visibility of the social sciences, particularly in relation to demonstrating its ability to adopt a fresh, distinctive and pioneering leadership agenda. And finally to unlock and utilise talents and skills that may have been over-looked or under-appreciated in the past due to the existence of embedded inequalities which a focus on different talents or contributions to research leadership may play some role in addressing. In order to achieve this potential this report adopts a system-based approach that focuses attention not just on the development of leadership skills at the individual level but also on the need to change the institutional and incentive structures within which those individuals operate. This level of change is required in order to bring about improvements at a deeper cultural level, improvements which clearly impact beyond the social science community. Having examined the existing evidence base and consulted widely within and beyond academe, this report makes twelve interrelated recommendations.

- **1. 'Scale-Up Ambition'** Through a process of co-production and co-design, a new approach should be established in order to foster a more strategic, inclusive and ambitious approach to research leadership.
- **2. 'Create Core Capacity'** Driving forward this agenda, catalysing action and sustaining momentum demands the creation of a central unit to co-ordinate activities, liaise with partners and distribute resources.
- **3. 'Understand What Works'** A fresh programme of research should be commissioned to produce a far more sophisticated understanding of the dynamics of research leadership than is currently available.
- **4. 'Acknowledge Excellence'** Nurturing talent and supporting future generations of researchers very often goes unrewarded. A small number of 'ESRC Celebrating Research Leadership' prizes should be established.
- **5. 'Facilitate Mobility'** A 'Discipline Hopping' funding scheme and 'Research Re-Entry Fellowships' (or 'Returnships') should be piloted in order to facilitate inter-disciplinary and inter-sectoral mobility.
- **6. 'Manage the Middle'** Mid-career researchers are often a 'left behind' constituency when it comes to nurturing talent. A new skills-focused 'cluster competition' should be established for researchers at this level.
- **7. 'Push the Top'** Nurturing talent and supporting people to reach their full potential is as important for professors as for post-docs. Establishing a new cross-council Senior Research Leadership Programme should be considered.
- **8. 'Embed EDI'** A future-focused talent emphasis creates an opportunity to promote equality, diversity and inclusion. A number of prestigious Laureate Professorial Fellows should be established to recognise excellence and drive change.
- **9. 'Reflect Upon REF'** Urgent consideration needs to be given to the manner in which the REF framework might more closely align to support inter-disciplinarity and the mobility of people, ideas and talent.
- **10. 'Reconfigure Resources'** The vast majority of ESRC funding is distributed on a highly individualised basis with little explicit thought to the cultivation of collaborative skills or the creation of innovative teams. This should be reviewed.
- **11. 'Reassess 'What Counts"** Reward structures within ROs generally do little to incentivise research leadership. There is an urgent need to ensure that they are better able to assess contributions to collaborative ventures.
- **12. 'Mentorship Matters'** The existence (or not) of a supportive and engaged mentor is a critical factor in explaining successful research careers. However, huge inconsistencies exist in mentoring arrangements and need to be addressed.

Taken together, these twelve recommendations combine to offer a 'paradigm shift' in how research leadership is viewed, cultivated, incentivised and sustained within the social sciences. It focuses on the full professional journey in ways that facilitate different forms of mobility in an explicitly inclusive manner. Delivering this new approach will take time, sustained investment and the commitment of a number of organisations; but it would also offer a relatively low-cost but high-gain strategy for not only maximising the value and impact of existing investments but also locating the ESRC at the cutting-edge of talent management discussions both within the UK and internationally. It would, put very simply, help ensure the social sciences really are 'fit for the future'.





The ESRC's Strategic Plan 2015 contained a commitment to developing capability for social science research leadership.1 This reflected a growing awareness that fostering research and innovation, as well as maximising the value of existing investments and building critical new research-related partnerships, was likely to require a new approach to talent management. This agenda – and the value of the ESRC's foresight – was underlined in the main findings of the independent review of the UK research councils that was led by Sir Paul Nurse and published in November 2015. Put simply, the Nurse Report emphasised that a successful research endeavour was increasingly dependent on two elements: the first related to institutional structures and the need to ensure that these facilitated the smooth movement of ideas, skills and people; the second in relation to research talent and the need to nurture scholars who combine a number of qualities and can operate in a number of contexts.

Issues relating to research leadership arose in the 2016 Review of Support for Early Career Researchers² and the 2017 Skills Review that served to refocus attention on this agenda.³ In June 2018 Professor Matthew Flinders (University of Sheffield) was appointed to examine the existing approach to building research leadership skills and competencies and provide recommendations for how ESRC should seek to develop capability for social science research leadership. Over the last 18 months Professor Flinders has established a wide-ranging evidence base on this topic through a combination of extensive research and broad engagement with the social science research community (within and beyond academe). What this evidence has revealed is less of a research leadership challenge and arguably more of a research leadership opportunity.

While this review has been underway a series of linked agendas and commitments have been made that further underline the timeliness and potential significance of this report. A large number of documents and reports recently published have highlighted the changing nature

of work, its impact on various professions and the need for a 'skills shift' in many sectors. The ten year review of the Concordat to Support the Career Development of Researchers was launched at exactly the same time that this review into research leadership was announced and emphasised the collective responsibility of research organisations to work together to support researchers to think about careers both within and beyond academe. This is a particular issue for the social sciences where a significant proportion of those completing PhDs will not remain within academe but may well forge highly successful careers in research-related roles in other sectors.

The multiplicity of potential career options post-PhD further signals the need to nurture self-leadership and self-awareness, plus a recognition of the portability of skills gained through a doctorate. It also demands that consideration is given to how those who have developed vital skills, talents and insights beyond academe might at some point in the future move back into academe or participate in new research partnerships. It is therefore not surprising that the UKRI Delivery Plan 2019 was published with an explicit commitment to investing in talent, people and research infrastructure. Growing, developing and retaining the skills base is a key element of the new UKRI agenda to the extent that it has called for 'a paradigm shift in supporting careers that seamlessly span sectors and increase mobility'.5

The ESRC has committed itself to playing a leading role in delivering this 'paradigm shift' and its Delivery Plan 2019 demonstrated a sophisticated grasp of this new agenda through a focus on talent, methods and leadership as a 'fundamental pillar' underpinning a world class (social) science base. This report is intended to inform this agenda. It makes a number of recommendations that are intended to represent a radical shift in the professionalism, capacity and ambition of the social sciences.



The British Academy, as the national body for the humanities and social sciences, warmly welcomes ESRC's 'Fit for the Future' project led by Professor Matthew Flinders. We agree that enhancing our capacity for research leadership is vital to ensuring that the UK remains a world leader in research and innovation. The research landscape is changing, and will continue to evolve, and we therefore need to ensure that we equip our researchers with the all the skills they need to capitalise on these new opportunities. The societal, economic and technological challenges we face are increasingly complex, requiring insights from multiple disciplines to solve; with welcome increased investment from government, we should have more researchers than ever in the ecosystem; and traditional boundaries between academic institutions and professional environments are becoming more fluid. These factors and many others highlight why researchers of the future will need to be strong, effective leaders.

British Academy, Consultation Response, 2019.

The Academy of Social Sciences welcomes the ESRC's initialtive on research leadership. The 'Evidence Review' ...is excellent. It makes a particular contribution by examining current practice, initiatives and gaps, and outlining a clear analytic framework for the various dimensions of research leadership. It includes a sophisticated discussion of the incentives (or lack of them) not only to encourage but proactively to shape a new generation of social science leaders.

The Academy of Social Sciences, Consultation Response, 2019.



This review adopted a three-stage approach. ⁶The first stage revolved around a systematic review of the existing research base and revealed the almost complete absence of research, data or evidence on the specific topic of research leadership in higher education. When reflecting upon what effective research leadership might look like in different contexts and at different career stages Linda Evans observes correctly that 'in one sense such leaders are inadequately equipped, for the knowledge base available to them is extremely limited'. 7 Jacky Lumby echoes this point with the conclusion that '[e]vidence of the impact of leadership and different forms of leadership on the extent and quality of research ... is slim'.8 The analysis of over five hundred books, articles and reports did, however, reveal the existence of some small pockets of relevant research and these were published as a selfstanding evidence review in June 2019.9

The second stage of the methodology involved a national consultation which sought to evaluate the main findings of the evidence review, identify additional sources of relevant information and to stimulate debate and discussion around a small number of potential ideas which, taken together, could form the basis of a new approach to building and supporting research leadership capacity. The consultation stage ran from June-October 2019 and was supported through the publication of a series of linked articles and blog posts in a number of major mass-access platforms (Times Higher, Research Fortnight, WONKHE, etc.).

The response exceeded all expectations in two main ways: firstly, well over a hundred responses were received from a wide range of research organisations, learned societies, private and public sector research-users, training providers and individuals (see Appendix A); secondly, it revealed the existence of a large number of organisations that were also seeking to develop research-related leadership capacities and who were keen to learn from this review and potentially develop innovative new

partnerships (e.g. Office for Statistics Regulation, National Leadership Centre, Major Projects Leadership Academy, AcademiWales, Local Government Leadership Academy, Scottish Policy and Research Exchange, NHS Leadership Academy etc.). Of the formal consultation responses over ninety-five percent agreed that: (1) the evidence review represented an accurate account of the existing knowledge base; (2) that a research leadership challenge existed for the social sciences; and (3) that, in principle, an ambitious new approach was needed.¹¹

In order to build-upon this positive engagement and to cultivate a national conversation the third phase of this project collected further evidence and insights through a programme of ten institutional visits that were held across the UK. The aim of these visits was to allow members of the review team to engage in face-to-face discussions with a diverse range of researchers (different disciplines, career stages, operating contexts, etc.), research support staff and research-users.

Visits were hosted by the University of Bristol, Cardiff University, Loughborough University, University of Leicester, University of Liverpool, King's College, London, Institute for Fiscal Studies, University of Edinburgh, the Scottish Crucible, and the University of Leeds. Each visit was usually divided into three separate focus groups that engaged with: (1) early career researchers (PhD and post-doc); (2) mid-career and senior researchers; and (3) with senior university office holders and professional research support staff. In total over 25 focus groups were held that allowed over 250 people to feed their thoughts and ideas directly into the review process. Taken together these three stages have produced possibly the most extensive and detailed investigation into the specific issue of research leadership ever undertaken. The review team would like to thank all the individuals and organisations that submitted evidence to this review and particularly to the institutions that hosted visits.

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We strongly support consideration of research leadership. Currently most training considers managerial and organisational leadership, and research leadership is not addressed.

University of Bristol, Consultation Response, 2019.

Thank you for this absolutely excellent review and proposal. It is clear, concise and valuable. **Prof. Lucie Cluver, University of Oxford.**

We agree that the social sciences face research leadership challenges of the kind described in this consultation document, and are pleased to see the ESRC focusing seriously on the issues surrounding this... The need for advanced leadership skills of the kind outlined in this document is something new for many social science researchers: many of us need to start from the ground up, learning what to others might seem very basic (as opposed to advanced) things.

London School of Economics, Consultation Response, 2019.

This is a very timely consultation and raises important issues. Developing and encouraging research leadership across the breadth of social sciences will enable expertise across disciplines to be harnessed for complex projects. Constructing a project of this kind would be challenging but the benefits are potentially very large.

Imperial College London, Consultation Response, 2019.



Research leadership is a complex concept. There is no 'one-size-fits-all' model and it is not a topic of common discussion within academe, in general, or within the social sciences, in particular. Even the most basic attempts to define the concept are absent from the scholarly and professional literature. Different disciplines will have their own particular understandings of what 'effective' or 'good' leadership looks like vis-à-vis research, the tenets of which will generally be passed down through tacit knowledge, institutional relationships and cultural mores. The terms 'research' and 'leadership' are also not the most obvious bedfellows in the sense that academics generally tend to instinctively defend their intellectual autonomy and professional freedom from what are automatically perceived to be the topdown, restrictive and generally bureaucratic structures of anything related to 'leadership'. It is therefore possibly not surprising that our understanding 'of research and research performance remains largely uncharted territory'12 and in relation to research leadership in particular the existing knowledge base has been described as 'relatively emaciated'. 13 A basic function of this review has therefore involved an attempt to focus

attention on the concept of research leadership by curating wide-ranging conversations on the topic. These conversations have been critical. They have revealed the existence of significant enthusiasm amongst social scientists, professional support staff, learned societies and research-users for building capacity in an inclusive and systematic manner that runs throughout the full professional journey, from pre-doc to distinguished professor. There is widespread recognition that the changing research funding landscape presents a leadership challenge that must be addressed through positive and strategic engagement. Moreover, these conversations have also demonstrated a professional appetite for thinking innovatively and ambitiously about supporting non-traditional career structures, about how we facilitate forms of mobility in ways that challenge and inspire researchers, and about how we define and nurture talent. More specifically these conversations with the social science research community (broadly defined) have helped to clarify the core essence and meaning of research leadership to the extent that it is possible to offer a clear and concise definition of what research leadership is. See box below.

Research leadership

Noun.

- **1.** The activity of supporting and facilitating the production of research in an inclusive manner that maximises the scientific quality and social impact(s) of that endeavour.
- 2. Relates to both individual development (self-leadership) but more commonly to the contribution of an individual to supporting and nurturing the research careers of others.
- **3.** May refer to activities in relation to a specific project or programme of research, or to broader ambassadorial roles within research funding organisations, learned societies or academies.
- **4.** Research leadership occurs in a number organisational and professional contexts and is in no way restricted to academe.

This definition is not perfect, it is open to future challenge and refinement, but it does put down some markers and reference points that have themselves emerged out of the extensive and wide-ranging consultation and engagement processes underpinning this review. This definition has been used to inform and underpin the remainder of this report.

Three brief points help explore and explain this definition.

First and foremost, this definition is not focused on 'heroic' individual leaders. It seeks to emphasise the collaborative nature of research and the likely existence of numerous leadership roles within any project. It is therefore possible to fulfil a leadership role without formally being 'the leader' which resonates with existing theories of 'leading from the back' with its emphasis on nurturing, facilitating and supporting others. Secondly, all forms of research leadership –from supervising

PhD researchers to directing a research institute or helping to lead a funding body - involve some element of management or administration. At the same time, research leadership is about far more than project management or administrative efficiency. It includes a capacity to enthuse, ignite and sustain an intellectual vision that is inclusive, flexible and open to challenge. It also involves an ability to take that vision beyond academe in order to demonstrate the social relevance of that research, and therefore why the social sciences matter. Research leadership is therefore increasingly tied to notions of innovation, entrepreneurship and ambassadorial skills that research suggests few social scientists are encouraged to develop within the existing academic career framework. When thinking about what research leadership means at different career stages it is therefore important to consider and ensure how appropriate and engaging support frameworks can exist (see Table 1, overleaf).

Table 1. The Evolution of Research Leadership Skills and Experience

PHASE	Key Question	Leadership Emphasis	Talents & Skills (Indicative Examples)
Phase 1 Doctoral	se 1 How do I Largely		 Awareness of broader professional environment and shifting research landscape. Regular engagement and interaction with other disciplines and research-users. Opportunity to gain experience in research-related but non-academic environment. Understanding of professional opportunities beyond academe. Ability to assess and manage risks, and learn from failure.
Phase 2 Post-Doc	How do I gain experience in relation to research leadership and assess success? [HARVESTING TALENT]	Leadership within small research groups (including supervision of pre/doc students) while developing an independent research profile.	 Willingness to contribute to small team-based projects or to the creation of new research platforms or innovative 'docking points' with research-users. Capacity to operate in an inter-disciplinary context and/or utilise insights from other disciplines. Appreciation of different research cultures within and beyond academe. Ability to offer training or professional support to peers, PhD students or research-users. Awareness of the challenges and opportunities of co-design and co-production.
Phase 3 University Scientist [Lecturer/ Senior Lecturer]	How do I develop my experience in order to be able to lead larger and/or more complex projects/ build innovative collaborations? [MID-CAREER MOMENTUM]	Leadership role within research projects, networks, collaborations, etc. or centres, mentorship. Abilities in relation to knowledge mobilisation and impact. Project and network management skills (finance, staff, etc.).	utilise insights from other disciplines. 3. Appreciation of different research cultures within and beyond academe. 4. Ability to offer training or professional support to peers, PhD students or research-users. 5. Awareness of the challenges and opportunities of co-design and co-production. 1. Capacity to create and promote a confident and inclusive research vision. 2. Ability to undertake project management responsibilities in key areas, including the management of staff. 3. Cultural and emotional intelligence derived through training, experience and inter-sectoral mobility. 4. Understanding of different leadership styles and the need for adaptation in different contexts. 5. Commitment to nurturing 'future leaders' through formal and informal mentorship, and the facilitation of/encouragement towards new skills-based opportunities.
Phase 4 Professor	How do I excel in terms of demonstrating research leadership, especially in relation to nurturing future generations, building research infrastructure and shaping the agenda? [HIGH-LEVEL AMBITION]	Leadership role within large and complex projects, mentorship to junior colleagues. Proven project and network management skills. Possibly leadership in relation to building (inter) national capacity, influencing policy, shaping debates, horizon-scanning and/or playing an ambassadorial role.	 Proven capacity in relation to complex project management. Experience of coping with crises and/or potential repurposing. Proficiency in relation to strategic coalition building and advocacy. Extensive media management and public engagement experience. Familiarity of research leadership challenges at the (inter) national level and experience of working within complex networks/politically salient contexts.

Finally, this report is intended to support the full social science community or what is more commonly now described as the research 'ecosystem'. It therefore seeks to build capacity in relation to research leadership for the benefit not just of those individuals or institutions that have already been identified as 'future leaders' or leading 'centres of excellence' in specific disciplines or sub-fields. The great danger of any talent management system is that it risks 'locking-out' individuals at a fairly early stage in their career and creating significant barriers that can make it very difficult to identify and embrace 'lost leaders' later in their career. This is a critical point.

One of the major contributions of the social sciences during the last century has been to reveal the existence of structurally embedded patterns of inequality in relation to both reward and opportunity. These insights are just as relevant within academe as they are within society more broadly – which is why a focus on equality,

diversity and inclusion must be at the heart of any discussion regarding research leadership and talent management. Addressing these issues creates an important opportunity for the social sciences not just in terms of recognising and drawing-upon a wider range of talents within its own disciplines, but also in terms of utilising social science methods, approaches and insights to support, advise and define the talent and leadership agenda right across the UK science base.

With this point in mind, however, to what extent is there anything that might be seen as a specific challenge for the social sciences as opposed to a generic challenge that is common across all fields? The main finding of this review is that although the definition set out above may well have a generic applicability there is a very specific research leadership challenge facing the social sciences. This challenge forms the focus of the next section.

66 Professor Flinders' evidence review

clearly depicts the challenges contributing

to the current lack of researcher and

research leadership development in the social sciences. It also rightly highlights that 'embedded structural inequalities' compound these challenges for many members of our community. British Assoc. of Management, Consultation Response, 2019.



The research leadership challenge revolves around the issue of alignment. The research funding landscape is changing in ways that create significant opportunities for the social sciences. A core element of this shift is the increasing focus on investment in projects that exhibit the following characteristics: they are large, ambitious and complex; they are inter-disciplinary in design, inter-sectoral in nature and international in scope; they are 'challenge-orientated' or 'mission-driven' and involve close engagement with potential researchusers; they combine a dual focus on knowledge-creation and knowledge-utilisation; and they may involve a range of funders and participating (academic and non-academic) institutions. Major research funding initiatives, such as the Global Challenges Fund, Industrial Strategy Challenge Fund, etc. were widely interpreted by respondents to this review as 'changing the social science landscape fundamentally' with major implications in terms of thinking about nurturing and harvesting talent.

Research investments have not simply grown in terms of scale but also in terms of complexity with implications for thinking about leadership that are only now beginning to emerge as researchers are increasingly expected to not only manage the logistics of dealing with networks of academic and non-academic participants, but also to work with partners that may well be based in countries where the research culture and infrastructure is very different. The emergence of a clear emphasis on what is variously termed 'collaborative research' or 'team science' therefore raises distinct challenges for the social science community in the UK.

The challenge for the social sciences is that the emergent research environment, both nationally and internationally, is increasingly demanding skills and talents that have traditionally not been facilitated, incentivised and rewarded. The evidence for this

statement was set out at length in the published review document, corroborated via the national consultation process and further verified during institutional visits. This evidence base can be summarised in ten points (see Box 1, overleaf) some of these are specific to the social sciences, whilst some are applicable across disciplines.

This challenge, moreover, is potentially exacerbated given the UK's current uncertain relationship with the European Union and therefore with the European Research Council (ERC). Not only has the ERC been a significant funder of social science in the UK, it has also promoted a strong focus on talent and skills alongside an emphasis on collaborative research.

Nevertheless and as a number of international benchmarking reviews have attested, the UK is home to a genuinely world-class community of social scientists.14 It is therefore well-placed in terms of possessing a large number of scholars with experience of successfully contributing to the leadership of research projects, programmes, centres, institutes or new forms of research infrastructure, such as the Doctoral Training Partnerships or Nexus Networks.

The challenge is to build upon these foundations in order to ensure that the existing institutional structures and disciplinary cultures are aware of - and more tightly aligned to – the demands of the emerging research funding landscape in the UK and internationally. What this review has revealed is a basic challenge between the skills, talents and competencies that are likely to define the existence of a flourishing research environment in the future, on the one hand, and the types of skills, talents and competencies that existing institutional structures and incentive frameworks are currently cultivating, on the other. This tension or de-alignment is illustrated in Figure 1 (below).

Past-Current Talent Emphasis

Largely defined by a hierarchical apprenticeship model and 'learning on the job' with institutional structures, incentive frameworks and audit metrics that implicitly tend to reward 'lone scholars' and/or monodisciplinary work.

Emphasis on the 'me' not 'we'

Future-Focused Talent Emphasis Collaborative leadership skills

emphasising the capacity to work in teams and across traditional disciplinary, organisational and professional boundaries. Potential research-users and professional research support staff form key parts of 'the team'.

Emphasis on the 'we' not 'me'

Figure 1. Closing the Gap: The Core of the Research Leadership Challenge

Figure 1 is clearly an attempt to simplify a complex set of issues. However, at a broad level it accurately reflects the existence of a significant research leadership challenge for the social sciences. An awareness of this challenge was a consistent and central feature of the evidence submitted to the consultation and of concerns expressed during institutional visits.

Box 1. Evidential Basis Underpinning the Research Leadership Challenge

- It is possible to identify a dominant mode of research leadership in the social sciences that is generally referred to as 'the apprenticeship model' or 'learning on the job'. This, in itself, reflects the extent to which the 'underlying culture of academic research remains arguably rooted in the independent scientist model of the nineteenth century'.¹⁵
- The existing support structures to promote and nurture research leadership are highly fragmented, underdeveloped and generally not 'fit for purpose'. They also tend to focus on early career researchers to the detriment of mid-career and senior staff.¹⁶ Leadership-related provision and support has been enhanced in relation to teaching and university management but generally not in relation to research.¹⁷
- Mid-career and senior academics are commonly expected to assume research leadership responsibilities with very little or no formal training. Skills are developed through trial-and-error with the evidence suggesting that the most common elements associated with a successful research career are luck and the existence of a supportive mentor.¹⁸
- An emphasis on luck that is heavily dependant on the goodwill of colleagues in an increasingly pressured professional environment is not sustainable. Extensive evidence suggests that researchers very often feel isolated, unsupported and vulnerable. This risks accentuating the already significant challenges regarding mental health and wellbeing.²⁰
- Data from the Principal Investigators and Research Leaders Survey suggests that only a quarter of research leaders feel fully confident in supervising researchers or providing career advice. Half say they would benefit from training or support in these areas. There is an urgent need for institutions to find ways to develop these competencies further.²¹
- A related evidence base also suggests that the existing institutional frameworks, performance audits and dominant disciplinary cultures very often tend to 'lock-in' a highly individualised and mono-disciplinary mode of scholarship which offers social scientists few incentives for taking on research leadership roles or contributing to team-based projects.²²
- The most difficult societal challenges are complex and cross-cutting, so more effective collaboration between researchers and research-users is a source of considerable public value. However, networks between researchers are often underdeveloped and there is demand for mechanisms that allow researchers to support each other, share practice, and learn from experience.²³
- During the last year a number of projects and programmes have been launched within and beyond academe in an attempt to facilitating collaborative research leadership. These provide potential partners and pilots for a new approach and also demonstrate the transformative potential of re-engineering national level frameworks to unlock innovation.²⁴
- Realising this transformative potential will demand an explicit and concerted attempt to engage with longstanding issues in relation to equality, diversity and inclusion as a core component of any new approach to nurturing research leadership. A focus on EDI provides an opportunity to draw upon a wide array of increasingly critical talents and skills.²⁵
- A very strong appetite exists for a new approach to thinking about talent management and research leadership. It is generally accepted that the traditional emphasis on 'learning on the job' must be supported with new opportunities in relation to training, support and mobility. This enthusiasm is especially strong among early career researchers.

With this evidence base in mind, the research leadership challenge can also be viewed as a significant research leadership opportunity for the social sciences in the sense that a focus on leadership can improve training and support structures while also helping to develop a vision for a more strategic, open, diverse and inclusive research environment. Research leadership development also provides an opportunity for the social sciences to utilise disciplinary insights in order to support and partner similar objectives within and beyond UKRI. The next section draws upon the evidence and insights assembled by this review to suggest how this might be achieved.



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The current system flows against just about everything the emerging agendas seem to be demanding... this may have been the case for some time but the tensions are becoming increasingly striking.

Early Career Researcher, University of Edinburgh.

The organic model of research leadership that thinks the cream will rise to the top 'as if by magic' is no longer enough. There needs to be at least some flexible support frameworks in place and clear incentives. There also needs to be a sharper awareness of inequalities within higher education and how they affect who is viewed as suitable for a leadership role.

Mid-Career Researcher, University of Bristol.

It is clear that there are no professional incentives or recognition of the time invested, in either developing colleagues around you or investing the time in the relationships and networks needed to lead research and research teams... Institutional culture, recruitment, reward and recognition mechanisms, and research evaluation exercises are pivotal in this regard.

University of Oxford, Consultation Response, 2019.

'I really welcome the ESRC initiative on research leadership. It is a massive gap in the social sciences, as the circulated document highlights. Much, as you note, is to do with disciplinary cultures and academic incentives, which encourage (often extreme) individualism, and this is especially problematic in the social sciences.

Prof. Ian Scoones, Co-Director ESRC STEPS Centre, University of Sussex.



The main conclusion of the previous section was that the social sciences face a research leadership challenge due to the manner in which dominant cultures and institutional structures tend to reward a highly individualised approach to scholarship, and very few social scientists have experience of working in large inter-disciplinary teams or in research-related environments beyond academe. Levels of mobility (people, ideas and talent) generally remain low and

under-incentivised. Yet the emerging national and international research funding landscape is increasingly demanding a broader range of talents and skills than have traditionally been cultivated and incentivised within the social sciences. The main conclusion of this review is that a rare opportunity exists for the social sciences to adopt a bold new approach that combines ambition and agility with the intention of becoming an international beacon of best practice in this area.

Table 2. A New Approach to Nurturing Research Leadership in the Social Sciences

		Current A	pproach	New Approach						
	IDEAL LEADERSHIP EMPHASIS	ESRC FUNDING STREAM	LEADERSHIP LENS [Largely Individual- based, fragmented, exclusive]	LEADERSHIP LENS [Collaborative Emphasis, strategic, inclusive]	SPINE	NEW FUNDING STREAMS/ INNOVATIONS		EDI AWARE	FOCUS ON MOBILITY	BIAS TO ACTION
Phase 1 Doctoral	Largely self-leadership but also leadership within research groups, conferences, networks and publications.	Doctoral Studentships	Developing ²⁶ⁱ	Strong	Research Leadership Pathway I		Cohort development, Digital Resources, Peer-to-Peer Support, Positive Career Guidance, Default Mobility	V	V	V
Phase 2 Post-Doc	Leadership within small research groups (including supervision of pre/doc students) while developing an independent research profile.	Post-Doctoral Fellowships (1 Year) Future Leaders/ New Investigators (usually 2 or 3 Years)	Weak ²⁷	Strong	Research Leadership Pathway II	Co-ordinated by n	Cohort development, Crucible Effect, Digital Resources, Peer-to-Peer Support, Positive Career Guidance, External Mentors	V	V	V
Phase 3 (Senior) Lecturer	Leadership role within research projects, networks, collaborations, etc. or centres, mentorship. Abilities in relation to knowledge mobilisation and impact. Project and network management skills (finance, staff, etc.).	Standard Grants (responsive mode or thematic).	Weak ²⁸	Strong	Research Leadership Pathway III	Co-ordinated by new Research Leadership Develop	Crucible Effect, Enhanced Mentoring, Mid-Career Funding Scheme, 'Discipline-Hopping' Scheme, Centre Director Leadership Course, Research Re-Entry Scheme	~	V	~
Phase 4 Professor	Leadership role within large and complex projects, mentorship to junior colleagues. Proven project and network management skills. Possibly leadership in relation to building (inter)national capacity, influencing policy, shaping debates, horizonscanning and/or playing an ambassadorial role.	Research Centres, Major Investments, Professorial Fellows	Weak ²⁹	Strong	Senior Research Leaders Programme	pment Unit	New Senior Leaders Research Programme, Peer-to-Peer Support, Research Re-Entry Scheme, Senior Leadership College, Professorial Fellows Scheme.	~	V	~

Before making any recommendations it is important to be clear about what this 'new approach' is seeking to achieve, and particularly how the skills and talents relating to research leadership are likely to change and evolve as an individual progresses in his or her research career (see Table 1, above). The emphasis of this report is not therefore on research leadership per se but on cultivating and nurturing a specific approach that is designed to complement the increasing shift towards 'collaborative research' or 'team science' with an explicit emphasis on mobility. It is also aware of the fact that not all social scientists will want to assume research leadership roles. The critical element, however, is that those researchers who do have the skills, aptitude and enthusiasm required to fulfil a leadership role have access to appropriate and professional support structures and a recognition of the need to work within and across teams. At the moment, as the evidence review and consultation revealed, the structures to support and incentivise research leadership are fragmented, under-developed and unbalanced. The aim of this section is therefore to outline what a new

approach might look like and it achieves this by drawingupon the evidence base that has been collected. This approach seeks to reflect the inclusive, collegial and collaborative definition of research leadership that emerged out of the consultation, by focusing on both institutional structures and individual behaviour that are necessary to nurture positive cultural change.³⁰ The main features of the 'new approach' this report seeks to recommend and how it differs from the current approach is set out in Table 2 (page 21).

This is a bold vision. It seeks to respond to UKRI's call for a 'paradigm shift' in thinking about research careers, research infrastructure and the research environment. Some of this vision will require ESRC to lead a response for the specific benefit of the social science community, other elements will require the need ESRC to champion issues at a UKRI level with a view to addressing system-wide challenges. Either way, there are some defining principles which have emerged from the evidence-base and which underlie this approach, these are shown below:

- 1. 'Efficiency and value for money' this principle seeks to maximise the value and return on existing investments. As the evidence review highlighted, many existing funding streams operate almost in isolation with very little focus on the exploration of potential synergies. A focus on research leadership therefore provides an opportunity to realise that potential and subsequently increase levels of efficiency through shared learning, best practice and forms of peer-to-peer support. This flows into the second underpinning principle.
- 2. Achieving a more integrated, responsive and balanced approach to talent management. The adoption of an approach that runs throughout the full professional journey, that embeds an explicit leadership lens at every stage and through all funding streams, which seeks to accommodate non-traditional career paths and that embraces the need to facilitate the mobility of people, ideas and talents.
- **3. Equality, diversity and inclusion** this principle is central to any attempt to broaden the talent base within the social sciences.
- **4.** The fourth principle underlines the manner in which in the future the ability to range across traditional **institutional, disciplinary and professional boundaries** is likely to define a successful research endeavour.
- **5.** The fifth and final principle emerged as a central theme throughout the focus groups and institutional visits and relates to a clear **bias towards action**. Irrespective of their discipline or career stage, researchers appear highly sceptical of the benefits of 'training' but extremely keen to participate in carefully crafted development opportunities that will help them acquire new skills in a variety of research-related environments.

Table 3 sets out the twelve recommended elements of a new approach to research leadership, each of which are described overleaf.

Table 3. Delivering a New Approach to Research Leadership

	Recommended Element	Career phase (see table 2)
Research Infrastructure	1. 'Scale-Up Ambition' – A new approach should be established in order to foster a more strategic, inclusive and ambition around research leadership.	All
	2. 'Create Core Capacity' – Driving forward this agenda, catalysing action and sustaining momentum demands the creation of a central unit to co-ordinate activities, liaise with partners and distribute resources.	All
	3. 'Understand What Works' – A fresh programme of research should be commissioned to produce a far more sophisticated understanding of the dynamics of research leadership than is currently available.	All
	4. 'Acknowledge Excellence' – Nurturing talent and supporting future generations of researchers very often goes unrewarded. A small number of 'ESRC Celebrating Research Leadership' prizes should be established.	All
	5. 'Facilitate Mobility' – A 'Discipline Hopping' funding scheme and 'Research Re-Entry Fellowships' (or 'Returnships') should be piloted in order to facilitate inter-disciplinary and inter-sectoral mobility.	2, 3, 4
Research Innovations	6. 'Manage the Middle' - Mid-career researchers are often a 'left behind' constituency when it comes to nurturing talent. A new skills-focused 'cluster competition' should be established for researchers at this level.	3
Research	7. 'Push the Top' – Nurturing talent and supporting people to reach their full potential is as important for professors as for post-docs. Establishing a new cross-council Senior Research Leadership Programme should be considered.	4
	8. 'Embrace EDI' – A future-focused talent emphasis creates an opportunity to promote equality, diversity and inclusion. A number of prestigious Laureate Professorial Fellows should be established to recognise excellence and drive change.	All
	9. 'Reflect Upon REF' – Urgent consideration needs to be given to the manner in which the REF framework might more closely align to support inter-disciplinarity and the mobility of people, ideas and talent.	All
Defining Principles	10. 'Reconfigure Resources' – The vast majority of ESRC funding is distributed on a highly individualised basis with little explicit thought to the cultivation of collaborative skills or the creation of innovative teams. This should be reviewed.	2, 3, 4
	11. Reassess 'What Counts" – Reward structures within ROs generally do little to incentivise research leadership. There is an urgent need to ensure that they are better able to assess contributions to collaborative ventures.	2, 3, 4
	12. 'Mentorship Matters' – The existence (or not) of a supportive and engaged mentor is a critical factor in explaining successful research careers. But huge inconsistencies exist in mentoring arrangements. This should be addressed.	All

Recommendation 1: 'Scale-Up Ambition'

The core recommendation arising from this review is that a new approach is needed to develop strategy, foster inclusion and grow ambition around research leadership. This should be co-produced and co-designed through engagement across and beyond the social science community, with the ESRC playing a catalysing and co-ordinating role. The aim of this new approach should be to: (1) 'add value' to existing organisational provision; (2) facilitate links and establish new 'docking points' that range across traditional professional, organisational and disciplinary boundaries in inclusive ways; and (3) drive cultural change by signalling and incentivising new approaches to skills development and talent management. The adoption of a systematic approach to cultivating talent should embed a more explicit 'leadership lens' throughout the full professional journey within academe while facilitating greater mobility in-and-out of higher education.

One of the striking findings of the consultation process was that a large number of researchers feel isolated and ill-prepared for the challenges of research leadership. This finding reflects a lack of support in terms of identifying the key skills and competences that are likely to be required and developed at different career stages. Although existing schemes, such as those provided by AdvanceHE and Vitae, were viewed as being useful, there was a strong sense that a far more ambitious, strategic and action-orientated approach was now needed if the social sciences were going to keep pace with emergent demands.

Tables 1 and 2 suggest that the 'four phase' approach (as set out in Table 1 and Table 2, above) provides the basis for the new approach, with a focus on supporting and nurturing researchers throughout their careers in ways

that are designed to help them navigate specific transition points. Drawing upon the existing research base and consultation findings, the new approach should focus upon *forging* higher levels of peer-to-peer support: (1) within each of these stages; (2) *between* these levels; and (3) *across* these levels in terms of collaborative activities with non-academic partners.

The harnessing of existing research leadership talent could, for example, be secured through the creation of a new 'leadership college' consisting of academics with significant experience of leading major investments or overseeing research programmes nationally or internationally. Members could fulfil a range of functions such as acting as mentors to first-time major grant holders, helping to develop new resources, supporting new leadership-related initiatives for researchers in phase 1 and 2, or identifying emerging skills-gaps. An annual conference for all ESRC funded PhD students and post-docs should also be established as a compulsory element of their training. With senior scholars and research-users providing a range of workshops, seminars and specialist presentations, this would provide a relatively low-cost way of forging new relationships, skills and insights, especially if it drewupon the success of recent Crucible-based events.31

This review therefore welcomes the fundamental review of the social science PhD announced in November 2019 and suggests: (1) that a collaborative element of some kind with a non-academic partner should gradually become the default expectation within all studentships; and (2) that the standard funding period of a studentship is increased to provide longer for students to develop their broader skills.



During my time as an early career researcher I often felt isolated – not in terms of understanding how to publish articles and collect data - but in terms of wider skills development. It was simply not clear to me what progression required other than writing more articles/books and gaining more citations. The management of research could do with more thought – what does it mean to manage research projects with multiple partners and RAs? What does it take to manage research impact and the deep, senior collaborative relationships with industry and government that are required for this? The impact element in particular is terra incognita so far as senior leadership development is concerned, despite the proliferation of 'how to' guides and courses for 'achieving' impact.

A national framework would be great, supported by practical and appropriate training and by localised networks, peer-to-peer support and mentoring.

Dr Layla Skinns, University of Sheffield.

Dr Matt Wood, University of Sheffield.

We agree that a focus on the entire pipeline and key transition points is key, and we applaud the suggestion that progression should be more 'transparent', allowing researchers to 'step up' or understand what is required to move into more senior research leadership roles. Providing researchers with some real, lived examples of different routes to and models of leadership, would be helpful, as would detailed work to identify barriers to and support mechanisms to enable transition, assuming the aim would be to attract a diverse audience of beneficiaries. These transition points need to be alert to gender, diversity, protected characteristics and career break issues.

University of Bristol, Consultation Response, 2019.

We would welcome the creation of a national framework for researcher and leadership development. We feel that provision specifically geared towards social scientists would be transformative in the social sciences having capacity and capability to lead on a greater proportion of the large and complex interdisciplinary research applications and projects.

University of Stirling, Consultation Response, 2019.

Recommendation 2: 'Create Core Capacity'

The existing evidence from ambitious and successful innovations regarding research leadership, such as the Clore Leadership Programme or the Wellcome Trust's Senior Research Leadership Programme, is that developing a new approach to supporting and nurturing research leadership necessitates the creation of core capacity in order to drive the agenda forward and to sustain momentum. It is therefore recommended that the ESRC establish a new Research Leadership Development Unit with sufficient resources to oversee

the day-to-day development of a bold new approach. Capacity should also be bolstered through the appointment of a 'rotator' (i.e. a senior academic with extensive research leadership experience, preferably in an inter-disciplinary context, appointed on a part-time basis) to support and advise the new unit. The rotator would also fulfil an important ambassadorial role for the new framework.

Shown below, the role of the new unit could include:

- Acting as a repository of effective best practice about (research) leadership programmes;
- Utilising that knowledge to draft a new research leadership strategy for the social sciences;
- Liaising with ROs, academies, learned societies, other funders and user-communities to share best practice;
- Co-ordinating the ESRC's work in this area with that of UKRI, other councils and external funders;
- Identifying new opportunities, evaluating progress and maximising inclusivity;
- Commissioning research, case studies or pilot initiatives as required, especially in relation to EDI;
- Expand the use of sophisticated and longer-term evaluation of EDI interventions to determine interventions' effectiveness across different contexts;
- Consider ways to encourage, recognise and reward organisations leading on EDI vis-à-vis research leadership;
- Identifying potential delivery partners for elements of the framework;
- Horizon-scanning in terms of emerging research leadership challenges and opportunities;
- Launching, overseeing and evaluating the new approach; and
- Promoting the ESRC's work in this area at the international level.

It is also vital that the ESRC develops a self-reflective capacity to look across its own funding portfolio on an ongoing basis in order to assess 'what works' and where broader lesson-learning or skills-sharing opportunities exist. This is particularly true in relation to successful boundary-spanning investments such as 'The UK in a Changing Europe Initiative' where the demands of research leadership and talent management may well offer distinctive insights and skills-related opportunities for learning and development across the social science community. All post-funding evaluations should include an explicit 'leadership learning lens'.

It is likely that a new unit would need to operate as a 'hub-and-spoke' model whereby a range of organisations,

user-groups, specialist bodies and institutions will make some form of contribution. In this context it is vital that the unit (hub) maintains an explicit and constant focus on ensuring inclusivity. This is a critical point. Wherever possible and utilising digital technology, insights and opportunities should be made available to all researchers and organisations. NESTA's 'Crucible in a Box' activities ran from 2005-2009 and provide an example of packaging a creative, dynamic and interdisciplinary leadership initiative in a form that was readily accessible to a vast range of institutions and communities at a low cost. ³² Capturing, sharing and disseminating best practice, in a variety of forms and utilising digital technology, must be a core element of the new unit's collaborative strategic focus.



[We] would welcome a centralised national-level unit of some kind (e.g. a Hub idea) that could provide training, advice and support on matters related to research leadership to organisations – be they academic or non-academic – that employ and/or collaborate with social scientists. London School of Economics, Consultation Response, 2019.

There is value in a sector-wide and multidisciplinary approach to researcher development and capacity and capability building. A national framework would need to be joined up, systematic and strategic. There is a risk with a physical 'hub' model that experience and capacity is concentrated in the institution and local region that is hosting it, rather than achieving a national framework.

The Open University, Consultation Response, 2019.

It is right that the ESRC are playing a leading role in thinking about these issues and should also play a role in developing a national framework and appropriate training. I wonder how these messages will be filtered down to Universities, though, and across the social sciences including to those engaged in social science research not funded by the ESRC.

Dr Layla Skinns, University of Sheffield.

I also support the idea of the creation of a new hub as a catalyst for driving change; it would be good to see more about 'change agents': who they could be and what their roles are. Another goal of the hub could be development and promotion of a clear narrative for a strong researcher and leadership development.

Natalya Sergeeva, UCL

Recommendation 3: 'Understand What Works'

'[F]ar too little is known about research leadership at present' Prof. Mel Bartley (UCL) argued in her consultation response 'let alone how to develop it'. The evidence review supported this point and revealed a major gap in relation to 'research on research leadership', in general, and 'what works' in relation to the leadership of complex collaborative projects, in particular. A significant body of work does exist on what might be termed 'managerial' or 'organisational' leadership within higher education but Jacky Lumby is correct to conclude that '[e]vidence of the impact of leadership and different forms of leadership on the extent and quality of research ... is slim'.33 It is therefore vital that the design and implementation of any new approach to research leadership is itself based upon solid research foundations, and certainly a far more extensive and detailed analysis than could be provided by this review. The ESRC, working closely with UKRI, should commission a series of rapid response grants that seek to generate a far more sophisticated understanding of the dynamics of research leadership than is currently available.

This might, for example, include case studies of both success and failure in collaborative research environments, a focus on the cultivation of leadership skills in non-academic research environments, a detailed and comparative review of research leadership through an EDI lens, an emphasis on how research leadership skills are (or are not) nurtured beyond the social sciences, developing our understanding of the effects of REF and other audit frameworks, a study of the relationships between forms of research leadership and concerns regarding mental health and wellbeing, and an analysis of related leadership development initiatives across the public sector and the scope of potential partnerships.

There is also an urgent need to commission research on two specific dimensions of research leadership. The first relates to the challenges of fulfilling a leadership role as an inter-disciplinary project. As Catherine Lyall's Being an Inter-Disciplinary Academic (2019) illustrates, there are still many challenges and obstacles that face the scholar who seeks to work across traditional

disciplinary boundaries. Understanding 'what works' visà-vis research leadership in an inter-disciplinary context and how potential impediments or hurdles have been removed or successfully navigated is a priority topic. A second priority topic, although one that has received far less attention, focuses not on researchers or researchusers but on the role of professional research support staff.34 As projects have become larger and more complex, and as expectations regarding dissemination and impact have also increased, then so too has the role and contribution of professional research support staff also increased. It is often these 'para-academics' who assume leadership responsibilities for specific roles (such as financial controls, data management, etc.) in order to alleviate the pressure on academic team members. Many have also worked beyond academe and therefore bring new skills, ideas and perspectives to the project and therefore form a component of inter-sectoral mobility. Not only is it therefore critical that any new approach [Rec. 1, above] is designed to include a focus on supporting professional research support staff but also that research is undertaken to fully understand the role and responsibilities of these 'third space' staff within successful projects.

This commitment to 'what works' also reflects the importance of understanding the impact of these leadership investments, both in the immediate, and over time. Developing a long-term and sustainable evaluation framework which is informed by best practice will therefore be a key output arising from this recommendation. This will enable evaluation to be incorporated into the design of new interventions from the outset, and for appropriate data to be systematically gathered to inform the ongoing implementation of this new leadership approach. In many ways what this recommendation is calling for is transformative 'research-on-research', undertaken in partnership with key international platforms, in order to underpin and provide an evidence base for the 'paradigm' shift' in relation to research leadership that this review is attempting to promote.35

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I think it is very important, given the collaborative requirements of world-leading research, that we recognise the significance of the experience and expertise of research support professionals who work with academic researchers and ensure that they are also able to develop their leadership potential to the maximum.

Prof. John Flint, University of Sheffield.

Finally I think universities also need to pay more attention to the kinds of professional services roles (e.g. project management) that can support effective research leadership. One reason senior researchers feel overwhelmed and daunted by their new responsibilities is that they are not properly supported and spend enormous amounts of time doing work that does not require their academic expertise and which others could do better. Could any research leadership training also extend to professional staff and help all parties understand how academic/professional teams can best be constructed and operated?

Professor Ruth Lupton, University of Manchester.

Providing case studies from universities with differing social science programmes and grant portfolios may help us to better understand how the local environment shapes leadership capacity and development. Another approach would be to undertake additional analysis of research leadership success in other disciplines, in particular the 'team approach' employed in STEM subjects, in order to identify underlying characteristics of successful research leadership throughout the career journey which may be transferable to the social sciences.

University of Liverpool, Consultation Response, 2019.

We would like to see the development of leadership skills in academics combined with those for professional services staff. The ability of professional services staff to support, challenge and encourage academic staff at all career levels is important. Links might therefore also be made with ARMA and PraxisAuril and their training and development programmes.

University of Leicester, Consultation Response, 2019.

Recommendation 4: 'Acknowledge Excellence'

As already underlined, the UK's social science community is home to a large number of experienced research leaders. Recognising the existence of a shifting research funding landscape it should be noted that the social sciences are considering their future very much from a position of strength. However, one of the key findings of this review is that activities that are by their very nature elements of research leadership are very often not recognised by employers or rewarded by the existing professional frameworks (discussed below). The fact that research leadership commonly involves individuals investing their time and energy in supporting the careers of those around them in a selfless manner, rather than focusing solely on furthering their own career, makes this lack of recognition even more disappointing. It is also true that as a critical topic of professional development the theme of research leadership has very few, if any, any ambassadors in the sense of scholars or practitioners who are committed to explaining why leadership matters in a research context and the opportunities it brings in terms of team-building,

innovation, funding and impact.

This absence of research leadership ambassadors may reflect either a sense of traditional British modesty or the long-standing ambivalence amongst academics towards 'leadership' or 'being led' (as highlighted in the slim research base on the topic). It could also be a combination of the two. Nevertheless, the time has come to recognise and reward excellence in research leadership.

The ESRC's Celebrating Research Leadership Prizes would be an annual opportunity to recognise and reward researchers or infrastructure innovations that have excelled and taken a lead when it comes to nurturing talent, building effective teams, working across boundaries and building capacity for the benefit of the whole research community. It should celebrate researchers at all career stages who might be based within or beyond academe but reward passion and commitment for sharing skills, supporting innovation and championing EDI. A small portfolio of prizes related to research leadership would:

- Signal an increased emphasis on the research leadership agenda;
- Develop new research leadership case studies;
- Reward those with a track record in nurturing talent;
- Underline that research leadership takes many forms;
- Highlight contributions by researchers at a range of career stages;
- Platform innovations in method and approach;
- Embrace EDI as a key element of the research leadership agenda; and
- Showcase the dynamism and ambition of the ESRC within and beyond the UK.

As well as acknowledging excellence and lifting the general visibility of the topic, the creation of a small portfolio of prizes for research leadership would also create a cohort of prize winners who could serve as ambassadors for, or contributors to, an ambitious new approach.

Prize-winners would, in effect, become 'change agents' promoting a clear narrative and highlighting new resources around researcher development and leadership.



It is clear that there are no professional incentives or recognition of the time invested, in either developing colleagues around you or investing the time in the relationships and networks needed to lead research and research teams...Institutional culture, recruitment, reward and recognition mechanisms, and research evaluation exercises are pivotal in this regard.

University of Oxford, Consultation Response, 2019.

As you note at root, this is all about incentives, and these are massively skewed against such research leadership roles (although of course organisational/management leadership gets heavily rewarded, sometimes excessively so). I wonder if the ESRC should start giving prizes for recognising social science research leadership (and innovation within), like they do for impact? Can ESRC lobby to get recognition of this sort of capacity into a revised REF 'environment' statement? Or part of RO career assessments, with rewards for those who perform in such research leadership roles?

Prof. Ian Scoones, Co-Director, ESRC STEPS Centre, University of Sussex. It is noted that within the social sciences there may be a culture that emphasises scholarly independence and autonomy. This is certainly the experience at our institution, where explicit policies exist that reward first and sole authored research, thus discouraging engagement with large, complex multi-disciplinary research projects where this cannot be guaranteed. This point is also relevant to RQ4.2 [Consultation Paper], which notes that there are few incentives to engage with 'team science' [...] Strongly agree that large and complex grant applications are time consuming and risky, especially in an inter-disciplinary context. Not only are there few incentives for such team science but in fact there may be disincentives. The increasing use of performance management approaches in Universities may dis-incentivize staff from pursuing these types of project and application because of the perceived risks.

Psychology Department, University of Winchester, Consultation Response, 2019.

Recommendation 5: 'Facilitate Mobility'

When it comes to mobility, what this review has revealed can be summarised in three points: (1) the research funding landscape is shifting in ways that emphasise the need for mobility and collaboration with non-academic partners; (2) a significant number of academics recognise this need but feel trapped within a system that does very little to facilitate or incentivise mobility; and (3) the creation of a fresh and integrated new approach provides an opportunity to innovate in terms of how the mobility of people, ideas and talent can be enabled. A new approach to nurturing research leadership in the social sciences must therefore adopt a bold approach to broadening the 'skills bandwidth', creating opportunities for academics to spend time in non-academic environments or in completely different areas of research, and for practitioners to bring their skills and expertise into academia (i.e. two-way inter-sectoral mobility). The aim of this two-way relationship is to re-energise research careers in ways that recognise and value nontraditional career paths. The ESRC should therefore signal and facilitate a focus on mobility by piloting two new funding opportunities: a 'Research Re-Entry Scheme' and 'Discipline Hopping Grants'.

The 'Research Re-Entry Fellowship' would be designed to recognise the fact that once an individual leaves academia it can be very difficult, if not impossible, to re-enter due to the absence of a recognised research identity or publications profile.36 There are a number of reasons why individuals may decide to leave academia or take a career break, and there are huge numbers of talented researchers who leave academe in order to build incredibly successful careers in the private, public or third sectors. The challenge for the social sciences, particularly in the context of REF (discussed below), is how to bring the skills, experience and insights of those 'lost leaders' back into the academic community. Building upon the success of existing initiatives, such as the Wellcome Trust's 'Research Career Re-Entry Scheme', British Heart Foundation Career Re-entry Research Fellowships, Daphne Jackson Fellowships and Dorothy Hodgkin Fellowships, this pilot initiative would recognise the challenges and opportunities of re-establishing a

research career in the social sciences irrespective of whether that is linked to a career break or time spent in non-academic research environment. Although it will be for the ESRC to work across the community to decide the specific parameters of this new funding stream the evidence suggests that three elements are critical. The first is that the funding period reflects the length of time it is likely to take even the most talented individual to buildup or re-establish a research profile (i.e. up to four years). The second element is a need for flexibility in terms of working-patterns, including the option to switch between a full and part-time commitment at various points in the fellowship to accommodate other commitments, such as caring responsibilities. The final element - which cuts across this whole review – is the importance of mentoring and on-going support (see Rec.12, below).

Supporting researchers throughout their careers also demands fresh-thinking in relation to facilitating mobility within academe and across disciplines. In an environment that remains heavily structured around disciplinary silos it is very difficult for academics to secure funding that will allow them to immerse themselves in a completely new field of inquiry in order to generate new skills, spread ideas, undertake feasibility studies, experience different research cultures, undertake 'proof of concept' trials or potentially develop significant collaborations. In recent years a number of research councils, have experimented with 'discipline hopping' schemes that enable established scientists to work in a completely new field for six months or a year, and the Wellcome Trust has supported specific institutions to facilitate 'hopping' between disciplines and sectors. Evidence and data from the ESRC suggests that although social scientists generally view their research in inter-disciplinary terms the breadth of spread is often limited to cognate disciplines within the social sciences. In order to facilitate and encourage a more vibrant and creative approach to the mobility of people, ideas and talent the ESRC should develop and pilot its own 'mobility' scheme to support and reward social scientists who are willing to 'take a leap' into completely new research or research-related environments within or beyond academe.



In order to attract and involve talented people who can bring different experiences and points of view to research, there should be acknowledgement that people may miss out stages and may come in and out of the pipeline as they engage with different career paths (e.g. professional) which will have their own 'pipelines'. A framework that provides support for those taking non-traditional routes would encourage fresh ideas and, crucially, promote interdisciplinary and cross-sector workin'.

Dr Carolyn Letts, Newcastle University.

It would be helpful to recognise that individual career development may well benefit from time spent in different types of organisations and to find ways for this experience to be valued and understood within academe. Career development is not always linear as a pipeline suggests.... Returnships would also be good to consider-particularly as those who have taken time out of work have often built up interesting skills/contacts/perspectives.'

Dr Katie Deverell, Cultural Partnerships Manager, Chelmsford City Council.

The recommendation to encourage 'flow' between academics and practice is welcome, but this is still often understood as being in silos, and could have a more central place in such a national framework to foster inter-disciplinary and cross sector working.... Perhaps more honorary fellowships could be opened up to people having left academia for related areas of work, that maintains links and affiliations to open up such a dialogue and broader valuing of skills.

Dr Emma Ormerod, ESRC Research Fellow, Newcastle University

Recommendation 6: 'Manage the Middle'

When it came to nurturing talent the evidence review discovered that existing institutional offers were highly fragmented, variable in terms of quality and overwhelmingly focused on ECRs. This finding was reinforced by responses to the national consultation and during the institutional visits. Indeed, one of the most unexpected findings of this review was a widely held belief that it was actually midcareer academics who should actually be prioritised in order to build and support research leadership capacity and a pipeline of talent. 'There is indeed a terrible gap' Prof. Mel Bartley from UCL suggested 'where today's late-middle career senior staff should be' and this was often related to a perceived imbalance in the ESRC's funding streams (specifically the abolition of the small grants scheme, the lifting of the minimum standard grant threshold to £400k and the fact that the average responsive mode grant is now almost £750k). The 'step-up' to being able to compete for this size of grant was very often thought to be unrealistic for most researchers, especially if they had not been identified as 'future leaders' through securing prestigious post-doctoral fellowships.

Addressing this issue would help prevent the emergence of 'lost leaders', especially amongst those who may have combined their career with significant caring responsibilities; while also recognising that mid-career researchers fulfil a key integrative role between ECRs and more senior academics. A more pragmatic reason for this focus is that it is not uncommon for research careers to plateau mid-career due to a combination of intellectual fatigue and administrative burdens. The evidence therefore suggests a need to think, as Prof. Stephen Machin from the LSE suggested, 'about generating a means to keep the momentum going from early to mid to later (leadership level) career development'.

The question then becomes one of not simply providing new mid-career fellowship opportunities but

of establishing more creative funding streams that are likely to promote the development of a range of leadership skills, in an inclusive and flexible manner that embeds collaboration from the outset (thereby nurturing exactly the sort of future-focused skills researchers are increasingly likely to need to progress through Phases 2 and 3 (Table 1, above) while also sending a clear signal to the broader research community about the shifting funding landscape). The recommended response to this question is that the ESRC establishes a completely new 'cluster competition' for mid-career scholars in which teams that demonstrate a broad approach to diversity and include at least one non-academic member apply for funding which combines an explicit focus on skills development in a team-based context.

The intellectual aim of each cluster could, for example, focus on a 'proof of concept' investigation examining a pressing societal challenge. The broader aim, however, would be to forge innovative research groups, hone collaborative skills, gain project management experience but (critically) within a flat team leadership context where the traditional hierarchical model of a designated (senior) Principal Investigator leading a team of (junior) co-investigators is not imposed. This recommendation is designed to respond to a raft of concerns that were expressed in the review about a lack of agility, risk-taking and creativity within the ESRC's own approach to funding. It is also designed to complement a commitment to EDI, and the need for research organisations to adopt a more expansive approach to recognising the achievements of their staff (discussed below). Piloting an initiative of this nature would form a critical element of forging a more integrated and coherent approach to nurturing research leadership, sustaining momentum, throughout the professional journey.



We concur that earlier career researchers are a key target group for any immediate action. However, we suggest a generous/broad interpretation of this classification, recognising that this is a diverse group; in addition, our experience, there are many potential leaders beyond those in receipt of ESRC postdoctoral fellowship, Future leaders or New Investigator funding. We advise casting nets widely. As suggested in the review document, the mid-career research group should be provided with support too. This is currently a key gap especially as there are limited small grants available to help provide experience before considering a standard grant. University of Bristol, Consultation Response, 2019.

Although we do understand the logic of focusing on early career researchers, our view is that mid-to-senior social scientists might actually be the immediate priority. In the near-term — say, 3-10 years — these colleagues are much more likely to be the holders of large grants that require significant leadership skills. Moreover, many of them may have relatively limited experience of research leadership (or even none at all), having been trained-up in a very different research landscape.

London School of Economics, Consultation Response, 2019.

There is a need) to ensure a clear focus on mid-career researchers. This career stage often falls outside of, and between, programme calls and can also be peripheral to strategic prioritisation as funders and institutions concentrate on developing early career academics and then look to late career researchers for leadership. There is a pressing need to develop leadership amongst a significant pool of mid-career researchers who already have strong research foundations and in many ways will be ready to lead the kinds of challenge-led and interdisciplinary programmes of research you rightly highlight. Some capacity-building and leadership development with them would make a very significant contribution. **Professor Alex Hughes, Newcastle University.**

There is generally a focus on early career development and leadership which we feel overlooks the need for mid-career and established researchers to develop their skills. A focus on ESRC grantholders might be a useful approach. A regional grant manager/mentor could bring grant holders together post-award, providing support outside of institutional HEI structures. This would encourage peer learning, and more focused training around research management and leadership. Whilst early career staff should be the longer term focus, there could be some quick wins with the current grant holders.

University of Leicester, Consultation Response, 2019.

Recommendation 7: 'Push the Top'

The previous recommendation was intended to maintain mid-career research momentum and cultivate collaborative leadership skills that work across traditional institutional, disciplinary and professional boundaries. Professional research support staff would potentially therefore be key members of a team applying for a 'cluster competition' grant. With the notion of momentum in mind there is, however, a final career phase or stage that this review has found demands urgent attention from a research leadership perspective – the professoriate.

The evidence suggests that being promoted to full professorship is widely seen as a 'final promotion' and therefore the end or peak of a career.³⁷ Moreover, as the evidence review and consultation illustrated, senior researchers rarely receive any form of professional support or training before they are expected to lead complex multi-million pounds investments that often include a number of organisations, a network of staff and a range of collaborative expectations. In order to explore this issue in more detail Prof. Flinders was appointed as a member of the commissioning panel for the ESRC's 2018-19 Centres and Large Grants competition and one of his most striking observations was the general lack, in all but a few cases, of any detailed engagement by applicants with questions concerning styles or policies for research leadership (i.e. pre-appointment preparation, talent management systems, peer-support, (reverse) mentoring, contingency planning, succession planning, etc.).

Embedding a sharper leadership lens within the decision-making processes for the ESRC's largest investments represents an urgent priority. This provides an opportunity to think about not only supporting

researchers to navigate the challenges of helping to deliver a large and complex project but beyond this to 'push the top' in terms of promoting high-level ambition and helping people to realise their full potential. The ambition is not therefore limited to nurturing a cadre of senior scholars with the capacity to help lead large and complex projects but is also concerned with developing researchers who can act as ambassadors for the social sciences and, through this, play a role in terms of shaping debates and engaging with decision-making processes at the national and international level.

It is for exactly this reason that this review recommends that the ESRC engages with UKRI to explore the possibility of establishing a cross-council Senior Research Leaders Programme. In doing so it should work in close collaboration with those funders and academies who have designed and launched similar initiatives in recent years, specifically the Wellcome Trust and the Academy of Medical Sciences, due to the manner in which a focus on research leadership has been combined with a collaborative focus on innovation and entrepreneurship, plus a clear international focus.

The evidence collected for this review has also identified a number of senior leadership development academies that have also been launched in recent years and which share a collective focus on facilitating the mobility of people, ideas and talent across organisational and professional boundaries. Many of these academies have an explicit focus upon increasing research-focused links with the social sciences and are proactively looking for collaborative opportunities that might forge new relationships, ideas and skills through a focus on place-based schemes, challenge-orientated projects or new peer-to-peer support and shared learning systems.



I agree with the view that newer calls for proposals focus more on large, interdisciplinary and multinational projects, which requires additional leadership skills. As the PI of one such large current European project (called REAMIT worth nearly €5 million and 11 partners in 5 countries), I face exactly the same issue. Leadership is a critical issue here and managing a large project with big consortium is always a challenge even if the PI has correct expertise to complete the project.... There is currently vacuum in project management skills among PIs.

Prof. Ram Ramanathan, Director of the Business and Management Research Institute.

I've just finished an ERC Senior investigators project and I really enjoyed developing a research team with its own brand and identity and I think I was pretty good at it! But I have no idea where to go next in terms of the next level, or even who to ask.

Institutional Visit, University of Leeds.

The evidence review and the proposition do not suggest that early career researchers are the immediate priority. If anything, the evidence review suggests an emphasis on middle-stage and senior leadership. A recognition that everyone – however senior – can benefit from development opportunities would be refreshing and useful.

Prof. Kay Tisdall, University of Edinburgh.

We seem to be in a bit of a leadership interregnum at the moment. The professors are supposed to be supporting the next generation but I'm not sure they actually have the skills or experience to do this. Today's professors were trained in a very different context and imbued with a very specific culture...I suppose this is an argument about the need for continuing professional support and development at all career stages and not just the beginning. Institutional Visit, University of Bristol.

It is clear that there are no professional incentives or recognition of the time invested, in either developing colleagues around you or investing the time in the relationships and networks needed to lead research and research teams...Institutional culture, recruitment, reward and recognition mechanisms, and research evaluation exercises are pivotal in this regard.

University of Oxford, Consultation Response, 2019.

Recommendation 8: 'Embrace EDI'

The focus of this report is research leadership and talent management in the social sciences. Its origins lie in the recognition that the funding landscape is shifting towards an emphasis on supporting collaborative projects that demand a fresh approach to thinking about what research leadership is, why it matters and how the social sciences can inform and underpin the full scientific spectrum. This creates a research leadership opportunity to consider how a broader range of skills and talents than have traditionally been valued and appreciated - despite the fact that many of them have, in fact, played a key but largely hidden role underpinning successful research environments - can be recognised, valued and rewarded. Added to this is the fact that a significant amount of data and research exists on the existence of embedded inequalities within higher education, in general, and the social sciences, in particular.³⁸ 'I don't think we can really plan a programme of work for developing research leadership capacity' Ruth Blakeley noted in her consultation response 'without taking very seriously the structural impediments that mean grant awards are disproportionately awarded to

In making this argument she not only reflected a broad sense of frustration and concern amongst large sections of the research community but also linked this to a data released by the government in June 2019 which revealed that 71% of UKRI funding goes to applicants where the PI is male.³⁹ Detailed analysis adds nuance to this headline figure and reveals that the ESRC actually has a success rate that slightly favours women and this has been consistent for at least five years. 40 What appears from the data to be more significant is that the gap in success rates shift in favour of men as the size of grant applications grow. In relation to ethnicity the data suggests that a substantial gaps exists between the success rates of white and BAME applicants; this gap is seen across all seven research councils.

Jennifer Rubin, the executive chair of the ESRC and UKRI champion for equality, diversity and inclusion has acknowledged the scale of the challenge: 'We have made equality, diversity and inclusion a priority—as a national research and innovation funder, as an employer, and

as an influential voice in wider research and innovation sectors.' This commitment is to be welcomed but one of the core findings coming out of this review is that, irrespective of the undoubted success of initiatives such as Athena Swan, the Aurora programme and the Clore Leadership Programme, there is a very strong demand for the ESRC to champion this agenda at a UKRI level and to set the standard in terms of ambition and agility for other councils and funders to follow. As already underlined, thinking about embracing EDI not as a problem but as an opportunity to be embedded throughout a new approach to research leadership, working closely with partners to showcase 'what works', and driving-up standards at the systemic level provides a clear way forward.

But 'grasping the nettle and making a difference' - to paraphrase one consultation response – is necessary not only at a broad integrated level but also at a more specific and direct level. Targeted action is required to achieve the 'diversity dividend'. 41 This could include changes to recruitment procedures for studentships and fellowships to make funding more flexible to accommodate diverse needs, and to build-upon recent innovations in terms of defining 'relevant experience' and assessing 'scientific potential' so as to recruit in a more inclusive manner. 42 The willingness of the ESRC to support part-time working - even possibly more innovative forms of job-sharing - across its funding portfolio should also be promoted; and Equality Impact Assessments should be used to drive change and promote good practice across all new investments.

In order to build capacity around this agenda it is strongly recommended that the ESRC considers establishing a prestigious Laureate Professorial Fellowships scheme to support outstanding researchers who can make a clear contribution to the UK science base, undertake innovative research, showcase a breadth of talent and undertake an ambassadorial role in terms of promoting research leadership skills. These new senior fellowships could signal a clear and bold commitment to promoting EDI if they drew upon the success of elements of the Australian Laurate Fellowships scheme. 43i



One thing I wanted to flag up in any future planning like this is the You do mention this, which is great, but I'd want to know how the ESRC was doing to grasp the nettle here and make a difference.. and training for under-represented groups in the social sciences (and academia in general) - here I am thinking not just in terms of sex, gender or race, but also class (amongst others). It would be great to see some positive action in this area

Prof. Hannah Barker, University of Manchester.

Furthermore, there needs to be an explicit recognition of barriers to becoming a research leader associated with gender and ethnicity. Is there already an analysis of gender differences in grant bidding and winning? Or analyses comparing the gender of PIs and Cols? Training needs to take account of these barriers at the least, if if research proposals are scored equally in all other respects then panel members are directed to give preference to female Pls.)

Prof. Ann Berrington, University of Southampton.

Lack of leadership training in general is definitely an issue. Programmes like Aurora are useful but these are quite generalised and target both academic and PSS staff. Research leadership is a diffuse term and incorporates the actual managerial issues of running grants and research teams, but also the broader elements of helping to lead ones field and move research forward on a wider scale. Consultation Response, University of Durham.

Recommendation 9: 'Reflect upon REF'

As the evidence review underlined, any attempt to nurture research leadership cannot focus solely on individuals but must also seek to change the institutional structures within which those individuals operate in order to facilitate exactly those changes to the cultivation of talents and skills that is now deemed urgent and necessary. ⁴⁴ Put very simply, this review has highlighted the need for more social scientists to develop leadership-related skills and experience, and particularly in relation to inter-disciplinary and collaborative research.

And yet a core finding of this review is that the Research Excellence Framework is widely perceived as working almost directly against this agenda. The evidence collected by this review suggests that in a large number of institutions 'research talent' is generally defined very narrowly (i.e. equating to peer-review publications and research grant income). Despite changes to REF2020, inter-disciplinarity is generally perceived as 'risky' in an audit framework structured around disciplinary panels, and inter-sectoral mobility is also viewed as a perilous professional pathway as the generation of new skills or the value of experiencing different research contexts is thought unlikely to be valued by appointment or promotion panels.

One striking feature of the institutional visits undertaken for this review was the clear passion and energy that ECRs possessed towards inter-disciplinary research and engaging with user-communities. They really were 'harbingers of change' that wanted to align with a future-focused talent emphasis and to cultivate a broader skills-base than has traditionally been valued within the

social sciences.⁴⁵ In this context the REF framework was generally viewed as a restrictive framework that dampened ambitions, curtailed creativity and generally hindered the mobility of people, ideas and talent. In this regard there are at least some similarities and links with the findings of the pilot 'real time REF review' of June 2019, especially in regard to the existence of a potential tension between how the REF framework is widely perceived amongst researchers and how it is actually intended to work.⁴⁶

When thinking about the cultivation of research leadership, talent management and the development of a bold new approach, the evidence and insight collected by this review suggests that it is vital that the role and influence of the REF is considered. Considered, that is, not in a necessarily negative or problematic sense but how the REF process might in the future be utilised with an explicit leadership lens that recognises and rewards ambition and innovation throughout the professional pipeline. 'Reflecting on REF' includes at least two elements. Firstly, despite its importance in shaping research cultures and reward and incentive frameworks very little systematic and nuanced evidence exists about how and why the REF affects attitudes and behaviour, especially in relation to EDI. This is one of the reasons that Recommendation 3 (above) highlights the need for further research. Secondly, the ESRC should engage with Research England, UKRI and the other research councils to initiate an urgent focus on how the REF process can focus a sharper emphasis on research leadership and facilitating mobility.



The evidence review notes the difficulties of inter-sectoral mobility into academia. I agree. I have noted in academic recruitment, the concentration of the REF on academic publications (ideally in peer reviewed journals) is precluding the appointment of excellent leaders (with extensive experience of working with large teams and projects, and gaining funding) from being even short-listed.

Prof. Kay Tisdall, University of Edinburgh.

I think that it will be almost impossible to establish the different research model by relying solely on devolved and autonomous institutions. So some sort of national framework is necessary, and one place to start would be with the REF and what is going to count for good performance in the future. But one has to be realistic as to how far it can override the decentralised decision-making as translated into promotion criteria at various HEIs.

Prof. David Ulph, St Andrews University.

REF often dominates. There is often a tendency to stress the importance of developing high quality (single discipline) REF outputs as opposed to undertaking other forms of (often multidisciplinary) research activity such as developing larger scale, complex hids. This is an inherent tension

There is potential for UKRI to consider this more fully with its new role and wider responsibilities than individual research councils and HEFCE. For many Universities, the significant and growing pressures of delivering teaching programmes can additionally mean that fewer colleagues undertake leadership including large-scale bid development/project delivery.

University of Bristol, Consultation Response, 2019.

One is the importance of collaboration between different stakeholders and researchers and the difficulty of achieving it! Higher education has sometimes been described as 'tribal' (with disciplinary tribes) but also competitive, between different institutions, individuals and basic organisational units. The existence of the REF, rankings etc. leads to greater competitiveness which can have a distorting effect on research practices and priorities which are not always in the interests of the wider society. **Prof. John Brennan, Open University.**

Recommendation 10: 'Reconfigure Resources'

The previous recommendation regarding the need to 'reflect upon REF' acknowledges the point made in many submissions of evidence that nurturing research leadership capacity, especially in relation to collaborative projects that range across boundaries, cannot be achieved solely by focusing on individual researchers. Institutional structures must also change to facilitate and reward the changes in behaviour that are deemed necessary, thereby serving to embed deeper cultural change. As such, the focus of this recommendation concerns how the ESRC currently distributes and administers funding and calls for a complete review of all funding streams to ensure that they are aligned with the need to generate future-focused skills and talents. Reconfiguration of resources at the national level will drive change amongst research organisations while also signalling the scale and extent of the ESRC's ambitions.

The evidence review revealed two core concerns about the ESRC's existing funding structures. First, the vast majority of funding is distributed on a highly individualised basis (i.e. through fellowships to individuals or grants to Principal Investigators). Although co-investigators are named on the majority of successful grant applications the consultation process and particularly the institutional visits suggested that a situation exists whereby 'only the PI counts' as far as institutional recognition and reward was concerned. Secondly, the 'steps' between different funding streams had increased significantly, especially since the abolition of the small grants scheme and the introduction of a £350k minimum for standard responsive mode grants.

Both of these features were viewed by respondents to the consultation and focus group participants as forming major impediments to the generation of exactly the sort of collaborative research leadership skills that are required to ensure the social sciences remain 'fit for the future'. A culture of 'extreme individualism' was consistently highlighted as a major impediment to collaborative or team-based working. 'I'm glad to see that [the ESRC] are aware of the problems in recognition of team science' the

University of Durham noted in its consultation response 'However, their very insistence on using leadership as a criterion is part of that problem....[P]rogrammes such as the Future Leaders scheme [now 'New Investigators'] etc. just exacerbate this by focusing on individual scientists. If they want to promote team science they have to put actively encourage small teams of to put in grants.' Rec. 6 (above) speaks to this agenda but far more could be done to engineer a shift in the balance of funding from individuals to team-based initiatives in order to foster new skills and generate new opportunities.

In this regard the evidence suggests that relatively small modifications to funding guidelines or the availability of small amounts of money may have a significant impact. One of the most common comments amongst today's leading social scientists was how important a small ESRC grant had been at the beginning of their career in terms of gaining research leadership experience in a manageable 'step'. During focus groups ECRs and mid-career staff consistently highlighted the perceived exclusionary impact of the abolition of the small grants scheme. Securing a small grant was also often vital in terms of securing tenure or promotion within institutions which also links into issues concerning EDI, and there was consternation amongst large sections of the community as to why the AHRC was able to maintain a standard grants scheme with a £50k minimum threshold (and a designated stream for ECRs).

The reconfiguration of resources should not, however, be a financially focused endeavour as the most common request from researchers and ROs was not for more money but more guidance on what the ESRC was looking for in terms of research leadership and talent management. In relation to research centres and institutes, for example, what explicit models of leadership development would the ESRC ideally like to see in place? What does succession planning look like in a research context? Where can ROs go to access genuinely world-class guidance and support about nurturing skills? These questions flow back into recommendations 2 and 3, above).



In addition to the challenges identified in the consultation document however, we would suggest that a further barrier to the leadership of large, complex and interdisciplinary research projects centres around a persistent culture of lone scholarship. Many researchers remain more comfortable with funding mechanisms, such as fellowships, which enable this model of research, and are less confident therefore that they will be able to deliver on research project outcomes when the predominant method of delivery is their supervision of other staff. University of Glasgow, Consultation Response, 2019.

Where the funding for larger projects is now for multi-disciplinary projects, that existing route may not provide sufficient training or experience. One solution that might help address that would be to provide funding schemes for mid-career researchers that would allow them to develop research leadership skills either through smaller scale multi-disciplinary projects or through supporting their participation in larger projects. That is, thought should be given to the way funding schemes support career development towards the management of large multi-disciplinary projects.

Prof. Matt Nudds, University of Warwick.

There remains a degree of structural tension across the sector between, on the one hand, calls for more inter-disciplinarity and collaboration and, on the other, 'reward and recognition frameworks' and the 'institutional architecture of higher education'. The latter have traditionally tended to be more disciplinary and individualistic in orientation, thereby disfavouring work which is applied, collaborative, or that sits in part outside a single discipline. Steps have been taken to address this already (e.g. by revising promotions criteria) but there is still room for improvement.

Lancaster University, Consultation Response, 2019.

[the ESRC small grants] scheme provided social scientists with the opportunity for leadership development... for both ECR and more experienced researchers to maintain both research career and leadership momentum, and perhaps countered the discourse of 'luck' that has now become associated with large grant success mentioned in the evidence report.

Newcastle University, Consultation Response, 2019.

Recommendation 11: 'Re-evaluate What Counts'

Whether viewed as a challenge or an opportunity, nurturing research leadership is undoubtedly a shared responsibility that can only be achieved through a coordinated response. Hence the core recommendation regarding the creation of a new approach that builds shared capacity, connects islands of innovation and seeks to add-value to existing provision in an inclusive manner. It also explains the focus of the previous two recommendations on the REF and the manner in which the ESRC currently allocates funding. The focus of this recommendation is on the research organisations who actually employ the vast majority of researchers and it calls on them to re-assess 'what counts'. One of the clearest messages emanating from the institutional visits was that dominant reward and incentive frameworks still tend to adopt a fairly narrow definition of 'what counts' (i.e. published papers and research grant income). This acts as a major impediment in terms of encouraging people to innovate, take risks or dedicate time to a leadership role that might ultimately be unsuccessful (in terms of funding) or largely disregarded (in terms of outputs).

The evidence base for this concern is very strong. The Nuffield Council on Bioethics' 'The Culture of Scientific Research in the United Kingdom' report (2014), the British Academy's 'Crossing Paths' report (2016), the League of European Research Universities 'Delivering Talent' report (2018) and the Academy of Medical Science's 2019 report on improving the recognition of team science contributions – to mention just a few key documents - all underline the manner in which contributions made by staff to collaborative projects are often overlooked or ignored when it comes to workload recognition or reward frameworks.⁴⁷ As such, and as NESTA's Creating Value Across Boundaries report of 2010 concluded, 'reward structures and professional development are heavily skewed towards individual appraisal and accomplishment'.48 Although some institutions have attempted to recalibrate their frameworks to capture the investment of time in the development or delivery of collaborative projects this review found numerous examples of ECRs being advised by supervisors and

mentors to avoid team-based projects, of concerns about co-authored publications 'not counting', of contributions to projects based in other institutions not being counted in workload allocation models, of mentoring and staffsupervision being viewed as 'not real work', and where being a co-investigator on a project rarely brought any recognition or credit and may, in fact, be detrimental to a career. The use of 'key' positions on publications and grants (i.e. lead-author or principal investigator) as primary indicators of research performance by ROs is hugely problematic in a scientific and social context that is almost defined by an increasing emphasis on collaboration. It is not the academics who necessarily need to change', as Prof. Ann Berrington suggested 'it is the institutions. Only then, will we be happy to be the fifth author on a large team project.'

ROs should therefore work with the ESRC, UKRI and other funders to ensure that reward structures and professional development opportunities are better able to assess the contribution of individuals to collaborative endeavours. This is a particularly pressing challenge given the increasing emphasis not just on knowledge-creation but on knowledge mobilisation which has led to the employment of many researchers in primarily knowledgeexchange focused roles (in, for example, 'what works' centres, nexus network investments, etc.). [L]eading a Network Plus is nothing like being PI of a research project' James Wilsdon noted 'You have no funding to do any meaningful research of your own. Depending on one's career stage, devoting this much time to a leadership role that yields few academic outputs - and lacks even the internal visibility of an institutional management role – could be risky or damaging for some researchers' careers. There are few incentives or rewards for taking on such a role. At a personal level, running the Nexus Network undoubtedly reduced the number and quality of publications I produced from 2014 to 2018 – and by the time of the next REF, this contribution to social science leadership will have been forgotten. Current academic reward systems don't recognise the value of such activities.'49 This is why there needs to be a concerted effort to re-assess 'what counts'.



The challenge of managing inter-disciplinarity also needs much deeper investigation, Key will be how universities are beginning (or not as the case may be) to facilitate inter-disciplinarity and evidence on whether it is working. Properly interdisciplinary social scientists suffer – because their cv does not have a straight forward/traditional disciplinary trajectory they often find promotion harder, get paid less, and are under-valued. There are few who stick with it.

Prof. Loretta Lees, University of Leicester.

HEIs should change their perceptions and incentives toward interdisciplinary researchers. Universities have been in favour of single, narrow discipline when it comes to promotion, particularly internal promotion. This unintentionally discourages academics from learning from other disciplines and joining interdisciplinary research in order to go beyond 'social science' issues.'

Mid-Career Researcher, University of Bath.

Progression and promotion processes could be revised to better recognise the challenges of assembling large grant applications. In addition, suggestions for further consideration could include greater recognition of wider team efforts. For instance, the work of Co-ls and other team members: a strong PI is crucial, but others often play important leadership roles too that are less recognised and could be well placed/better supported to take on future leadership roles (as discussed above). The encouragement or incentivisation of including ECRs as Co-ls on bids is also a positive way to provide experience of larger projects (including being part of bid writing process).

University of Bristol, Consultation Response, 2019.

Recommendation 12: 'Mentorship Matters'

One of the evidence review's main conclusions was that the existence of a supportive and engaged mentor appeared from the available evidence to be a critical factor in understanding successful research careers. This conclusion received widespread support in both consultation submission and during institutional visits. For example, Prof. Alex Singleton from the University of Liverpool suggested that 'Mentoring is absolutely critical. Getting this right is definitely the key'. His PhD. Supervisor provided a broader mentoring role that went beyond the thesis and 'told me what I needed to do to get on at each stage in my career - they actively introduced me to all the key academics in the field.' This helped Prof. Singleton to secure an ESRC First Grant (subsequently replaced by the 'Future Leaders' scheme, then 'New Investigators') which had a second mentor designed into it: 'which again proved very useful as I progressed from Post-doc to Lecturer -[the mentor] made lots of efforts to guide and help build my network.'

Not only is acting as a mentor a critical form of research leadership but for mentees it can be absolutely crucial in terms of helping them survive, in terms of coping with the increased pressures on ECRs, and thrive, in terms of supporting them to excel and realise their potential. This is demonstrated in 2015 RAND review of 'high-performing research units' and its finding that 'The majority of the interviewees and workshop participants linked high performance with the existence of healthy mentoring practices within departments. Mentoring was seen as being crucial to generate and develop new research ideas.'50

And yet as the University of Durham's response to the consultation noted, 'The opportunity of receiving supportive mentoring from experienced academic leaders is a matter of luck' and this was laid bare during institutional visits where focus groups with ECRs and mid-career staff revealed huge inconsistencies in mentoring arrangements within and between ROs. Even when mentors had been appointed it was not at all uncommon for this relationship to be either weak or non-existent, especially at the post-doc level. This may reflect the existence of a highly-individualised 'sink-or-swim'

culture within the social sciences that has already been highlighted in this report and that may be drowning the next generation of research leaders. ⁵¹ It may also reflect the manner in which mentoring is often 'not counted' in terms of workload allocation which, in turn, means that it depends on the discretion and goodwill of senior staff which, in turn, can very often have significant EDI implications for both mentors and mentees.

The recommendation is therefore that the ESRC and ROs work together as part of a confident new approach to ensure that 'mentorship matters' are put at the heart of the agenda. Mentorship fits within the existing 'learning on the job' tradition within the social sciences but it also chimes with an emphasis on the mobility of people, ideas and talent. It also fits with a focus on the full professional journey and taking EDI seriously as an opportunity for talent growth and enhancement. Making 'mentorship matter' is about ensuring that all staff have the time, motivation and requisite skills to mentor the next generation of researchers but achieving a 'paradigm' shift' in terms of skills, talent and ambition requires far more. It requires that mentorship is redefined, reinterpreted and revitalised as a dynamic set of future-focused professional relationships that forge connections across traditional disciplinary, institutional and professional boundaries.

Grant application processes might, for example, encourage a new 'dual principal investigator' model through which a close mentoring model was, as one respondent put it 'baked in'. All funding streams could incentivise the adoption of clear and novel forms of mentorship (reverse-mentorship, peer-to-peer mentorship, non-academic mentors, etc.) and make it clear that the costs of such support structures are a valid element of overall project costs. More information on 'what works' could be shared (Rec 3. above) and the new Research Leadership Development Unit (Rec. 2, above) tasked with exploring how the creation of a new 'research leadership college' at the national level (made-up of experienced researchers, senior investment holders, etc.) could be used to drive innovation in this area throughout all career phases.



There is no substitute for learning on the job ie mentoring others on how to lead so I personally don't think it is just about funding ECRs to do leadership training. I think the good models we have out there (e.g. research centres that have trained an entire generation of research leaders) rely on senior researchers having the time and inclination to train the next generation. Perhaps co-leadership models in grant applications might be encouraged to make it more explicit that this is a good thing? Or at least grants could be favourably viewed if they had more explicit models of leadership development in them?

Professor Anna Vignoles, University of Cambridge

We also recommend the ESRC consider the feasibility of running mentoring/learning sessions and utilise the experience of their Pls. For example, it would be relatively easy (and cheap) to run such a session three times a year to coincide with standard panel outcomes; having a couple of experienced Pls from across different disciplines to share learning on running a successful project and explore common problem areas. This would be particularly useful for smaller institutions where providing mentorship maybe difficult. University of Bristol, Consultation Response, 2019.

We strongly support the idea of engaging senior, successful research leaders as mentors to mid/early career academics. This does not come naturally to all researchers, however, and institutions need to consider carefully how to implement this effectively and how to respond to the training needs of this group.

University of Strathclyde, Consultation Response, 2019.



I am convinced that the greatest scientific discoveries in coming decades will be facilitated by those who can work across traditional academic disciplines and feel at home in multidisciplinary teams' Prof. Sir Robert Lechler recently argued 'We can't fully know what the future holds, but we do know we will need a pipeline of talented leaders that will disrupt the status quo to seize opportunities and galvanise multi-sectoral teams to overcome barriers.'52 This argument is as valid for the social sciences as it is for the life sciences and any other part of the scientific spectrum. We cannot fully know what the future holds but we can identify relatively clear shifts in both the funding landscape and the broader social context that underline the fact that the social sciences must move with the times. What we do know. however, is that the most pressing societal challenges revolve around people and how people live their lives as individuals, as family-members and within communities of varying type and scale. The understandings and insights offered by the social sciences are therefore critical and must be placed at the heart of responses to global societal challenges such as climate change and resource depletion, mental health and wellbeing through to plastic pollution, and from economic growth or economic inequality.

As such, this review has taken inspiration from the 2013 World Social Science Report's call for a 'bigger, bolder, better' and most of all 'different' approach to the social sciences. ⁵³ 'Different' in the way it thinks about and does research; and 'different' particularly in the sense of how it defines talent and seeks to nurture research leadership capacities, throughout the professional journey and through dynamic partnerships with a range of research-related organisations, in order to be able to put the social sciences at the heart of major and future-focused debates and investments. It is only through seizing this agenda, this 'new paradigm' that the social sciences will flourish, thrive and be genuinely 'fit for the future'. It is, however, important to understand that building capacity demands sustained investment, commitment and co-ordination.

Funding has to be made available for a sufficient period to produce results and the experience of initiatives in other sectors has generally seen what night be termed 'leadership lag' of around five years between initial strategic change and demonstrable impact. It is also

important to appreciate that the benefits of investing in talent, skills and leadership can often be difficult to assess, especially through traditional linear evaluative mechanisms. ⁵⁴ Moreover, although some of the specific recommendations build-upon the success of similar initiatives and therefore an established evidence base the same cannot be said for all of them. This reflects the lack of attention that research leadership has generally received within higher education and creates an opportunity for the ESRC to be genuinely pioneering on the international stage.

In terms of the next steps this will be for the ESRC Council to decide but what this review has attempted to provide is a number of inter-related recommendations that can be implemented almost on a self-standing basis but that would in time combine to create a bold new approach. If the core recommendation relating to the creation of an ambitious new approach to research leadership is accepted then a five-year plan might see recommendations 1-4 implemented within 12 months, recommendations 5-8 put in place during years 2 and 3, and recommendations 9-12 forming the focus of years 4 and 5. Delivering on these recommendations would require additional investment by the ESRC, investment in the region of £5m/year (i.e. less than 2% of annual core funding), but it would also lever significant financial and non-financial resources through partnerships and potential innovation, while increasing the short-term efficiency and long-term impact of existing investments.

Taken together, these twelve recommendations combine to offer a 'paradigm shift' in how research leadership is viewed, cultivated, incentivised and sustained within the social sciences. It focuses on the full professional journey in ways that facilitate different forms of mobility in an explicitly inclusive manner. Delivering this new approach will take time, sustained investment and the commitment of a number of organisations; but it would also offer a relatively low-cost but high-gain strategy for not only maximising the value and impact of existing investments but also locating the ESRC at the cutting-edge of talent management discussions both within the UK and internationally. It would, put very simply, help ensure the social sciences really are 'fit for the future'.

"

Appendix a. List of consultation respondents

Institutional Submissions

London School of Economics

Newcastle University

University of Bristol

University of Leicester

SeNSS DTP

University of Winchester

Durham University

Imperial College London

Lancaster University

University of Stirling

University of Liverpool

Offiversity of Liverpoof

Loughborough University

King's College, London

Manchester University

University College London

University of Exeter

Bath Spa University

British Academy of Management

University of Edinburgh

University of Glasgow

Political Studies Association

Parliamentary Office of Science and Technology

Open University

Queen Mary, University of London

British Association for Applied Linguistics

British Sociological Association

University of Oxford

University of Strathclyde

South East Researcher Developers Network

British Academy

Individual Submissions

Dr Olga Kuznetsova, Manchester Metropolitan University

Prof. Anna Vignoles, University of Cambridge

Prof. David Blane, Imperial College London

Prof. Ram Ramanathan, University of Bedfordshire

Prof. Alex Hughes, Newcastle University

Prof. Alison Harcourt, Exeter University

Prof. Kay Tisdall, University of Edinburgh

Prof. Ian Scoones, University of Sussex Prof. Loretta

Lees, University of Leicester

Prof. Christopher May, Lancaster University

Prof. Hannah Barker, University of Manchester

Prof. Katherine Homewood, University College London

Prof. Ruth Blakeley, University of Sheffield

Prof. Eleanor Fisher, University of Reading

Prof. Catherine Lyall, University of Edinburgh

Prof. Lucie Cluver, University of Oxford

Prof. David Ulph, University of St Andrews

Prof. Cate Watson, University of Stirling

Prof. Ann Berrington, University of Southampton

Prof. Jackie Carter, University of Manchester

Prof. James McCalman, University of Portsmouth

Prof. Ruth Lupton, University of Manchester

Prof. Irene Hardill, Northumbria University

Prof. Frank Lorenz Müller, University of St Andrews

Prof. Joyce Liddle, Northumbria University

Prof. Jan van der Bloon, University of Leiden

Prof. Andy Stirling, University of Sussex

Prof. Michael Keating, University of Aberdeen

Prof. Rosemary Deem, Royal Holloway, University of London

Prof. Stephen Roper, University of Warwick

Prof. Tim Jackson, University of Surrey

Prof. Stephen Machin, London School of Economics

Prof. Barbara Kehm, University of Hannover

Prof. Paul Blackmore, King's College London

Prof. Simone Baglioni, Glasgow Caledonian University

Prof. Mark Birkin, University of Leeds

Prof. Marcus Munafò (University of Bristol), Nadia

Soliman (Imperial College) and (Daren Bowyer

(Cumberland Lodge)

Prof. Gary Morgan, City University, London

Royal Economic Society's Conference of Heads of

University Economics Departments

Prof. John Brennan, the Open University

Prof. Emma Crewe, SOAS, University of London

Prof. Matthew Nudds, University of Warwick

Prof. John Dupré, University of Exeter

Prof. John Flint, University of Sheffield

Prof. Rosaleen Duffy, University of Sheffield

Prof. David Wield, Open University

Dr Layla Skinns, University of Sheffield

Dr Nadia Siddiqui, University of Durham

Prof. Mel Bartley, University College London

Dr Stefanie Reissner, University of Newcastle

Dr Natalya Sergeeva, University College London Dr Harriet Allen, University of Nottingham

Dr Harmut Blank, University of Portsmouth

Dr Matt Wood, University of Sheffield

Dr Emma Uprichard, University of Warwick

Dr Ghazala Mir, University of Leeds

Dr Gilberto Algar-Faria, University of Bristol

Dr Olivier Sibali, Birkbeck College, University of London

Jeni Vine, University of Sheffield

Dr Emma Ormerod, University of Newcastle

Dr Katie Deverell, Cultural Partnerships Manager,

Chelmsford City Council

Alexy Buck, Ministry of Justice

Ann Starkey, Harper Keeley LLP

Prof. Helen Lawton Smith, Birkbeck, University of

London; and Chair of the Regional Studies Association's

Diversity and Equality Committee.

Dr Cecilia Brincat, Cranfield University

Dr Carolyn Letts, Newcastle University

Helen Walker, University of Portsmouth

Prof. Elizabeth Stokoe, Loughborough University

Prof. David Gordon, University of Bristol

Prof. Mike Wallace, Cardiff University

Jess Hoare, Cardiff University

Prof. Alex Singleton, University of Liverpool

Prof. Gill Bristow, Cardiff University

Prof Jon Hindmarsh, King's College, London

Prof. Jo Tacchi, Loughborough University.

Dr Lara Alcock, Loughborough University

Mid-Career Researcher, University of Bath

Footnotes

- 1 ESRC Strategic Plan 2015, p.12.
- 2 https://esrc.ukri.org/skills-and-careers/postgraduate-careers/early-career-researchers/
- 3 <u>https://esrc.ukri.org/news-events-and-publications/news/news-items/knowledge-and-skills-needs-call-for-evidence-summary-report-and-next-steps/</u>
- See, for example, McKinsey Global Institute (2019) Skill Shift: Automation and the Future of the Workforce, McKinsey: London.
- 5 UKRI Delivery Plan 2019, London, p.25.
- 6 Matthew Flinders would like to acknowledge the role of Dr Alexandra Anderson in the development of this review and the drafting of this final report. Her contribution was absolutely outstanding.
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- 9 See Flinders, M. and Anderson, A. (2019) Fit for the Future: Research Leadership in the Social Sciences, Evidence Review. Swindon: ESRC. https://esrc.ukri.org/files/research/fit-for-the-future-researcher-development-and-research-leadership-in-the-social-sciences-review/
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- 15 Professor of Biological Psychology, Consultation Response, University of Bristol.
- 16 See Flinders, and Anderson, Evidence Review, p.17.
- 17 Ibid, p.13.
- 18 Ibid, p.22-23.
- 19 Ibid, p.24, 34.
- Higher Education Policy Institute. 2019. Pressure Vessels: The Epidemic of poor mental health among higher education staff, HEPI: London.
- 21 file:///Users/matthewflinders/Downloads/VITAE%20-%205%20steps%20forward%20Web%20(2).pdf
- See, for example, British Academy 2016. Crossing Paths: Interdisciplinary Institutions, Careers, Education and x Applications, London: British Academy. https://www.thebritishacademy.ac.uk/sites/default/files/Crossing%20 Paths%20-%20Full%20Report_2.pdf
- Blackwell, A. et al. (2010). Creating Value Across Boundaries: Maximising the Return from Interdisciplinary Innovation. London: Nesta
- 24 See for example, the National Leadership Centre programme launched by the Cabinet Office.
- See Flinders, and Anderson, Evidence Review, p.40-41.
- The ESRC Postgraduate Training and Development Guidelines 2015 set clear expectations for the content and delivery of doctoral training. With a strong emphasis on the provision of broad based social science research training. Beyond core research methods training, Doctoral Training Partnerships are expected to provide broad transferrable skills training including a focus on leadership, research management and relationship management and opportunities for experiential learning through placements and internships outside of academia. However, the primary focus is on completion of their thesis within the 36-month funding period and the extent to which students access training and opportunities is variable and often dependent on the advice of the supervisor and provision of host institution. Doctoral Training Partnerships have forged interinstitutional networks and a positive cadre-effect creating the opportunities for students to engage with a range of disciplines.
- As part of their application award holders are required to provide a detailed training and development plan with a named mentor identified. However, funded recipients are not placed within any formalised talent management strategy. Networking opportunities are not in place to promote inter-institutional, interdisciplinary or inter-sectoral mobility. Highly dependent on the advice of the nominated mentor, the provision of host institution and discretion of award holder.

- Research development and leadership experience are not significant elements of the application or assessment process. Highly dependent on the support and provision of the host institution. No explicit thought as to transition management and preparation for more demanding roles.
- Evaluations suggest that in relation to major investments failure is generally attributable to a failure of research leadership. And yet research leadership experience and team competencies have (until very recently) not received a lot of attention. No focus on reciprocity or positive spill-over.
- 30 See, for example, the NIHR Reviews: https://www.nihr.ac.uk/explore-nihr/funding-programmes/systematic-reviews.html
- These are interactive events that bring researchers from a range of disciplines together with potential research-users in order to build novel and fresh boundary-spanning relationships. See https://scottishcrucible.org.uk/
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- Potential partnerships include the new Research on Research Institute (RORI): http://researchonresearch.org/
- The University of Sheffield runs a 'Women Academic Returners' Programme' and has been able to identify long-term impact as it has run for over ten years. The scheme enabled women to request up to £10,000 to support an additional post or up to £5,000 to support other research-related activities, such as conference costs, coaching and training courses. The scheme was open to female academics and researchers across all faculties. Since 2006, over 136 women have received awards that total over £1.7million. Award recipients have since brought in over £12.5million in apportioned research grant income to the university, this represents a return on investment of over 620%. The university also saw improved retention rates for women who returned after maternity leave. See Higher Education Funding Council for England (HEFCE) & Equality Challenge Unit. (2017). Sector-leading and innovative practice in advancing equality and diversity. Higher Education Funding Council for England.
- 37 See Evans, L. (2018). Professors as Academic Leaders: Expectations, Enacted Professionalism and Evolving Roles. London: Bloomsbury, p.174.
- For recent reviews see: Moody, J and Aldercotte, A. (2019) Equality, Diversity and Inclusion in Research and Innovation: International Review, London: AdvanceHE; Guyan, K and Oloyede, F. (2019) Equality, Diversity and Inclusion in Research and Innovation: UK Review London: AdvanceHE.
- 39 Skidmore, C. (2019). UK Research and Innovation: Grants: Written question 262366. London: Department for Business, Energy and Industrial Strategy. https://www.parliament.uk/business/publications/written-questions-answers-statements/written-question/Commons/2019-06-11/262366/
- 40 UKRI, (2018) 'UKRI Data and Evidence', Paper to the UKRI EDI External Advisory Group, Paper 18-03. July 2018.
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- 42 Wellcome has recently experimented with a completely new recruitment process. Details to be added.
- 43 <u>https://www.arc.gov.au/policies-strategies/strategy/gender-equality-research/kathleen-fitzpatrick-and-georgina-sweet-australian-laureate-fellows</u>
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- 46 <u>file:///Users/matthewflinders/Downloads/RTRR_Pilot_Working_Paper_June19_final.pdf</u>

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- 48 Blackwell et al. Creating Value Across Boundaries, p.22.
- 49 Wilson, J. (2017). ESRC Research Network Plus Directors Final Report. Swindon: ESRC, p.31-32
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- 53 <u>http://www.unesco.org/new/en/social-and-human-sciences/resources/reports/world-social-science-report-2013/</u>
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