The Real-Time REF Review
A Pilot Study to Examine the Feasibility of a Longitudinal Evaluation of Perceptions and Attitudes Towards REF 2021
Commissioned by Research England

Executive Summary June 2019
Background

The UK first introduced a national research assessment exercise in 1986, and methods of assessment continue to evolve. Following the 2016 Stern Review and further rounds of technical consultation, the UK higher education (HE) community is now preparing for the next Research Excellence Framework – REF 2021.

Commentary about the REF across the sector is often critical, yet the exercise also performs several purposes for the research community.

1. Supporting the allocation of around £2 billion of quality-related research funding each year;
2. Informing strategic decision-making about national research priorities;
3. Providing an accountability mechanism for public investment in research;
4. Creating performance incentives for Higher Education Institutions (HEIs), departments and individual academics;
5. Giving HEIs information to inform decisions on resource allocation;
6. Providing a periodically-updated reputational benchmark, that may be especially important for less known HEIs.

Despite its importance in shaping research cultures, there is little systematic and nuanced evidence about how academics across the sector view the REF, and which aspects are viewed favourably or unfavourably. The aims of this pilot study were twofold: first, it was designed to gather initial data to address this evidence gap; second, it was aimed at testing the feasibility of conducting a longitudinal study into academic and managerial attitudes towards the REF. We argue that further research to better understand the effects of the REF on research cultures, institutions, and individuals should be part of the evidence used to inform the development of future iterations of the exercise.

The Real Time REF Review Pilot Study was developed and delivered by a research team from Cardiff University and the University of Sheffield, in collaboration with Research England.
Our Approach

The pilot study focused on four universities: Cardiff University, University of Sheffield, University of Sussex, and University of Lincoln. These institutions were selected in large part because they have equivalent fit across REF Units of Assessment (UoAs) [broad areas of research] and they complement one another in both research profile and REF engagement. Considering the pilot nature of the study and participation by four universities, it is unclear how well results will generalise further across the sector.

Within the four higher education institutions, our focus was on eight subpanels of the REF, two drawn from each of the four main panels:

**Fig 01: The eight subpanels of the REF selected for study in the Real-Time REF pilot.**

**Main Panel A: Medicine, health and life sciences**
- UoA 3 – Allied Health Professions, Dentistry, Nursing or Pharmacy
- UoA 4 – Psychology, Psychiatry and Neuroscience

**Main Panel B: Physical sciences, engineering and mathematics**
- UoA 11 – Computer Science and Informatics
- UoA 12 – Engineering

**Main Panel C: Social sciences**
- UoA 17 – Business and Management Studies
- UoA 23 – Education

**Main Panel D: Arts and humanities**
- UoA 28 – History
- UoA 34 – Communication, Cultural and Media Studies, Library & Information Management

The pilot comprised two phases of data collection:

1) Phase 1 consisted of a survey study intended to understand the perceptions and experiences of research-active academics within the four universities.

2) Phase 2 consisted of semi-structured interviews with individuals who play an active role in REF management within the four universities.
Methods

Data collection took place between April and August 2018, while changes to REF 2021 resulting from the 2016 Stern Review were in the process of being disseminated and implemented.

Participants were asked about their attitudes towards the REF, their knowledge and experience of the REF process, and the impacts of changes to REF 2021 following the Stern Review. More broadly, participants were asked about the perceived influence of the REF on research activities and management approaches to the REF. In addition, participants were asked to comment on the perceived impact of the REF on the research culture and their views on what the purpose of the REF is and what it should be.

Phase 1: A survey of academic attitudes

The pilot study aimed for a sample of $n = 600$ and achieved a final sample of $n = 598$ respondents to a survey on the REF. Focusing on the disciplinary communities represented by the eight REF UoAs, academics representing all eight of the selected REF subpanels at each university responded to closed-ended questions.

Fig. 02: Percentage time spent on research by respondents in the study.
We explored the nature of many responses and relations primarily as a function of two professional categories: (1) academic position held and (2) REF panel; and two personal categories: (3) gender, and (4) caring responsibilities. Researchers representing all career stages took part. Just under 1/3 of respondents had some formal responsibility for managing the REF. Of the sample, 228 (38.1%) of participants identified as women, and 283 (47.3%) identified as men. 51.5% (308 respondents) identified as White British, and an additional 17.9% (107 respondents) identified as another White ethnicity.

**Phase Two – Interviews with university managers**

The research team conducted semi-structured interviews with 21 managers of the REF between July and September 2018 in the four participating higher education institutions. Interview participants at each institution were selected using a purposive sampling approach to gather a range of views from those coordinating and supporting the REF. Interviews were conducted with senior managers, members of each institution’s research directorates (and heads of schools/departments with REF lead responsibilities. Access to interviewees at each institution was granted through securing senior management agreement. Interviews were thematically analysed using NVIVO 10 software.
Findings and Discussion

1. Attitudes to the REF

The pilot study revealed that academics have mixed but less strident views of the REF than might be assumed. Survey responses revealed that, across the whole sample, academic attitudes toward the REF were *moderately negative*. Researchers reported more positive attitudes if they also perceived that the REF encourages engagement with the community and with interdisciplinary work, does not discourage blue-sky research, and encourages researcher integrity.

For managers who were interviewed, broad views were moderate and tending towards positive, while acknowledging the challenges the REF poses to both managers and researchers. Those in senior management positions tended toward a more pragmatic and positive stance, whereas those in academic/REF lead positions were more likely to problematize the REF in line with survey data of academics.

Our study suggests that views on the REF are not as polarized or as *extreme* as is commonly believed, or reflected in coverage of the REF in the media. Extremely negative views were in the minority, while a majority of respondents had neutral or moderately negative attitudes about the REF.

*Fig. 03: Percentage responses for attitudes toward the REF ranging from (-3 = extremely negative) to (3 = extremely positive), where 0 reflects a neutral (neither negative nor positive) attitude (2.5% missing responses).*
2. Influences on research cultures

Both survey and interview data revealed the REF has both positive and negative influences on research activity. These data together suggested that, positively, the REF is seen to increase engagement outside academia and the use of open research activities, whereas game playing (where additional strategies are implemented, beyond those required by the exercise, in order to influence exercise outcomes) and impacts on creativity were deemed to be the most negative influences of the REF on academic culture.

Importantly, an insight that emerged from the survey data was that the focus on open access and research practices was the most consistently positive and impactful influence of the REF on both researchers’ own work and UK academic culture. Survey data suggested the move to encourage more open research practices was seen as the most positive change in REF 2021. It also elicited the most consistently positive attitudes.

These findings suggest that additional emphasis on open access and open research practices would enhance researchers’ experiences of the REF, although these causal interpretations based on correlational data merit further study.

Concerns related to the REF were seen to arise often in terms of overselling the claims of research findings for impact case studies and, in broader terms, this related to perceptions of REF as a ‘game’. One concern with respect to the effects on research cultures was that REF 2021 would still promote tactical game playing by institutions – though perhaps at a reduced level than in REF 2014.
Differences by standing on demographic characteristics could only be considered in survey responses. However, survey responses were generally consistent across genders, and across participants’ academic positions. An important exception was that the small subsample of non-independent researchers (PhD students, postdoctoral researchers) had more positive views regarding many of the REF’s influences on academic culture. Another was that participants expecting to submit to Panel B perceived the most beneficial influences of the REF on research activities. Participants expecting to submit to Panel D perceived the least beneficial influences of the REF on research activities.

Fig. 04: Perceived influence of REF on research activities in terms of how negative (-3) to positive (3), where 0 = neither negative nor positive.
3. The road to REF 2021

Researchers generally saw the changes to REF 2021 in a positive light. Increased emphasis on open research practices was seen as the most positive change. Increased weighting of impact from 20% to 25% was seen as the least positive change. On average, participants modestly agreed that REF 2021 is more supportive than previous exercises, and viewed REF 2021 as offering somewhat greater flexibility than REF 2014. A further positive development was that respondents saw REF 2021 as placing more focus on quality rather than quantity of outputs, as compared with REF 2014. **Results support the case that REF 2021 offers moderate improvements over REF 2014, albeit with scope for further improvement in future cycles.**

*Fig. 05: Mean attitudes toward changes to the REF 2021 (from REF 2014) overall, for women, carers, and self-identified early-career researchers, with 3 = positive, -3 = negative, 0 = neither negative nor positive.*
4. Knowledge of the REF rules

We asked how participants received information about the REF and how aware they were of the recent changes to REF 2021. Participants demonstrated generally good knowledge of aspects that are new to REF 2021. Those in more senior positions demonstrated more accurate knowledge, and changes to REF 2021 had been well communicated. The exception was relatively low awareness that further support is available for interdisciplinary research, suggesting a need for greater clarity in communications in this area.

Most information about the REF came from informal discussions with colleagues, heads of departments, and university-wide communications. The smallest amount of information came from the REF website and social media. Non-independent and early independent-position researchers received more information about the REF from their mentors, as compared with later-career researchers. Respondents representing Panel D received more information from peers through informal discussions and social media. Analysis from the interviews showed that universities receive information in part through REF readiness activities, including the sharing of best practices.

*Informal disc. = informal discussions with colleagues; professional = professional services*
No single source of information stood out as predicting participants having more knowledge about changes to REF 2021. This suggests that trickle-down or peer-to-peer processes do not result in a significant loss of information compared with more formal approaches. For early-career researchers, a disproportionate amount of information about the REF may come from mentors, so there is likely to be a higher variability in the accuracy of this information and how these researchers build their own portfolio to meet expectations of the REF.

Participants still perceived a lack of clarity with respect to some REF 2021 expectations, despite holding positive views about the consultative nature of the process. Instead, most participants suggested that the late stage at which information was received (in terms of REF preparations) heightened a sense of uncertainty among managers and staff, which was deemed unhelpful. The findings suggest that, where possible, REF expectations should be outlined as early as possible in the process.

5. Institutional management and support

Analysis of the survey data reveals that between one-third and one-half of respondents reported their departments used supportive activities to motivate and guide them toward better REF performance, including providing academics with clear guidance. Interviews with managers revealed a range of readiness activities and structured interventions used to embed REF activity.
### Table 07: Readiness activities for research outputs described by interviewees

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<thead>
<tr>
<th>Readiness Activities</th>
<th>Targeted Interventions</th>
<th>Structured Interventions</th>
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<tbody>
<tr>
<td>REF reading and ranking groups</td>
<td>Research mentoring</td>
<td>Performance Development Review (PDR)</td>
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<tr>
<td>Rolling REF/REF stocktake</td>
<td>Training on star ratings</td>
<td>Reporting and monitoring dashboards/systems</td>
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<tr>
<td>Implementation of system for open access database of papers</td>
<td>Meetings with research leads about star ratings</td>
<td>Internal code of practice for research assessment</td>
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<tr>
<td>Annual REF reading exercises</td>
<td>Regular communications and bulletins, information events, Open Access week</td>
<td>Movement of research staff to teaching contracts</td>
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<td>Internal peer review group</td>
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<td>Appointment of External Research Advisors</td>
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Departments were seen as using constructive and supportive motivational approaches towards the REF, more frequently than pressuring motivational strategies.

Although less frequent, the use of potentially pressuring motivational strategies was still noteworthy, in that just under 1 out of 6 respondents experienced the use of such techniques. The most common such strategy was indicating a role change if academics failed to perform in accord with the REF. Relatively few respondents reported the use of formal contract changes or promotions to motivate REF activities.
These techniques, and especially the expectation of role change, are problematic because they are likely to drive what managers ostensibly want to avoid, by encouraging affected researchers to be motivated primarily by REF performance and less by other drivers for conducting research.

Both interviewees and survey respondents identified the importance of departments using supportive approaches to motivate and inspire academics. Interviewees highlighted the idea that REF is a ‘team sport’ or collective endeavour rather than an individual activity, and this was reflected indirectly in these survey responses. Interviewees also described a broad set of approaches taken by universities and departments/schools to prepare academics for the expectations of the REF through enhancing communication and skills building. Overall, these approaches were varied and often resource/system intensive, and little was described in terms of their reception by academics. While some of these approaches are tailored to the climates of specific institutions and departments, others may be more or less adaptive across institutions.

It may be fruitful for institutions to share best practices in REF readiness rather than attempting to ‘reinvent the wheel’ as the REF process approaches the submission stage and as the new rules are more widely embedded (e.g., a greater focus on impact).
6. Identity, equality and diversity

The analyses from the pilot study considered differences as a function of gender, caring responsibilities, and those who self-identified as early career or occupied more junior roles (e.g., lecturers). On the whole, there were few differences between male and female respondents’ views, and those who had caring responsibilities, or did not. There were several notable exceptions, but these merit future study, given the large number of analyses overall may have yielded some findings by chance. Any differences between these demographic groups should be replicated in future research to obtain greater confidence that they reflect meaningful differences in the population.

Notably, women and independent early and mid-career researchers reported that changes made to REF 2021 were more likely to influence the expectations placed on them, although it was not clear whether these changing expectations would be positive or negative ones. The finding that early-career researchers report more influence is consistent with interviews, in which managers highlighted a disproportionate influence of the REF on early-career academics. The difference across genders is also noteworthy and merits future consideration.
Although not assessed in the survey data, analysis of the interviews conducted with university managers revealed some negative impacts upon the health and well-being of the research community with respect to the REF. With respect to the changes to REF 2021 where equality and diversity considerations are taken more plainly into account, most managers felt that this would have a positive impact upon the well-being of academics for whom equality and diversity issues were faced in the previous REF 2014. Analysis suggests that the new approaches to equality and diversity and reduction in outputs may lessen anxiety and stress caused by the rules of the previous REF cycle.

More broadly, several managers noted concerns over academic wellbeing arising from increased performativity, workload pressures and competition, in part, associated with the REF. Instead, stress and wellbeing issues were often raised by participants as symptomatic of broader challenges facing higher education, and further research would need to focus more specifically to ascertain the extent to which there exists a causal relationship between concerns about academic wellbeing and the REF.

It is notable that most if not all participants suggested that they felt stress was likely to reduce as a result of the changes post-REF 2014 as the sector further adapts to the demands of the REF process. Despite this, REF continued to be characterized as burdensome and, as such, more research into the localized and systemic effects specifically with respect to REF would need to be conducted to untangle these concerns from pressures coming from elsewhere within the higher education system.
In most analyses, we did not observe consistent and noticeable differences between those who identified as submitting to different REF panels. However, notable findings are: that those who identified as submitting to Panel B – engineering and physical sciences – reported the most beneficial influences on research activities in academic culture, and that those from Panel D – arts and humanities – reported the least beneficial influence of the REF on research activities.

Reflecting these differences, Panel D also saw the REF as being less successful in achieving its stated purposes, and particularly to influence the national agenda, while Panel B perceived that the REF was most successful in achieving what it sets out to do. Further, those who identified as submitting to Panel C - the social sciences – talked more about metrics and their complexities than Panel A – biomedical sciences - who had a tendency to have confidence in and rely on metrics such as citation and journal impact factors.

Further, in survey data, Panel C participants reported a greater influence of the REF on the quantity, quality, scope, and prestige of outputs they produced. This may suggest a challenge to meet expectations of the REF, particularly as interdisciplinary research is often located within this group of cognate disciplines.
7. Challenges and concerns

The REF can be seen to pose challenges and concerns for academics and managers alike. These include, but are not limited to: impacts on authenticity and autonomy, influencing behaviours, diminishing morale, concerns for wellbeing, and encouraging concerning behaviours such as game-playing (where additional strategies are implemented, beyond those required by the exercise, in order to influence exercise outcomes). The REF is inevitably seen to influence the authenticity of researchers’ work, that is, how closely it represents their academic interests and values. Preliminary findings from the pilot study suggest that there may be small negative impacts on respondents’ authenticity.

Future research should examine where negative impacts on authenticity may occur. There may be a small subset of respondents who feel negative impacts on authenticity and could be supported in more substantive ways. Interviewed managers acknowledged some potential conflicts with academic freedom, but there was a lack of consensus about this, and no one expressed confidence that it was driving people to conduct different research. Instead, managers suggested that REF might ‘focus minds’ on particular projects. This may come at the expense of more creative projects. Similarly, the REF exercise was not seen by surveyed respondents to impact their authenticity, relative to other potential influences of the REF, although, where there is an influence, it was seen to be slightly negative.

A potential risk to authenticity is reflected in a survey finding that 15% of respondents reported that they were asked to change the focus of their research to accommodate the REF. While this is a relatively small proportion of respondents (85% of respondents did not report this risk), it still indicates that a sizeable portion of research content within the UK may be directly shaped through REF expectations. The fact that interviewed managers did not feel they could comment on this influence suggests some degree of divergence between strategic aspirations and the realities on the ground for those conducting the research.
8. Where next?

Going forward, it will be important to understand whether and how attitudes related to the REF are changing with new rules, structures, and emerging deadlines. Understanding academic attitudes and experiences across time informs strategic changes to better support the research community, as well as policy recommendations for funders and institutions alike.

This pilot represents a first step in the right direction, but a larger, longitudinal study would allow an understanding of respondents’ attitudes related to the specific reforms being introduced in this and future cycles of the REF – for example, staff selection, number of outputs, [non] portability of outputs, and the increased weighting of impact case studies.

Through an expanded longitudinal study, further research paying attention to the higher education institutions that took part in the pilot project, supplemented with further institutions and UoAs to increase the breadth of findings, would allow modelling what researchers and managers are feeling and why they are feeling these ways. This more systematic approach to ‘research on research’ is vital to informing the activities of a system that values evaluation, continuous improvement and evidence-informed policymaking.

The approach used in this Real-Time REF Review pilot, supplemented with additional breadth, could yield a more thoughtful, textured and empirically informed approach to how the REF is adapted and implemented in future cycles to:

(a) better understand their relation to the salience and implementation of changes; and

(b) predict changing attitudes and perceptions from current baseline measures at individual and institutional levels.

In sum, this pilot project suggests that researchers have mixed and complex reactions to the REF, and that these reactions are sensitive to aspects of the REF process and how it is implemented within universities. Through expanding the approach taken in this pilot study to a larger sample over time, further research would enable the sector to better understand the nature of the issues – problems and benefits – pertaining to the REF, to inform future assessment cycles beyond 2021.