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Responsible Research Assessment Working Group

Transforming Assessment

The 2025 Global Research Council survey of funder approaches to responsible research assessment

May 2025

Alexander Rushforth, Anh-Khoi Trinh, Claire Fraser, Denis Newman-Griffis, James Wilsdon, Mohammed Ahmad Alshamsi, Nino Gogadze, Peter Kolarz, Shawn McGuirk

With input from the Global Research Council Responsible Research Assessment Working Group.



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Foreword



Prof. Alejandro Adem NSERC, Canada Chair, GRC Governing Board



H.E. Dr. Munir Eldesouki KASCT, Saudi Arabia



James Wilsdon Executive Director, RoRI Vice-Chair, GRC Governing Board Professor of Research Policy, UCL

Two years ago, a comprehensive review of global progress towards research assessment reform concluded that "the imperative to rethink the way in which research individuals, institutions and outputs are evaluated is clear and urgent." This follows a decade in which we saw debates intensify across the research community about how diverse forms of quality and impact can be measured and evaluated, and how research cultures can be made more open, inclusive and impactful.

A bottom-up drive to reform assessment systems through manifestos and principles has matured into a focus on concrete institutional commitments, catalysed by international initiatives like the Coalition for Advancing Research Assessment (CoARA) - which now has over 800 signatories to its underpinning agreement.

<u>The Global Research Council (GRC)</u> has made significant contributions to these agendas, leveraging its unique capacity to convene and connect the leadership of funding agencies worldwide. In 2020, it partnered with the Research on Research Institute (RoRI) to publish an influential report on <u>The changing role of funders in responsible research assessment</u>, which included an initial survey of approaches to RRA among its participating funders. The 2020 report advanced a definition of responsible research assessment (RRA) as

'an umbrella term for approaches to assessment which incentivise, reflect and reward the plural characteristics of high-quality research, in support of diverse and inclusive research cultures.'

At its 2021 Annual Meeting, the GRC endorsed a Call to Action on RRA, followed by the establishment of an <u>RRA Working Group</u> to carry forward this work. This group in 2022 produced an Action Plan, and in 2024, a framework for the <u>Dimensions of RRA</u>.



With this new report, the GRC and RoRI are proud to deepen and extend their collaboration in support of assessment reform. Drawing on insights from fifty public research funders worldwide – collected through a global GRC survey conducted throughout 2024 and into early 2025 – we aim here to provide a comprehensive global perspective on the current state of RRA within public funding agencies, and support funders on their journeys towards more transparent, inclusive and evidence-informed assessment practices.

While conventional modes of evaluating research quality remain prevalent, the survey highlights a growing recognition among GRC participants of the principles and value of RRA, and signals a shared readiness for change across global funding systems.

The GRC is well positioned to foster a global dialogue on research assessment. Notably, nearly half of the responses to the latest survey originate from funders in the Global South, complementing much RRA work that focuses on Europe or North America. The diversity of perspectives captured by the survey highlights varied approaches to RRA, and underscores the importance of context-specific innovations.

Over the next five years, sustained support and training will be essential to embed and implement RRA. The enthusiasm we see among funders for process modifications, such as the narrative CV, reflects a commitment to improving efficiencies and reducing biases in research assessment. However, the survey reveals that there is no one-size-fits-all approach to achieving RRA.

More experimentation and evidence is needed to identify what works in different settings. In this respect, research assessment reform links to a wider movement in support of metascience (or meta-research), now gaining momentum in many countries.

The premise and the promise of metascience are simple – to turn the data, methods and tools of research back towards analysing and improving the research system itself. Linking RRA to metascience will strengthen our collective efforts, and ensure that we proceed on the basis of robust and contextualised evidence. Doing RRA well, experimenting creatively, collaborating and learning within and across different institutions are foundations on which so much of the longer-term health of the global research system now depends.

Prof. Alejandro Adem, H.E. Dr. Munir Eldesouki and Prof. James Wilsdon

May 2025

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Executive Summary

Responsible research assessment (RRA) is an umbrella term denoting approaches to assessment which incentivise, reflect, and reward the plural characteristics of high-quality research, in support of diverse and inclusive research cultures.

The rise of RRA reflects the changing and expanding role of research funders, from a more traditional emphasis on supporting knowledge advancement and tracking academic outputs, to ensuring research contributes to broader societal needs and economic development. Against this backdrop, established methods for assessing research quality and achievements have come under greater scrutiny, led by a global movement calling for research assessment reform. RRA therefore needs to be understood as an open-ended transformative endeavour, rather than as a specific process with predefined start and end-points.

The Global Research Council (GRC) is a virtual participant organisation, composed of the heads of science and engineering funding agencies from around the world, dedicated to promoting the sharing of data and best practices for high-quality collaboration among funding agencies worldwide. The <u>GRC RRA Working Group</u> was established in 2021 to support the promotion and implementation of RRA practices in the international research and innovation system, through the development of a collective understanding of RRA and the sharing of guidance and best practices between research funding agencies worldwide.

This report presents the findings from the GRC's 2024 RRA survey. The survey builds on the first RRA survey conducted by RoRI with the GRC in 2020 (Curry et al 2020). The survey questions are in large part designed to align with the GRC's <u>Dimensions of Responsible</u> <u>Research Assessment</u> framework.

Fifty public research funders across the globe have participated in 2024 (including over a third from the Global South), resulting in a global picture of the current state of RRA.

Our headline finding is that research assessment among GRC-participating funders remains strongly focused on conventional and long-established modes of evaluating scholarly quality. However, principles of RRA are of considerable and increasing importance.

Critically, there is no single or uniform RRA 'pathway': different funders pursue RRA in multiple ways and with different emphases. This is most clearly illustrated on the issue of formal RRA definitions and frameworks. Almost all respondents endorse or adhere to at least one RRA framework, and the great majority adhere to several of the frameworks we surveyed for - the Coalition for Advancing Research Assessment (CoARA), the Declaration on Research Assessment (DORA), the UNESCO Recommendation on Open Science, and the GRC's own peer review guidance, to name a few. Yet, there is no single dominant RRA framework. This may be no bad thing: different statements emphasise distinct aspects of assessment reform and can address different needs.

Outputs and criteria

When evaluating **outputs** in research proposals, almost all funders value journal articles, books, book chapters, conference contributions and patents. At the same time, funders often also encourage a broader array of different output types, many of which are only applicable within a subset of fields (exhibitions, designs, web content, translations, etc.).

At the level of applicants' broader **activities**, established markers of academic 'excellence' still dominate the picture (published outputs, previous funded projects, awards, citations) but growing numbers recommend reviewers to also consider open access publications, open research data and data curation. Mentoring, teaching and other organisational responsibilities are also in this range of additional considerations.

At the level of **indicators**, metrics of journal impact and journal prestige appear to be waning in significance. On other types of indicators (e.g. individuals' field-adjusted citations), there is no clear trend. For most non-journal indicators we surveyed for, there are roughly as many respondents reporting phasing-out as there are reporting possible phasing-in. Superseding all quantitative indicators in research assessment, qualitative assessment of published outputs is by far the most commonly noted way in which research outputs are assessed. Many respondents also note that they are considering phasing this in, compared with very few who are considering phasing out this approach.

The most common **criteria** reviewers are instructed to consider are soundness of proposed methodology, feasibility, resource allocation, ethical considerations, and expertise of the research team. This reflects our headline observation that established approaches to research assessment remain dominant. But likewise reflecting our headline observation, there is evident growth of a range of additional elements. These mostly pertain either to equity and diversity considerations, or to impact pathways and the societal relevance and/or use of the proposed research.

Assessment processes

In terms of substantive process changes in research assessment, there is an increasingly strong influence of RRA principles. While changes are not being implemented across the board, and far from uniformly, many efforts and plans are in place to make funding processes less burdensome and more equitable.

Grant funding processes typically involve application review by 2-3 remote experts and ranking of applications by a review panel. We find that funders make use of many modifications to this standard process.

The most-used process modifications (often reported by 70-80% of respondents) are generally of a less controversial and more light-touch nature. They include use of international assessors, virtual panels, and introducing additional assessment criteria (e.g. to include relevance, potential for societal impact, or equity, diversity and inclusion dimensions). Those least in use tend to present more radical departures from standard established assessment processes: partial randomisation, use of quotas, wildcards, applicant anonymisation.

A growing number of funders are also introducing narrative CV formats to broaden what can be assessed and to mitigate bias against researchers who demonstrate excellence and impact beyond conventional academic publications and those with non-linear career paths. There is much enthusiasm around narrative CVs, with 60% of respondents noting that narrative CV formats have been introduced in their organisation in some form.

When we asked which process modifications are not in use now but under consideration for future use, the most-noted ones pertain closely to RRA, especially in terms of making processes more efficient and less burdensome, and in terms of reducing biases and inequities (e.g. reducing application form length, applicant anonymisation).

A major current limitation is that there is little evaluative evidence on the effects of many of these process modifications. This problem is very pronounced for narrative CVs, as well as for several other funding process interventions mentioned above.

Implementing responsible research assessment: the funders' perspective

Our survey reveals a high degree of funders' perceived autonomy from state institutions and academic communities, especially when it comes to assessment criteria and process design. While constraints still exist, these reported levels of operational autonomy highlight that funders may be well positioned to be important 'change-makers' in the science system.

Nevertheless, while funders' engagement with RRA principles reflects a commitment to reform, our results show that the practical application of RRA remains a key ongoing area for development.

Our survey results reflect well-known arguments that innovation in organisations is more likely to occur where there is resourcing, leadership, and a shared pro-innovation culture. A large majority of funders report that staff have formally allocated time to concentrate on exploring and developing new ideas, including developing responsible research assessment practices and capturing knowledge from outside their organisation (e.g. by attending conferences). However, there are disparities in the level of resources available to meaningfully engage with changing or emerging RRA practices.

While exploratory engagement is important, resources to implement new interventions are also crucial. Additional training, for instance, must be accounted for in financial and operational planning. This is not a one-time investment but requires sustained support, as well as time, patience, monitoring and evaluation. Beyond financial, operational and political capacities, senior leadership often also plays a crucial role in setting the cultural tone for innovation.

The growing role of AI in research assessment

Artificial intelligence (AI) technologies are rapidly changing our ideas and approaches for how research works, and research assessment processes are no exception. Our survey shows that funders around the world are actively exploring the use of AI to inform the work of research assessment, from selecting reviewers to strategic insight.

However, AI use is neither universal nor uncontroversial. Our results show that funders see both significant benefit and risk from potential use of AI in their work, with some funders still avoiding the use of AI entirely. The greatest benefits of AI are seen for operational decision-making, while AI use for longer-term strategic questions is seen by respondents as particularly risky.

Most importantly, our results show how complex the use of AI is in practice. Funders reported that decisions about AI were informed by concerns representing all parts of funding organisations, with a mixture of in-house and external input required.

Tackling the question of AI use in research assessment is an iterative and evolving process, with our results representing a snapshot of the current diversity of opinion and practice on AI use. With clear benefits and risks attending AI use in research assessment, and the importance of all aspects of funders' work in shaping this use, developing shared practice on AI use in research assessment is a priority over the next few years.

Recommendations, learning and future research

Our findings allow us to make a number of recommendations, which are fully spelled out in the final main section of this report. They notably pertain to the need for more research.

More research is needed in order to grow the evidence base on the effects of modifications to assessment processes. This includes pilots of specific interventions, and experimental, qualitative and mixed-methods studies. Most organisations also perform evaluations of their processes in some form, though publishing evaluations does not appear to happen in all cases.

We recommend that **results** of process experiments, as well as any evaluations, **should as a rule be published openly and shared**, so that the global research funding community can benefit from these insights.

Our survey findings illustrate a diversity of the RRA landscape. We recommend further **research to map and improve understanding around what different approaches to RRA look like**, why different approaches exist in different places, and to what extent observed developments are due to RRA agendas at all.

Chapter 1

Introduction

This report presents the findings of the second GRC Responsible Research Assessment (RRA) survey, which was conducted during 2024 and closed on the 6th of January 2025. Fifty public research funders across the globe have participated in this survey, so this report is able to give a robust global picture of the current state of RRA among funding organisations.

RRA is an umbrella term, defined as the approaches to assessment which incentivise, reflect, and reward the plural characteristics of high-quality research, in support of diverse and inclusive research cultures (Curry et al 2020). The GRC's RRA working group has developed a new framework: the <u>Dimensions of Responsible Research Assessment</u>.



Figure 1: GRC RRA Dimensions.

These dimensions include guiding principles, responsible processes and methodologies (e.g. responsible assessment of research contributions and achievements and responsible uses of assessment criteria, including bibliometrics) and responsible governance practices (e.g. responsible administration and monitoring of research assessment processes and responsible approaches to research assessment reform) (Benamara et al 2024).

The framework - and our survey itself - also reflects several GRC statements published in recent years on topics including sustainable research, recognising and rewarding researchers, peer/merit review and, most recently, on artificial intelligence (AI).¹

Inspired by the drafting and release of the Dimensions of RRA Framework, this survey covers the following topics:

- Funders' engagement with established RRA declarations and international guidance documents
- Presence of management and administrative practices in support of RRA
- Criteria and areas of focus in the assessment of research funding applications
- Innovations in application assessment techniques and methods aligned with RRA
- Funders' reality 'on the ground' in terms of ability to implement changes, and their freedom and resources for training and reform
- How funders make use of artificial intelligence (AI) in their operations and processes

Taken together, the survey results provide an instructive picture of the current state of RRA in funding organisations from around the world. In this report, we present aggregate headline findings on a range of key survey items and provide reflection on what they tell us about RRA, and about current contexts and practices in the global research funding landscape more broadly.

Following this introduction, Chapter 2 of this report focuses on definitions of RRA itself and how visions for RRA are implemented (i.e. what kinds of outputs and quality markers are valued in assessment processes). Next, Chapter 3 looks at assessment processes themselves and how these are evolving. Chapter 4 provides a deep-dive into the use of AI in funders' operations (notably in assessment processes) and what shape this may take in the future. Finally, Chapter 5 covers funders' organisational context and culture, and asks what scope and space there is for renewal and continuing reform. We conclude with a list of recommendations in Chapter 6.

¹ See Appendix 4 for a full list of recent relevant GRC statements and declarations.

1.1. Method notes - a global survey

The full survey method and all data tables are appended to this report. However, we note some key points here:

- The survey opened on 28 May 2024 and closed on 6th January 2025.
- Invitations to complete the survey were sent to representatives of all public research funding organisations participating in the Global Research Council during the time of the survey. This gave us a population ('N') of 117.
- There were a total of 50 responses, including 47 complete and 3 incomplete ones. To account for this, as well as for occasional non-completion of individual survey items by some respondents, we note the response count ('n') in each data graph in this report. Taking full and partial responses together, our response rate is 43%.
- Most questions had a closed point-and-click format, lending themselves to quantified data presentation. However, there were also several open text entry fields that respondents could use. Where helpful, we present summaries or anonymised extracts from this qualitative information to further contextualise and deepen the quantitative findings.
- The anonymised selected dataset is available <u>here</u>. We have removed any variables that may conceivably allow for identification of specific respondents or organisations. Requests for data not covered in the public set can be directed to the RoRI <u>AGORRA</u> team, who will consider each data request on an individual basis, prioritising anonymity of respondents in all cases.
- The research was granted approval by the Ethics Review Committee of the Faculty of Social and Behavioral Sciences, Leiden University.

Surveying research funding organisations is to an extent 'the art of the possible': there are organisations not included in our surveyed populations, simply because they are currently not engaging with the GRC. The true global number of public national research funding organisations exceeds 117, and the number will rise significantly further if we were also to consider regional, subnational and private funders (e.g. charitable foundations).

Notwithstanding these limitations, the GRC is the best available starting point for a survey of this type. Firstly, the GRC was able to spread awareness of our survey through its communication channels, which has helped decisively to boost response rates. Second, the GRC is a participatory rather than a membership organisation, which means there are relatively few barriers to entry. Consequently, there is a lot of diversity among organisations participating in the GRC in terms of region, size and thematic focus.

This diversity is reflected in our pool of survey responses. We note in particular that there is a high degree of geographical diversity of respondents. While funders from Europe are strongly represented at 44% of responses, there are substantial numbers of responses from all GRC-regions, with over a third of all responses being from funders in the Global South.



Figure 2: Distribution of responses among the five GRC regions.

This strong representation of the Global South is especially important, as much of the academic and policy literature on RRA and research assessment more broadly has historically been strongly focused on a select few countries in the Global North. While there is much to be gained from studying this body of work, the scarcity of perspectives from the Global South risks creating gaps in our understanding of what exactly RRA might mean in different contexts and what kinds of innovations can take shape.

Conducting surveys of national organisations inevitably means that response numbers will be too small to conduct statistical hypothesis testing (in contrast, for instance, to surveys of individual citizens where one might expect thousands of responses). However, we are pleased to report that our pool of responses is quite large in relation to the population surveyed. Further, in terms of geographic distribution (as well as other factors we screened for such as organisation size and disciplinary spread), we have a suitably diverse response pool for this to be an authoritative and truly global picture of the current state of RRA.

There are some items where it is helpful to take a closer look at diverging results between different groups of countries. Our response pool is too small to sub-divide between the five GRC regions, given the risk for a few 'outlier' responses to heavily skew results and yield a misleading picture. However, we judge the response pool sufficiently large and balanced for a two-way split into Global North and Global South countries (as defined by inclusion or non-inclusion in the <u>OECD DAC list</u>). In large part, this separation maps onto those countries most often included in the wider literature on research assessment versus those most often excluded. We provide data illustrating important distinctions between these two groups of countries in Chapter 2. Beyond this occasional distinction, we focus on showing aggregate results across all survey respondents.

1.2. A look back: the 2020 GRC RRA survey

Our survey builds on the first RRA survey conducted by RoRI with the GRC in 2020 of GRC participant organisations to gather insights into their RRA policies and practices (Curry et al 2020).

The 2020 survey built on the 2019 survey by Science Europe (Technopolis 2019) of research assessment practices among its members and was an opportunity to collect further information at a global level. The findings from the 2020 GRC survey were instrumental in shaping the agenda for a virtual conference on RRA held in November 2020. The conference used the 2020 survey data and supplementary report to provide a clear context and baseline for discussions. This ensured that the focus was on emerging priorities and on the role of the global funder community in advancing RRA.

In 2020, the survey report presented data (Curry et al 2020, pp. 29-39) which demonstrated a shift away from reliance on metrics towards more qualitative or mixed-methods modes of assessment. It also showed appetite and action from global funders in changing research assessments to be more objective and fair, particularly by enabling a broader range of people to evidence a wider variety of skills and experience in applications.

At the 9th GRC Annual Meeting in May 2021, a <u>Conference Summary Report</u> was published and the GRC endorsed a <u>Call to Action</u> that called on participant organisations to embed existing RRA principles and take concrete steps to incentivise and fulfil RRA ambitions. It is based on these activities that the GRC RRA working group was established.

The GRC RRA working group agreed with the RoRI AGORRA (A Global Observatory on Responsible Research Assessment) project in 2024 to conduct this second RRA survey, with the intent to expand on the 2020 GRC survey with additional questions and elements of new categorisation and clarification.

In conducting our 2024 survey, we asked respondent funding organisations for permission to re-use data they submitted to the 2020 survey, as the consent collected during the 2020 survey only covered use for that specific report. Accordingly, we were able to compare the findings from the 2024 survey to the responses of organisations that granted us this permission. Of the 50 organisations that responded to the 2024 survey, 22 had also responded to the 2020 survey and gave permission to re-use their data.

Comparative analysis in this report is limited to the 22 respondents that answered both surveys and gave permission to re-use their data. This ensures that the responses included for each year are comparable, and that any changes measured from 2020 to 2024 are not due to changes in the composition of the responding organisations. However, as this is not a randomly selected sub-sample, we do not expect the findings to fully apply to the whole sample. The 22 respondents likely represent a particular subset of funding organisations that

are highly active as part of the GRC community, given that they participated in both the 2020 and 2024 surveys.

Additionally, the wording of some questions was changed slightly between the 2020 and 2024 surveys, which also impacts the ability to undertake comparisons. Full and consistent comparison would require question wordings to remain constant.

Chapter 2

The multifaceted rise of RRA

Research assessment across the globe remains strongly focused on conventional and long-established modes of evaluating scholarly quality. However, our survey findings show that principles of responsible research assessment (RRA) are of considerable and increasing importance. Critically, there is no single or uniform RRA 'pathway': different countries pursue RRA in different ways and with different emphases.

Our survey findings illustrate this diversity of the RRA landscape and also give rise to a need for further research to fully map and understand what different approaches to RRA look like, why different approaches exist in different places, and to what extent observed developments are linked to RRA agendas at all.

2.1. RRA definitions and frameworks

Our headline observation is most clearly illustrated in the context of formal RRA definitions and frameworks:

- Almost all respondents endorse or adhere to at least one RRA framework, and the great majority adhere to several of the frameworks we surveyed for.
- The GRC's own RRA frameworks are most commonly noted, followed by CoARA and DORA. However, there does not appear to be a clear dominant initiative: almost all we surveyed for have been selected by 30-60% of respondents.
- Signatories to DORA and CoARA are strongly concentrated in the Global North. Just 6% of our respondents from the Global South note that their organisation is signatory to CoARA, with 17% the equivalent figure for DORA. Conversely, more funders from the Global South report subscribing to the UNESCO recommendation on Open Science.



Figure 3: Frameworks endorsed or adhered to related to RRA. Percentages for total population, Global North and Global South. As noted in the introduction to this report, we classify Global South and Global North countries by inclusion or non-inclusion in the OECD Development Assistance Committee (DAC) list.

Since the 2020 GRC members' survey, the number of research assessment statements and initiatives has expanded significantly. New frameworks, such as CoARA and its Agreement on Reforming Research Assessment (CoARA 2022), and the <u>GRC's statement of principles on recognising and rewarding researchers</u> have built on principles outlined in earlier statements covered in the 2020 survey, including the Leiden Manifesto, the Metric Tide Report, and the Hong Kong Principles.

While initiatives like DORA and the Leiden Manifesto initially focused more narrowly on the inappropriate use of indicators, and the Hong Kong Principles addressed research integrity concerns, CoARA represents a broader, more multi-dimensional approach. CoARA, like the broader RRA movement, not only critiques existing practices but also articulates a positive vision of what constitutes high-quality and impactful research assessments at the individual, funding proposal, and organisational levels (Wilsdon 2021; Rushforth and Hammarfelt 2023). With 40% of respondents reporting their organisation's endorsement, CoARA has rapidly become one of the most visible frameworks in this space, particularly in the Global North with an uptake of 59%.²

In light of the shifting landscape of actors and frameworks, our comparison to 2020 is only partial, with no comparator for several frameworks included in the 2024 survey. Subtracting these and including only organisations who responded to both the 2020 and 2024 surveys, we have 22 responses, on which the following observations are based.



Figure 4: Frameworks endorsed or adhered to related to responsible research in 2020 and 2024 for the 22 respondents that responded to both surveys and consented to use of previous response. NB: the figure for the GRC peer/merit review is very high in this chart, significantly higher than the overall 2024 figure of 60%. This is because we present here only those organisations that responded to both the 2020 and 2024 GRC surveys - a subset very likely to represent those most consistently engaged in GRC activities and therefore most likely to endorse GRC frameworks. This means there is a degree of skew in these figures, though we are confident in the overall trends they show.

Our comparison with 2020 suggests growing but uneven engagement with RRA frameworks. Importantly, responses indicate the GRC is a key vector for spreading RRA principles, and is in fact growing in importance, with an increase from 73% to 95% of respondents endorsing or

² We note that among Global South participants, just 6% have flagged that their organisation endorses CoARA, so the overall percentage for CoARA is strongly driven by the Global North.

adhering to the GRC's own frameworks.³ Beyond this, there is no clear sense of 'rise' or 'fall', though this is obscured by the absence of CoARA in 2020.

There is a notable decrease in respondents saying they have their own framework developed by their organisation. While there is therefore little evidence of convergence to a single framework, there may be a slight trend away from individual organisational frameworks and towards any number of the international ones for which we surveyed.

The absence of a single dominant framework may be no bad thing, as different statements emphasise distinct aspects of assessment reform - despite areas of overlap - and can address different needs: some funders may prefer (or be constrained to) frameworks that address more narrow concerns like responsible metrics, while others may be more inclined (or limited) to adopt statements that provide more comprehensive visions of reform. In future surveys it may also be useful to include the 11 Dimensions of RRA developed by the GRC (Benamara et al 2024), which was published on the same day as this survey was launched.

It is worth considering whether signing or endorsing these various frameworks is considered important or perhaps just perfunctory. Taking the GRC statement of principles on peer/merit review, results indicate a strong tendency for respondents to believe that endorsement of the framework makes a difference to assessment approaches. Forty percent report that it has not played a role, which reflects in part the fact that 40% did not state that their organisation had endorsed it in the first place.⁴ Of the remaining respondents, two thirds can see an effect, and one third are unsure.



Figure 5: Influence of the GRC statement of principles on peer/merit review.

³ Note that for the 2024 bar of the 2020-2024 comparative chart we have conflated 'GRC merit review' and 'GRC recognising and rewarding researchers'.

 $^{^{4}}$ We note that there is not a perfect overlap: of those answering 'no' (n=19), 11 have selected at least one GRC framework in the previous survey item, and of those answering yes (n=20), 17 have selected at least one GRC framework. Some therefore indicate that endorsement has had no effect, while others see an effect even without their organisation formally endorsing the framework.

We do not judge these figures to be concerning: the direct effects of declarations and frameworks of this type may not immediately be clear in all cases, and is one of the reasons why newer frameworks such as CoARA may have included a requirement for organisations to develop action plans. The results certainly indicate that endorsing them appears in most cases to be more than just a 'box-ticking exercise'. Indeed, we see plenty of indications of changing practices in funding organisations reflecting many of the above-mentioned frameworks. We cover these in the following sections of this report.

2.2. Indicators and evaluation criteria

While funders' engagement with RRA principles reflects a commitment to reform, our results show that the practical application of responsible indicators and evaluation criteria remain a key ongoing area for development.

In terms of outputs that are considered in the evaluation of research proposals, conventional forms of academic productivity dominate the picture. Almost all respondents note that applicants' track record of journal articles is considered, with books, book chapters, conference contributions and patents also very common.

At the same time, most funders also consider a broader array of different output types, many of which are only applicable within a subset of fields (exhibitions, designs, web content, translations, etc.). While standard types of academic output dominate the picture, there is therefore evidence that funders are embracing a diversity of different output types in the assessment of applicants' track records, consistent with the GRC dimension of responsible use and dissemination of research assessment criteria.

We also checked for differences between Global North and Global South respondents but found no evidence of notable divergences between the two groups.



Figure 6: Type of outputs assessed when evaluating research proposals.

At the broader level of applicants' activities (i.e. not just formal outputs), there is evidence of the rise of RRA. As above, established markers of academic 'excellence' still dominate the picture (published outputs, previous funded projects, awards, citations). However, there are several elements emerging as being increasingly important: a majority of respondents report that their organisation recommends reviewers to consider open access publications, open research data and data curation. Mentoring, teaching and other organisational responsibilities are also in this range of additional considerations. Notably, at least a further 10% of respondents report these as being considered for future use.

These figures give an especially clear indication of the central finding of this report: conventional markers of research assessment still dominate the field, but aspects related to RRA are emerging and strengthening as important additional considerations.

Please indicate if your organisation instructs/recommends reviewers to consider any of the following aspects of an applicant's track record (n=47)	Currently instruct/ recommend using	Recommended / instructed in the past, but not anymore	Considering instructing/ recommending in future	Never instructed/ recommended and not considering doing so	Unsure
Publication outputs of the applicant/s	83%	0%	4%	11%	2%
Applicants' knowledge transfer/commercialisation (i.e. patents, clinical trials, spin-offs)	81%	2%	4%	9%	4%
Previous funded research projects of the applicant/s	79%	0%	6%	9%	6%
Applicants' participation in international research projects	77%	2%	4%	11%	6%
Awards of the applicant/s	70%	0%	4%	17%	9%
Applicants' participation in conferences	70%	2%	6%	15%	6%
Non-publication outputs of the applicant/s (e.g. research dataset and database, exhibition, performance and other outputs)	68%	0%	13%	13%	6%
Public engagement activities of the applicant/s	62%	0%	13%	17%	9%
Mentoring by the applicant/s	60%	2%	11%	13%	15%
Applicants' services for the research community (i.e. organisation of conferences, editorship of journals)	57%	2%	13%	13%	15%
Internal responsibilities within the applicant/s research organisation*	55%	2%	11%	21%	11%
Teaching activities of the applicant/s	51%	4%	9%	21%	15%
Data curation conducted by the applicant/s	51%	2%	13%	19%	15%
International representation of the team of applicants	49%	2%	11%	17%	21%
Open research data of the applicant/s	47%	2%	26%	15%	11%
Applicants' services for peer review and research evaluation	45%	2%	13%	21%	19%
Activities to support research integrity	45%	2%	19%	17%	17%
Activities of the applicant/s to promote diversity and inclusion	43%	2%	17%	23%	15%
Citations and publication-based indicators	40%	9%	15%	28%	9%
Open access publications of the applicant/s	40%	2%	28%	21%	9%
Preprints produced by the applicant/s	38%	0%	15%	30%	17%
Activities to support indigenous ways of knowing	28%	2%	13%	36%	21%

Figure 7: Aspects of applicant track record reviewers are instructed/recommended to consider. *Full item text: "Internal responsibilities within the applicant/s research organisation (e.g. head of department, or being a champion for open research, or a member of a research ethics committee)". At the level of indicators, funders vary in their approaches. There is a noticeable move away from some of the crudest journal-based metrics (a key commitment in DORA's 2013 statement) but at the more granular level of individuals' citation-based metrics, a more complex picture emerges.

Qualitative assessment of published outputs is by far the most commonly noted way in which research outputs are assessed. Many respondents also note that they are considering phasing this in, compared with very few who are considering phasing out this approach. This suggests current practices of the majority of GRC members who responded are aligned with the RRA principle of qualitative, context-sensitive modes of assessment, as advocated by GRC's Dimension on responsible assessment of research contributions and achievements, and CoARA's second commitment ("Base research assessment primarily on qualitative evaluation for which peer review is central, supported by responsible use of quantitative indicators") (CoARA, 2022).

Conversely, there are a range of metrics that are still commonly used, but where respondents also note past use and phase-out in relatively high proportions. This applies to:

- Number of publications
- Number of publications in high impact factor journals
- Journal reputation
- Presence of journal on a publicly or internally curated list of high quality journals
- Journal impact factor

While still widely used, these metrics appear to be waning in significance. However, on other types of indicators there is no clear trend. For most other indicators on which we surveyed, there are roughly as many respondents reporting phasing-out as there are reporting possible phasing-in.

This applies especially to a range of citation metrics, most notably the H-index.⁵ Unsurprisingly, lesser-known indicators are rarely recommended to reviewers, such as H-5 Median (2%), Eigenfactor (2%), and Citescore (11%). While response numbers for these lesser-known metrics are low, the survey data are consistent across the more mainstream 'desktop bibliometrics' (like H-index and cumulative citation numbers), with similar numbers reporting considering phase-in and reporting phase-out.

⁵ which for evaluative purposes has been widely discredited, see: <u>https://sfdora.org/resource/halt-the-h-index/</u>.



Figure 8: Top panel displays author-level approaches/tools reviewers are recommended to use when measuring research productivity and academic impact. Bottom panel shows journal-level approaches/tools reviewers are recommended to use when measuring research excellence.

Beyond indicators of scientific quality and/or impact of applicants' work, the survey results also indicate a strengthening of additional considerations in the assessment of research proposals. Figure 9 covers a range of considerations, and results show that most funders instruct or recommend their reviewers consider all elements we surveyed for here. Additionally, there is almost no indication of phasing-out of any of the items on the list, but in many cases there are substantial numbers of respondents considering future use. The most common aspects reviewers are instructed to consider are soundness of proposed methodology, feasibility, sound resource allocation, ethical considerations, and expertise balance of the research team. This reflects our headline observation that established approaches to research assessment remain dominant. But likewise reflecting our headline observation, there is evident growth of a range of additional elements. These generally pertain either to equity and diversity considerations (equity considerations on the research team, gender considerations in the research team or the research itself), or to impact pathways and the societal relevance and/or use of the proposed research (contribution of the research to SDGs or grand challenges, contribution to public policies). These are areas where especially high numbers of respondents report contemplating future adoption.





Finally, we can provide further detail on the rising importance of factors other than scientific excellence in the assessment of proposals - this time in terms of the weight assigned to such factors. We note that the figures below need to be viewed in the context of the points made above: conventional markers of scientific excellence are still central to research assessment. The additional elements we consider here are firmly 'second-order' considerations in terms of their prevalence, compared with the more long-established assessment criteria.

Of the factors for which we surveyed, research integrity and research ethics⁶ are most commonly noted as being given 'a lot' of weight. Considerations of EDI and multidisciplinarity, interdisciplinarity, and transdisciplinarity occupy intermediary positions. The remaining items we surveyed for are rarely noted to carry 'a lot' of weight in assessment of proposals.



Figure 10: Weight reviewers are instructed/recommended to assign to various factors when assessing merit of research proposals.

We also asked respondents to indicate whether any of these factors have been given either more or less weight over the past four years. Results show that for all factors, the weight given in assessment processes has at least remained the same and has often increased - almost no respondents report a decrease in weight for any of the factors.

⁶ Research integrity refers to a set of moral and ethical standards that serve as the foundation for the execution of research activities. Integrity in research is the incorporation of principles of honesty, transparency, and respect for ethical standards and norms throughout all stages of the research endeavor, encompassing study design, data collecting, analysis, reporting, and publishing. (Zhaksylyk et al 2023, see also the GRC's Statement of Principles for Research Integrity

https://globalresearchcouncil.org/fileadmin/documents/GRC_Publications/grc_statement_principles_research_integrity_FINAL.pd f)



Figure 11: Degree to which reviewers are instructed/recommended to consider certain factors more or less actively in 2024 compared to 2021.

These figures provide evidence for the continuous rise of a range of considerations in research assessment alongside conventional markers of scientific excellence. To be clear: there is no indication from our survey data that established criteria (robustness of method, feasibility, originality, qualification of team) are being displaced or even replaced. There is simply a growing number of considerations that are made when assessing and funding research.

These results also suggest that the global RRA movement's core principle is being largely upheld by funders. In fact, the items in the above survey question reflect several of the GRC RRA Dimensions framework. Its guiding principles include:

- Responsible commitment to and promotion of research integrity and the responsible conduct of research
- Responsible approaches to incentivizing open research
- Responsible commitment to equity, diversity, and inclusion in research

Our survey data presents evidence that respondents are generally pursuing all three of these guiding principles. In many cases, they are doing so more actively than they were four years ago.

Chapter 3

Funding processes in transition: trends, exceptions and the need for evidence

Most competitive research funding is allocated through a standard process that has been remarkably stable over several decades. It involves submission of a written application, followed by an administrative check (for eligibility and compliance). Applications are then typically reviewed by 2-3 external experts who each produce a review report. All applications and reviews are then discussed by a review panel and applications are ranked from best to worst. The top ranking applications are then recommended for funding and the leadership of the funding organisation will provide a final check before signing off the funding decision.

This process (or a very close approximation to it) is practiced as the main type of review process by almost all funding agencies across the globe. This includes not just research funders, but also innovation agencies (Biegelbauer et al 2020).



Figure 12: Overview of review process, depicting the basic components found in most funding organisations. Adapted from Kolarz et al (2023).

Whilst this standard funding process is well established and trusted by the research community, there is a growing understanding that it also has several problems, some of which pertain directly to the aim of responsible research assessment.

- It is burdensome and can take a long time (Guthrie et al 2018, Herbert et al 2015, RAND 2013, Nuffield 2014).
- It can produce arbitrary outcomes (Mutz et al 2016, Abdoul et al 2012, Graves et al 2011, Clarke et al 2016).
- It disadvantages highly novel, interdisciplinary and high-risk/high-reward research ideas (Kuhn 1970, Wessely 1998, Horrobin 1996, Roy 1985, Luukkonen et al 2015).
- It is prone to bias (Tomkins et al 2017, RAND 2013, Magua et al 2017, Mutz et al 2015).
- It struggles to reward criteria other than scientific excellence (for example, relevance to societal topics, potential for impact) (OECD 2018).

In order to respond to these problems, funders have experimented with and adopted a large number of variations and alternatives to this standard process. A recent report by Technopolis assessed 38 of these 'interventions' to standard grant application review processes, to understand how each one might be useful (i.e. which of the above problems it might help solve), and what evidence there is for its efficacy (Kolarz et al 2023).

While that report produced comprehensive descriptions of each intervention, it did not provide information about how widely each intervention was being used by funding organisations around the world. Our survey results are able to fill this gap.

The data shows that funders are varying their funding processes a lot through the 38 interventions, with several interventions reported to be in use by 70-80% of respondents.⁷ However, there is also substantial variation with many interventions only reported as being in use by a small minority of respondents.

⁷ We note that these figures say nothing about how widely the interventions are used within each funder (e.g. just in a few select schemes or across all funding activities), but just what share of funders use each intervention at all.

What peer review interventions does your organisation currently implement in the assessment of research proposals? (n=47)	Currently using	Used in the past	Never used but considering	Never used and not considering
Use of international assessors	80%	0%	9%	11%
Virtual panel	80%	5%	9%	7%
Group review	78%	7%	2%	2%
Embedding equity, diversity and inclusion in assessment	78%	0%	20%	2%
Assessment criteria definition (ensuring transparency, consistency, clarity, etc.)	77%	2%	6%	15%
Interviews	73%	7%	9%	11%
Expanding or reducing the amount of detail of feedback to unsuccessful applicants	70%	0%	11%	18%
Funder representation on review panels	70%	5%	2%	23%
Scoring mechanisms (formal weightings, 'calibrations between criteria)	70%	0%	9%	20%
Limiting individuals to one application (as lead investigator) at a time	66%	0%	14%	20%
Two-stage application process	66%	16%	11%	7%
Improving review quality (e.g. through training or peer review colleges)	65%	0%	16%	19%
Changing the number of reviewers	65%	7%	5%	23%
Use of non-academic assessors	64%	2%	11%	23%
Encouraging positive applicant behaviours (e.g. consortium building & collaboration)	60%	2%	17%	21%
Use of moderation panels	52%	5%	7%	36%
Panel only (no postal or external review)	52%	17%	2%	28%
Reducing application form length or cutting sections	51%	2%	33%	14%
Expressions Of interest	51%	16%	18%	16%
Returning reviews to applicant before funding decision (can include applicant rebuttal)	50%	2%	16%	32%
Standing panels versus portfolio panels	50%	0%	14%	36%
Use of metrics	48%	14%	2%	36%
Encouraging/supporting underrepresented groups to apply	48%	5%	19%	29%
External review only (no panel)	42%	9%	5%	44%
Sequential application of criteria	41%	2%	5%	52%
Moderation of reviews (only reviews that pass a quality threshold go to panels)	40%	9%	7%	44%
Bringing in reviewers from earlier careers and providing mentoring	40%	2%	30%	28%
Automation-assisted reviewer allocation	35%	0%	40%	26%
Sandpits or matching events	33%	16%	7%	44%
'Time out' period for unsuccessful applicants (e.g. no re-application for the next year)	30%	2%	15%	52%
Limiting the no. of applications/ re-submissions per institution (e.g. per year. per call)	22%	10%	15%	54%
Use of quotas	21%	14%	19%	47%
Partial randomisation	18%	0%	18%	64%
Programme managers discretion	17%	5%	0%	79%
Dragon's Den style pitch	14%	5%	9%	73%
'Wildcard': panellists can unilaterally fund one application per year	14%	0%	9%	77%
Applicant anonymisation	13%	4%	20%	62%
Peer allocation/distributed peer review	9%	14%	5%	73%

Figure 13: Shows the percentages of respondents using interventions in the assessment process. NB: For better comprehension, some intervention titles have been changed from the original survey text (which used verbatim definitions from the <u>Technopolis report on funding process interventions</u>). Original wording of interventions in the survey can be found in Appendix 3.

While there are few clear trends in terms of which interventions are used more or less often, it is evident that the most-used interventions are generally of a less controversial and more light-touch nature. They include use of international assessors (which may reduce bias and conflicts of interest), virtual panels (to reduce travel, emissions and burden, and to include a broader geographic diversity of panellists), and introducing additional assessment criteria (e.g. to include relevance, potential for societal impact, or EDI dimensions).

Those least in use by contrast tend to present more radical departures from standard established assessment process models: partial randomisation, use of quotas, wildcard, applicant anonymisation. In many cases, funders may simply have no interest in adopting some of these interventions. However, they also present far more significant process changes and may entail a degree of risk, particularly as the Technopolis report notes that the evidence for the effectiveness of many of these interventions remains limited. For funders keen to try new things, there may be a need for more controlled experiments and small pilot schemes to better understand how these more radical interventions to funding processes work.⁸

An especially important finding lies among those interventions most often noted as not being used at the moment but with intentions to do so in the future. The most noted in these terms are:

- Automation-assisted reviewer allocation (40%)
- Reducing application form length or cutting sections (33%)
- Bringing in reviewers from earlier careers and providing mentoring (30%)
- Applicant anonymisation (20%)
- Embedding equity, diversity and inclusion in the assessment (20%)

We cover 'automation-assisted reviewer allocation' in a separate section in this report on the issue of artificial intelligence in research assessment.⁹ Aside from this, all of the top most-noted interventions that are being considered for future use pertain closely to RRA, especially in terms of making processes more light-touch and efficient, and in terms of reducing biases and inequities.

Reflecting the findings of the previous section, we conclude that in terms of substantive process changes there is an increasingly strong influence of RRA principles. While these

⁸ There are plenty of initiatives to do so. This includes major metascience programmes in, for instance, the <u>UK</u>, <u>Germany</u> and <u>Canada</u>, RoRI's <u>AFIRE</u> programme, or individual funders' experiments with partial randomisation documented in the <u>Experimental</u> <u>Research Funders' Handbook</u>.

⁹ Though the term 'automation-assisted reviewer allocation' may also cover non-AI approaches, e.g. automation based on keyword matching rules.

process changes are not being implemented across the board, and far from uniformly, efforts and plans are in place to make funding processes less burdensome and more equitable.

3.1. Spotlight on narrative CVs

Many activities essential for research are not well captured by dominant research evaluation practices and relying on evaluation criteria such as quantity of publications, awards and journal prestige imposes a narrow ideal of academic excellence. Such dominant practices may also be biased towards those with linear career paths and disadvantage those with caring duties and other commitments.

In response to this problem, some funders have in recent years begun to introduce narrative CV formats (Fritch et al 2021; Strinzel et al 2021). What are now widely referred to as narrative CV formats '...supplement[s] more 'traditional' information such as publication lists and employment history with novel elements, in which researchers describe their achievements and trajectories in narrative form" (Varga et al 2024, 4).

Narrative CVs are an intervention not covered in the aforementioned Technopolis report, but it is one that is especially pertinent to RRA. Narrative CVs are also explicitly mentioned in the GRC Dimensions of RRA as a valuable practice, so our survey covered them with a series of specific questions.



Figure 14: Implementation and piloting of narrative CVs.

Just 17% of respondents reported that neither narrative CVs nor other new CV formats¹⁰ were in use with no plans to have such formats in the future. However, there is a diverse picture in terms of the level of roll-out. This ranges from narrative CVs being standard practice across the entire funding portfolio, to individual narrative CV pilots. A further 17% do not yet use narrative CV formats but are considering doing so in the future.

There are low response rates for the more detailed optional further questions on narrative CV formats, so we do not present them here (see Appendix 3 for full data tables). However, several respondents provided free-text responses, which we can draw on here.

Motivations for trialling narrative CVs are closely tied to fulfilling principles articulated by agreements like DORA and CoARA, for instance moving from narrow to holistic modes of assessment:

"Based on the premise that there is no ideal type of researcher and that different research projects require different talents. Therefore, the purpose of our implementation of the narrative CV was to consider the increasingly diverse range of contributions that researchers bring to their work, provide a more rounded picture of an individual's career, their achievements and overall contribution to research." (*Survey respondent, anon.*)

Contrary to some concerns that narrative CVs might add a layer of administrative burden to applicants and reviewers, some funders cited efficiency considerations as a motivation:

"[The rationale for trialling/implementing narrative CV formats was]...Reducing bureaucracy: adopting a single, flexible [narrative CV] approach facilitates understanding and reduces the need to refer to detailed guidance across applicants, research offices and reviewers..." (*Survey respondent, anon*.)

"[The rationale for trialling/implementing narrative CV formats was]...Simplifying the evaluation process and making it more effective: narrative CVs must be of maximum 6 pages, applicants must highlight their experiences and research results relevant to the specific funding opportunity, making it easier for reviewers to follow and analyze..." (*Survey respondent, anon.*)

Importantly, our survey data suggests that while there is a lot of enthusiasm around narrative CVs, there is so far very little evaluative evidence on the effects of their introduction. When asked about a range of possible effects of introducing narrative CVs, the great majority of respondents selected the 'don't know' option. Written comments from respondents indicate that routinisation of interventions like narrative CVs require a period of time to allow for

¹⁰ Some funders have new CV formats that have narrative elements but aren't 'pure' narrative CVs. This survey item was designed to accommodate such cases.
trialling and subsequent monitoring, learning, and adaptation by funders, reviewers and applicants alike.

This lack of evidence reflects the current state of wider debates on the topic of narrative CVs. Fritch et al (2021) highlight the value of narrative CVs but also note the importance of timely evaluations of narrative CV experiments, together with inter-organisational cooperation and knowledge sharing as important conditions for mutual learning and spread of these new tools.

3.2. Training and briefing of reviewers

Given the large numbers of variations in assessment processes, criteria and CV formats that we have covered in the report so far, it is important to consider whether reviewers actually receive any guidance in all these changes, or whether the reviewer community is largely expected to adjust to changes without support.

Almost all funders appear to provide written guidance to reviewers and the great majority also note that they inform reviewers explicitly about what tools or criteria should not be used. Over half of respondents also note that they offer some form of training for reviewers.



Figure 15: How reviewers are informed of research assessment expectations.

Additional survey data shows that training and guidance cover a broad range of issues. Almost all respondents report that they cover information of conflicts of interest, roles of reviewers and panellists, and tools, metrics and criteria used in the assessment. Several further elements we surveyed for were selected by around three quarters of respondents.

In short, it appears to be very common for guidance and/or training to be provided, and for these to cover a broad range of issues pertaining to assessment.



Figure 16: Indicates if training and/or guidelines are available to reviewers and which elements are covered.

Chapter 4

The rise of Al

Advances in artificial intelligence (AI) technologies have not left research assessment untouched. The rapid growth of interest in adopting AI technologies across nations and sectors has been reflected among both research funders and research organisations, catalysed by the release of publicly-available generative AI platforms such as OpenAI's ChatGPT.

Al technologies are already being used to prepare funding applications, support writing research publications, and even conduct peer reviews (Carbonell Cortés et al 2024; Okasa et al 2024; Blatch-Jones et al 2025). These applications have the potential for streamlining research and research assessment processes, but they also represent challenges for funders as they seek to mitigate adverse effects.

Best practice on the use of AI in these contexts is an ongoing development (Woods and Newman-Griffis 2024) that necessitates a responsible response from funders to engage with and address the effects of this global challenge in accordance with the GRC Dimensions of RRA. The extent and purposes of AI use among research funders has not been systematically studied, and understanding these emerging applications of AI is essential to shaping the future of responsible research assessment.

Our survey results begin to fill this knowledge gap. Research assessment involves multiple processes that are amenable to the use of AI technologies. These range from clearly-defined processes, such as matching reviewers to applications or research outputs or categorising outputs and researchers, to complex tasks such as summarising research information and producing high-quality feedback. Our survey sought to understand how funders around the world are exploring the use of AI in the context of research assessment processes, and how the use of AI interacts with the wider implementation of responsible research assessment. This is particularly timely, given the topic of the GRC 2025 Annual Meeting on the use of AI in research management.

Our survey questions referred to both AI and machine learning technologies ('AI/ML'). Historically, AI is a broad umbrella term for many different technologies and approaches, including expert-designed systems as well as data-driven approaches such as machine learning. However, the growth of commercially available generative AI technologies is shifting language use, with 'AI' often being synonymous with Large Language Models and other generative AI technologies. We therefore explicitly included machine learning approaches in our questions to reflect the use of a much wider variety of data-driven methods in research assessment.

As AI use is not inherent to research assessment, and adoption of AI among research councils varies widely, three of our four AI-related questions were optional. Our first question on where AI has or has not been used in research assessment to date was required as this was relevant to all research funders, but subsequent questions regarding particular experiences of AI use were optional. Numbers of responses received to these questions are indicated in our results.

Our goal was not to conduct a systematic analysis of AI use around the globe, but to develop a preliminary understanding of emerging directions and the variety of opinions and concerns informing discussions of AI in research assessment.

4.1. Use of AI in research assessment

Al use is most often noted as being in use for the task of selecting and assigning reviewers and/or panel members: 32% of respondents are currently using Al or have previously used it in this process, with a further 40% considering Al adoption. Experience in applying Al across other assessment processes is relatively low: fewer than 20% of respondents use Al in organising proposals and outputs, fewer than 10% for strategic and portfolio analysis, and fewer than 5% in operational assessment.

However, responses indicate strong interest in exploring AI in future across all areas. Only strategic applications are not under consideration for the majority of respondents. Nonetheless, a notable proportion of respondents are steering clear of AI use in each area, indicating that AI integration into research assessment is far from a universal issue.



Figure 17: Funder processes where AI/ML is being used.

Despite this low adoption to date, AI use is consistently rated as moderately or very beneficial for all research assessment processes included in the survey, with a plurality indicating 'very beneficial.' This includes responses from funders who do not themselves have direct experience with AI: for example, while only 9% of respondents have used AI for strategic analysis, 30% see potential benefit to AI use in these processes. There is strong perceived potential for benefit even in processes of assessing impact and researcher contributions, where reported AI adoption to date is lowest.



Figure 18: How beneficial AI is perceived to be in different parts of the assessment process.

This suggests that AI technologies are perceived by research funders as having high relevance and potential for benefit across the work of research assessment. Funders have been cautious in their adoption of AI but many are optimistic about its broader potential. However, a consistent proportion of respondents do not have plans to adopt AI technologies in any assessment processes, demonstrating that AI use for data-driven transformation is not a universal interest at this time for research funders.

4.2. Implications of AI for research assessment

In addition to direct application of AI in research assessment processes, increasing adoption of AI has important implications for the role of research funders in ongoing governance and longer-term strategy of research assessment. Two-thirds of respondents indicate perceived benefit and risk of AI in four aspects of assessment governance and strategy, ranging from the day-to-day administration of assessment to long-term assessment reform.

Over 60% of respondents see potential benefit from AI/ML use across all aspects of assessment governance and strategy, with nearly 40% anticipating great benefit from AI for administration and monitoring of assessment. The least anticipated benefit is in long-term reform of assessment processes, reflecting the complexity of this task.



Figure 19: Perceived benefit of AI/ML use in governance and strategy.

The benefits of AI/ML are balanced for funders by anticipation of the risks posed by inappropriate use of AI. Perceived risks broadly align with the perceived benefits, with highest anticipated risk from AI reported for reform of research assessment processes, and both administration and monitoring of assessment reflecting persistent risk but to a lower degree. Nonetheless, a majority of respondents indicate at least some perceived risk for AI use across all four aspects of assessment governance and strategy.





4.3. Considerations informing AI use in assessment

The use of AI in research assessment is a complex challenge, drawing in many aspects of a funder's work in addition to data and technology expertise. Twenty-two survey respondents have indicated what factors inform decision-making about the use of AI/ML technologies in their organisation.

Of these 22 respondents, over 70% report that all surveyed aspects of their operation have a strong or moderate effect on AI/ML decision-making. Financial and strategic factors are only noted as having a 'strong effect' by 50% each, but overall every factor we surveyed for is noted to have at least a moderate effect for almost all respondents.



Figure 21: Factors that affect the decision of using AI/ML.

Eighteen respondents also indicate from where their organisation had sourced relevant expertise to inform these different aspects of decision-making about AI use. Technical aspects of AI are those with the lowest in-house expertise and are most frequently outsourced, while operational, strategic, and HR factors are handled by internal expertise only. Across all categories, funders are seeking to grow their internal expertise to inform AI discussions.



Figure 22: Sourcing of relevant expertise when exploring tools such as AI and ML.

When funders bring these experts together to make decisions about the use of AI/ML in research assessment, discussions may touch on a number of aspects of AI/ML implementation in the funder context. Twenty respondents indicate the range of topics touched on in these discussions.

No single topic is considered universally by our respondents, reflecting the variety of approaches to Al/ML in practice and the range of lenses through which it is viewed. The most common topics are those most directly related to the day-to-day work of research assessment: selection of appropriate data (reflecting wider discussions around research metrics and measurement), impact on the organisation, and impact on the community of researchers. However, most topics are considered relevant by at least half of respondents, including EDI considerations, impacts and the use of open research practices.



Figure 23: Topics covered in discussions of AI/ML use in research assessment.

Overall, these results are indicative of the evolving landscape of AI use and exploration among funders, and the complexity involved in bringing AI to bear on research assessment processes. It is clear that the use of AI and machine learning is becoming an important, though not universal, part of research assessment around the globe.

These practices will continue to develop, and the ecosystem of AI technologies and providers will continue to grow. Proactively engaging with the implications of AI/ML will be vital for funders in shaping the future of research assessment.

Chapter 5

Inside the funding organisations - changing practices and scope for renewal

5.1. Autonomy of funding organisations

Positioned at the interface of government ministries and academic communities, research funders must balance the demands of both (Guston 1996). For instance, they are expected to ensure research delivers social and economic impacts on behalf of governments while upholding standards of scientific quality on behalf of academic communities.

To pursue RRA innovations, funding organisations require legitimacy in the eyes of these national actors and autonomy to proceed without undue constraint. Our survey reveals that perceived autonomy from government and academic communities is quite strong, though it varies across research funders, suggesting some funders may have greater room for maneuver in accommodating RRA than others. In detail:

- Funders generally have the greatest level of autonomy from both government and researcher communities when it comes to defining performance criteria used for reviewing funding applications. This area might offer scope for introducing reforms without governmental constraint.
- Large majorities of respondents also either 'completely' or 'somewhat' agree that they have complete autonomy when designing funding calls or choosing mechanisms for distributing funding. Open text responses highlight that legal rulings in some systems underscore the terms and organisation of assessments, potentially making reform more challenging than in systems where these processes follow custom or tradition.
- Funders generally have less room for manoeuvre when it comes to priority setting, though even here around half of respondents say they have at least some autonomy.



Figure 24: Autonomy of funding organisations from government and researcher communities.

The levels of autonomy clearly depend on the political and governance arrangements of each individual country. We note that our survey data does not indicate any clear geographical patterns. In terms of government oversight, there are no evident differences between respondents from the Global North and Global South. Respondents from the Global South do however report independence from the researcher community in noticeably greater numbers.¹¹

While constraints may exist in many cases (and especially around broader strategic considerations like science priority setting), these reported levels of operational autonomy highlight that many funders may be quite well positioned to be important 'change-makers' in the science system - especially around the topics covered so far in this report.

However, it is worth reflecting on the constraints that do exist. Although more than half of funders reported high levels of autonomy, open text responses underscore the importance of maintaining legitimacy in the eyes of the government and academic community:

"Our organisation is officially autonomous from governmental oversight. However, the government can ask questions or put in requests on research topics. The research community is involved in our processes as much as possible and we ask for advice and input if we change processes. Although this is different than exactly doing what the community wants. Asking their advice prepares us on how we can change our processes in order for the community to embrace them as best as possible." (*Survey respondent, anon.*)

"We often engage with stakeholders when designing funding instruments with the intention of ensuring that they work as intended. This might include representatives from the [national health ministry - official name generalised to preserve anonymity]

¹¹ We stress that these are relatively low respondent numbers that cannot confidently assert a general pattern - for this reason we do not present them as a separate graph.

or the public health system, host institutions, and specific groups of researchers, for example those that have previously received a similar grant and can give their account of what element works or doesn't work, or those who work in a particular setting such as the health service. It is important to gain different (and sometimes conflicting) perspectives. It is ultimately a [name of funding organisation] decision what changes will be implemented. We consider these engagements as important to making the best possible use of our budget." (*Survey respondent, anon.*)

Given the need for buy-in from the wider academic community and its representatives on funding review panels, some responses suggested that academics were not adapting as quickly as funders or the transnational RRA movement would like:

"It has been difficult for the community to understand the need to have an EDI approach in order to foster the diversity of trajectories. (*Survey respondent, anon.*)

"Our community is very conservative and does not like change." (*Survey respondent, anon.*)

"The research community needs time to adjust to changes e.g. after the introduction of the two-stage application process in [anonymised instrument name]." (*Survey respondent, anon.*)

Despite this hesitancy, some noted that once interventions were actually trialled they did not generate much controversy, as illustrated by this quote on the specific issue of narrative CVs:

"The assessors do not advocate either strongly for or against narrative CVs. They appreciate its value for certain contexts (especially non-academic/non-traditional careers) but do not see it as a particular gamechanger in how they conduct assessments." (*Survey respondent, anon.*)

While academic communities were viewed by some as resistant to change, other funders acknowledged their own role in contributing to positive research culture conditions and addressing legitimate concerns voiced by the community:

"Some members of the research community report that they feel overwhelmed with secondary criteria (animal welfare, data management, diversity measures, sustainability, access benefit sharing, ethics, safeguarding against foreign interference, dual use etc.)" (*Survey respondent, anon.*)

However, some funders also described extensive steps they had taken to monitor and evaluate new interventions, indicating some interventions may be more controversial in some national and disciplinary contexts than in others. Respondents emphasised that consultation and evaluation mechanisms can help to build legitimacy for new interventions: "We tried to communicate well with our stakeholders when introducing new interventions (e.g. use of narrative CVs) and are also asking feedback through surveys (from applicants, reviewers and panel members), also to further improve the process and implementation. Communication is key!" (*Survey respondent, anon.*)

"Good communication with all involved is key in the process of acceptance of new peer review interventions." (*Survey respondent, anon.*)

This ongoing need to mediate between national governments and academic communities aligns with scholarly accounts of funding organisations as 'intermediary organisations' (Guston 1996) – entities that steer but do not dictate reviewers' preferences and adopted criteria. Our survey questions thus sought to gauge both normative expectations and formal parameters that funding organisations establish for expert peer reviewers. The responses therefore reflect more the cultural preferences and normative dispositions of funding organisations than the actual decision making processes of panels or individuals that determine project and program selection outcomes.

5.2. Resourcing and Leadership

Our survey results reflect well-known arguments that innovation in organisations is more likely to occur where there is resourcing, leadership, and a shared pro-innovation culture. A large majority of funders report that staff have formally allocated time to concentrate on exploring and developing new ideas, including developing RRA practices and capturing knowledge outside their organisation (e.g. by attending conferences).



Figure 25: Time set aside time for activities related to advancing RRA *Full item text: 'Capturing knowledge from outside the organisation (e.g. attending conferences, research consortia, professional societies) on research assessment reforms.

However, open text responses reveal disparities in the level of resources available to meaningfully engage with the global movement towards RRA.

A key necessity for engaging with RRA is the availability of 'slack resources', i.e. discretionary funding and time to allow staff to engage in exploratory activities that might facilitate innovation e.g. attending conferences, participating in external communities of practice, initiating innovative internal projects, or engaging in meta-research collaborations.

Some respondents describe extensive opportunities for their staff to engage in RRA-oriented activities, ranging from playing a leading role in shaping the GRC Dimensions to participating in meta-research, from applying for research funding to attending internal workshops. Others report a lack of resources to engage in innovative activities to anywhere near the same level:

"[It] would be desirable to have a better budget for these activities." (*Survey respondent, anon.*)

"Given the high work-load of the scientific officers, low in number, not that much have [sic] yet been possible to implement when it comes to time to invest in responsible research assessment related activities." (*Survey respondent, anon.*)

"At [anonymised funder name], there is currently one staff member working on RRA related activities. A team is yet to be established to focus on RRA work." (*Survey respondent, anon.*)

While exploratory engagement is important, resources to implement new interventions are also crucial. Additional training, for instance, must be accounted for in financial and operational planning. This is not a one-time investment, but requires sustained support, as well as time and patience:

"The broadening of our understanding of output and impact requires a cultural shift, as is the case for the rewarding of Open Science. That kind of shift take[s] time." (*Survey respondent, anon.*)

These responses point to potential disparities in the extent to which funders are currently equipped to engage in RRA-related reforms.

Beyond financial, operational and political capacities, senior leadership often also plays a crucial role in setting the cultural tone for innovation. Sixty-one percent of respondents report that their top leaders had circulated communications in support of RRA to staff within the previous three years, suggesting most, but not all are taking proactive steps to raise awareness and encourage RRA.



Figure 26: Communications to staff about RRA practices.

The following response also suggested that leaders can set the tone for innovation within an organisation by encouraging staff to explore and propose new ideas:

"We take a more bottom-up approach to bring about best practice and get affirmation from our organisation leaders." (*Survey respondent, anon.*)

Currently, leadership engagement appears to vary across the global research funding landscape, with some organisations lacking clear direction or endorsement from the top.

Of course, organisational leaders may not always have the power or resources available to prioritise and invest in RRA. Innovation necessarily occurs in dynamic, complex research systems, where there may be competing priorities and put simply, other things are going on:

"At present [anonymised funder name] is in a transition period [...] as such, staff capacity is currently somewhat limited to invest in responsible research assessment related activities." (*Survey respondent, anon.*)

The ability to adopt new research assessment frameworks may also be influenced by organisational size. Survey responses indicate variation in scale of funders, as indicated by staff numbers (see Appendix 3 for full figures). The relationship between organisational size and innovation remains an open question requiring further investigation. For example, large organisations may have more siloed structures, while smaller organisations may struggle with capacity issues. One respondent noted that the complexity of their organisation made RRA adoption more challenging:

"We do not have big experience adopting new peer review interventions. The board has now signed off on CoARA and this now gives us an opportunity to implement changes. Previous attempts have been difficult to introduce due to a large organisation with standing councils with conflicting interests which make it difficult to establish a common baseline within the organisation." (*Survey respondent, anon.*) Despite these challenges, high-profile voluntary agreements, such as CoARA, can be a valuable reference point for leaders in generating momentum, visibility, and legitimacy in driving change.

In sum, to implement overarching principles of responsible research assessment, there are several important factors: supportive leadership, adequate resourcing, a pro-meta-research culture, and engagement of staff in communities of practice.

5.3. Evaluation of selection processes

Besides experimentation and piloting of new interventions and process changes, evaluation of existing processes is an important tool to improve the assessment of research, as emphasised in the GRC Dimensions of RRA. Evaluations come in many shapes and sizes: they may cover entire funding organisations or individual funding schemes, they may or may not extend beyond process to also cover the evaluation of impact, and they may use a range of different qualitative and quantitative research methods.¹²

It is beyond the scope of this report to provide detail of the international landscape of evaluation of assessment processes. However, we covered evaluation with two survey items.

Results show that most organisations perform evaluations of their processes in some form. However, there are varying practices in terms of frequency, with around a quarter of respondents noting that they perform evaluations at some form of fixed intervals. We also note that 15% of respondents say their organisation has never performed process evaluations but plans to do so in the future, indicating a growing culture of evaluation among funding organisations.

¹² For some recent examples, see the <u>2022 evaluation of the Academy of Finland</u> (now Research Council of Finland), or the 2024 process <u>evaluation of the Austrian FWF's Emerging Fields</u> programme.



Figure 27: Frequency of evaluations of selection processes.

Evaluations predominantly exist for internal audiences; in other words, they are intended to help the funder in question. However, most respondents also note that evaluations have at least one (or often several) external audiences.



Figure 28: Intended audiences for evaluations of selection processes.

Additional data provided by respondents indicates, however, that evaluations are not always placed in the public domain. Publishing evaluations appears to happen in the majority of cases, but not always.¹³

As with controlled funding process experiments, evaluations also present an important source of evidence for the global funding community, so publication of evaluations is to be encouraged wherever possible.

¹³ Our survey did not ask directly about rules governing publication of evaluations so there is no conclusive information allowing us to state numbers. However, responses to questions around circulation to specific groups indicate that publication may not always be standard practice. See Appendix 3 for full results.

5.4. A note on equity, diversity and inclusion

Finally, we can report a few findings in relation to the GRC RRA Dimension of equity, diversity and inclusion. As mentioned previously in this report, such considerations in many cases play a second-order role¹⁴ in the assessment of proposals alongside several other issues around research integrity, ethics, and openness. However, we also asked respondents to tell us whether their organisation has implemented any additional process adjustments to tackle potential bias or observed discrimination. We note the following findings:

- Of a range of possible types of bias/discrimination, gender is most commonly selected where process changes are implemented. Discipline and seniority are also areas of concern, though less so. Far fewer respondents note efforts to tackle bias/discrimination for disability, age, race or religion.
- By far the most frequently noted process change is to select groups of reviewers with a more diverse profile. Quotas and prioritising of applicants from certain groups are also practised by several funders - as above, most commonly along lines of gender and to a lesser extent along discipline lines.

Has your organisation implemented any of the following adjustments to their processes to select research proposals in order to tackle any potential bias or observed discrimination? (n=34)	Gender	Disability	Age	Race	Religion	Discipline	Seniority	Affiliation
Introduction of quotas to balance the selection of applicants with a certain profile	35%	9%	12%	3%	0%	15%	6%	3%
troduction of policy to give priority to the selection of proposals from applicants with underrepresented profiles*	35%	6%	6%	9%	0%	18%	3%	3%
Introduction of quotas to balance the selection of applicants with a certain profile	24%	12%	15%	3%	0%	15%	12%	0%
Limiting reviewers' access to personal identifiers throughout the review process	24%	9%	12%	12%	9%	6%	9%	3%
Selection of groups of reviewers with diverse profile	62%	6%	15%	15%	3%	47%	35%	26%
Other adjustment(s)	9%	6%	3%	6%	6%	6%	3%	0%

Figure 29: Adjustments intended to tackle potential bias or observed discrimination.

¹⁴ 'Second-order' is not intended as a value judgement but simply designates a lower weighting or prevalence in the assessment process.

Chapter 6

Recommendations

This report has presented a snapshot of RRA practices within a global sample of public research funding organisations. We have found and described a diverse picture of increasingly broadening practices. This extends to the frameworks and guidance documents which organisations endorse, but also to concrete funding processes, criteria, CV formats, and the growing use of AI.

Crucially, we find little evidence of convergence: no single framework, process or criteria mix appears to be emerging as an international 'gold standard'. Instead, different funders, regions and research systems have different needs, preferences and capabilities. Going forward, it will be important to understand this diversity and ascertain how best to identify best practices and helpful policy recommendations in each individual context.

While this report is mostly of a descriptive nature, the survey findings allow us to make a number of recommendations for the global community of research funders:

- Foster a culture of experimentation: R&I funding organisations should continue to test, trial and compare a broad range of process innovations, in the shape of pilot schemes and systematic experimentation. There are many process modifications that carry much promise but where evidence of effectiveness is lacking. We encourage funders to fill these evidence gaps so that it becomes ever-easier to confidently modify and evolve all funding processes.
- The results of process experiments, as well as any evaluations (of individual funding schemes or process elements, or of entire funding organisations) should as a rule be published openly and shared, so that the global research funding community can benefit from these insights.
- There is a need to better understand the different needs, barriers and drivers of research assessment and assessment reform in different parts of the world: this survey has found that there is a lot of diversity, suggesting that what is appropriate in one research system might not be appropriate in another.

Yet, the data from this explicitly global survey is not sufficient to provide in-depth information on individual research systems or parts of the world. Understanding different 'models' of research assessment will be critical to developing appropriate strategy and practice for each geographical, cultural and political context.

- Funders should use the findings from this survey and the 11 Dimensions of RRA to consider their own RRA implementation across 'Guiding principles', 'Governance and strategy', and 'Process and methodology'. Funders from all GRC regions are encouraged to input into the design of a forthcoming self-assessment tool and roadmap at the GRC Regional Meetings in 2025 and Annual Meeting in 2026.
- Use of AI in research assessment has the potential to improve efficiency and optimise processes, but our findings also show that funders see substantial risks in the adoption of AI. Implementation of AI in research assessment is therefore a complex issue involving many different stakeholders in and around the funding organisation, as flagged in the 2025 GRC Statement of Principles on Research Management in the Era of AI. Engaging with a broad range of stakeholders is essential for shaping responsible use and management of AI in the context of research assessment. A GRC working group on AI (as suggested in the GRC Statement of Principles) would be a useful part of such engagement.
- Our findings (especially free-text responses) underscore the importance to engage and consult with relevant stakeholders (e.g. academic communities and government) to improve prospects of buy-in to reforms (e.g. narrative CVs and other process modifications).
- We recommend that a survey of this kind should be repeated every 4-5 years to track progress and developments on the topics we have assessed here. The survey should re-use questions as-is from this survey, where possible to ensure comparability, though it need not be a full re-run. A shorter version may yield an even higher response rate and may therefore even allow for more regional analysis.

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APPENDIX 2: Survey Methodology

Process

Survey Period

The survey was conducted from **27 May 2024 to 6 January 2025.**¹⁵ The survey was launched at the **GRC Annual Meeting 2024** held in Interlaken, Switzerland.

Development of Survey Questions

The survey questions were based on the GRC RRA survey conducted in 2020 (Curry et al, 2020). The 2020 GRC RRA survey utilised questions from the 2019 Science Europe survey on the same topic. Updates to the 2020 survey were drafted with input from the **GRC Responsible Research Assessment working group** and the **RoRI A Global Observatory on Responsible Research Assessment (AGORRA) working group**. To aid comparison between 2020 and 2024 datasets, the groups were asked to consider a reasonable balance between consistency, clarity, and making sure questions accounted for changes in the research landscape since 2020.

Additional questions on the use of AI in research assessment were drafted by the RoRI <u>GRAIL</u> project leads, supported by their working group.

2020 data re-use

In the 2020 survey, participants consented for use of responses for the 2020 report **only**. To support analysis of major trends, we asked participants of the 2024 survey to consent for the re-use of responses to the 2020 survey, if applicable.

Participant Recruitment

Invitations to participate in the survey were sent via email to Heads of Research Councils using the **GRC mailing list** held by the GRC secretariat. A total of **117 funding organisations** were invited to participate.

Support for Participants

To assist funders in completing the survey, several support measures were implemented:

¹⁵ Respondents that discovered errors in their submission were allowed to correct these after the survey closed, though no new submissions were accepted after January 8.

- An FAQ document was produced.
- The **RoRI team** delivered a webinar.
- The **GRC Responsible Research Assessment Working Group's secretariat team** ran multiple drop-in sessions to answer specific queries.

Survey Extensions and Follow-ups

Due to low initial participation rates, the survey deadline was extended twice. **Regional GRC leads** sent follow-up email communications to GRC participant organisations, and we promoted engagement with the survey at the GRC Regional Meetings between October-December 2024 which helped to boost engagement.

Survey Hosting and Data Sharing

The survey was hosted by **Leiden University** using **Qualtrics**. A data sharing agreement was established to share raw data between Leiden University, University College London (UCL) as the host RoRI organisation, and Sheffield University.

Ethics Approval

In April 2024, the Ethics Review Committee of the Social Sciences of the Faculty of Social and Behavioural Sciences, Leiden University granted ethics approval for the project as presented.

Analysis

All results are represented as a percentage of the total n for that specific question. For every question, n is reported in parenthesis after the question, in the headline if the figure only represents one question or if all sub-questions have the same n, or after the factor by which n varies. The total number of respondents per question is calculated as the total number of subjects interacting with the question for optional questions, and as the total number of subjects who have completed the specific part of the survey for the mandatory questions. For optional questions this might make the total n, and therefore the percentage, inaccurate in cases where there was not an option to indicate that none of the above". In cases where there was an option to select "Not applicable" (or equivalent), these responses were not included in the total n, unless the option "Not applicable" (or equivalent) also is present in the figure.

A note on analysis of qualitative information

Open text questions were included in the questionnaire to allow respondents the opportunity to provide follow-up information and context. These responses were analysed thematically, starting with line-by-line open coding, followed by grouping codes together into broader categories, and looking for patterns across categories. Insights from the parallel analysis of the survey also fed into this process, creating a dialogue between quantitative figures and qualitative data, raising new questions, and highlighting points of contrast and similarity.

Given open the text responses were optional, we do not claim that they are statistically representative of all funders. Nonetheless, qualitative data provided an important additional input for exploring underlying rationales, tensions, and alternative viewpoints not fully captured in closed-ended survey questions.

Illustrative quotations used throughout the report have been de-identified to protect the identities of our respondents.

APPENDIX 3: Full data tables

Survey introduction text

Information about the study

Please read before agreeing to consent to participate in this survey

Research assessment reform, sometimes referred to as Responsible Research Assessment (RRA), is a rising key priority in the world of research funding and academic evaluation.

You have been invited to participate in this survey about research assessment practices in your funding organisation, entitled 'Responsible research assessment and national funders: State-of-the-art global survey'. All current Global Research Council (GRC) partner organisations have also been invited to take part. Please answer all questions to the best of your ability, as a knowledgeable member of your funding organisation.

This survey is a follow up to a survey study first conducted in 2020 by the GRC (analysis presented in <u>this report</u>). Repeating the survey will provide an updated understanding of current practices in Responsible Research Assessment practices across participant organisations of the GRC, which have increased in number since the first survey was conducted in 2020.

The GRC Responsible Research Assessment working group has partnered with the Research on Research Institute (RoRi), via their project titled <u>A Global Observatory on Responsible Research Assessment (AGORRA)</u>, to deliver this survey and analysis. The RoRi AGORRA team will provide the analysis capacity and will produce and publicise reports and publications on the findings.

Please note that some personal information will be requested from you at the start of the survey, including your name, email address, as well as the name of your organisation. This information will only be used by the research team to avoid duplication of responses and it will be redacted from any subsequent analysis made public by the research team. Members of the RoRi AGORRA and GRAIL core research team, stationed at University College London, Sheffield University and Leiden University, will also exchange raw and processed survey data files, by way of secure data transfer agreement. Raw data, including personal information, will be kept on secure, password protected computer servers at University College London, Sheffield University and Leiden University and Leiden University for a period of up to ten years following completion of the study, in case of inspection by auditors.

In the spirit of the open data movement and re-use of data, a final, de-identified version of the survey data, with names of individuals, organisations, and countries redacted, will be deposited on a data sharing repository shortly after analysis. This will be available indefinitely via Creative Commons CC-BY 4.0 re-use license.

This study has received ethical approval from the Ethics Committee for Social and Behavioral Sciences, Leiden University, the Netherlands. For all enquiries on this survey, please contact: GRC-RRA@ukri.org

In 2020, the GRC and RoRi conducted a survey study with members of the GRC, published in the aforementioned report <u>'The</u> <u>changing role of funders in responsible research assessment</u>'. At the time of the initial invite, participants were consented only to have response data for the 2020 survey used for that report.

We would now like to request your consent to re-use those 2020 survey responses to compare them with the new 2024 survey, in order to support analysis of major trends and developments over this time period. Please note that the 2020 survey data will not be made publicly available on any data sharing platforms if you consent to the re-use of that survey data. Only the core RoRi research team will be able to exchange and analyse this data, and it would feature only in de-identified form in any future publications.

For Question 1.2 below, please indicate whether you consent for the RoRi research team to re-use your responses from the 2020

survey. Please select 'Yes' (if your organisation took part and consents to data re-use), 'No' (if your organisation took part but you do not grant consent for data re-use), or 'Not applicable' (if you are uncertain if your organisation participated in the 2020 survey, or if you know for certain it did not). If you would like to clarify if your organisation took part in 2020 before submitting your response to this question, please email GRC-RRA@ukri.org.

[questions around respondent identification and consent to the above terms redacted]

Survey items and data tables

Q3.1 - In which Global Research Council (GRC) region is your organisation located?

#	Answer	%	Count
1	Sub-Saharan Africa	16.00%	8
2	Asia-Pacific	18.00%	9
3	Americas	12.00%	6
4	Europe	44.00%	22
5	Middle East/North Africa	10.00%	5
	Total	100%	50

Q3.2 - [Optional] Which of the following best describes the disciplinary scope of the research your organisation funds? (select multiple if applicable)

Answer	%	Count
No specific discipline (we fund across multiple disciplines)	70.00%	35
Social sciences and humanities	14.00%	7
Medical and health sciences	24.00%	12
Natural and life sciences	28.00%	14
Engineering and physical sciences	26.00%	13
Other (please specify)	16.00%	8
Total	n/a	50
	Answer No specific discipline (we fund across multiple disciplines) Social sciences and humanities Medical and health sciences Natural and life sciences Engineering and physical sciences Other (please specify) Total	Answer % No specific discipline (we fund across multiple disciplines) 70.00% Social sciences and humanities 14.00% Medical and health sciences 24.00% Natural and life sciences 28.00% Engineering and physical sciences 26.00% Other (please specify) 16.00% Total n/a

Q3.3 - [Optional] How many Full Time Equivalent members of staff are in your organisation? Please select one value.

#	Answer	%	Count
1	0-50	18.37%	9
2	51-100	16.33%	8
3	101-200	24.49%	12
4	201-500	14.29%	7

5	501-1000	12.24%	6
6	1001-2000	6 12%	3
5	1001 2000	0.122/0	3
7	2001-3000	0.00%	0
'	2001-3000	0.0078	0
Q	3001-4000	0.00%	0
8	5001-4000	0.0078	0
9	Over 4001	8 16%	4
5	0001 4001	0.10%	4
	Total	100%	49
1	Iotai	100%	45
1			
1			

Q4.1 - Does your organisation have a definition of responsible research assessment?

#	Answer	%	Count
1	Yes (please elaborate)	28.00%	14
2	No	64.00%	32
3	Unsure	8.00%	4
	Total	100%	50

*Free-text answer components redacted to ensure anonymity

Q4.2 - [Optional] Does your organisation endorse or adhere to existing frameworks related to responsible research assessment? Please select all that apply (multiple answers possible)

#	Answer	%	Count
1	San Francisco Declaration on Research Assessment (DORA; https://sfdora.org)	40.00%	20
2	CoARA (https://coara.eu/)	40.00%	20
3	Leiden Manifesto for research metrics (http://www.leidenmanifesto.org)	14.00%	7
4	Hong Kong principles (https://www.wcrif.org/guidance/hong-kong-principles)	10.00%	5
5	GRC statement of principles on peer/merit review (https://www.globalresearchcouncil.org/fileadmin/documents/GRC_Publications/Statement_of_Principles_on_Peer-Merit_Review_2018.pdf)	60.00%	30
6	GRC statement of principles on recognising and rewarding researchers (https://globalresearchcouncil.org/fileadmin//documents/GRC_Publications/SoP_Recognising_and_Rewarding_Researchers.pdf)	50.00%	25
7	Science Europe recommendations on Research Assessment Processes (https://www.scienceeurope.org/media/3twjxim0/se-position-statement-research-assessment-processes.pdf)	32.00%	16
8	UNESCO recommendation on Open Science (https://unesdoc.unesco.org/ark:/48223/pf0000379949)	38.00%	19
9	Framework developed by our own organisation	34.00%	17
1 0	Other framework or initiative. Please specify	16.00%	8
	Total	n/a	50

*Free-text answer components redacted to ensure anonymity

A baseline application assessment process used by research and innovation funders across the globe is described below (steps 1-4). The next question asks about 38 peer review interventions which deviate from a baseline assessment process.

Please see the Review of Peer Review

(https://www.ukri.org/publications/review-of-peer-review/review-of-peer-review-june-2023/) for more information.

- Step 1: applicant submits their application. Step 2: funder's admin staff perform eligibility and compliance checks.
- Step 3: peer review of applications, including: remote peer review by two to three external experts panel review, resulting in a ranked list of applications from best to worst.
- Step 4: formal sign-off by department or organisation leadership. Each step has formalised standards, including: reviewer selection co-investigators eligibility criteria.

Q5.1 - [Optional] What peer review interventions does your organisation currently implement in the assessment of research proposals? Please see the Review of Peer Review for a more detailed description of each intervention listed below. Please select all that apply (multiple answers possible)

#	Question	Currently usi	ng	Used in the p	bast	Never used but considering using in future		Never used and not considering using in future		Total
1	Pre-announcement: Assessment criteria definition	76.60%	36	2.13%	1	6.38%	3	14.89%	7	47
2	Pre-announcement: Demand management: individuals (1)	65.91%	29	0.00%	0	13.64%	6	20.45%	9	44
3	Pre-announcement: Demand management: individuals (2)	30.00%	12	2.50%	1	15.00%	6	52.50%	21	40
4	Pre-announcement: Demand management: Institutions	21.95%	9	9.76%	4	14.63%	6	53.66%	22	41
5	Pre-announcement: Working with under-represented groups	47.62%	20	4.76%	2	19.05%	8	28.57%	12	42
6	Application design and parameters: Application behaviours	59.52%	25	2.38%	1	16.67%	7	21.43%	9	42
7	Application design and parameters: Expression of interests	51.11%	23	15.56%	7	17.78%	8	15.56%	7	45
8	Application design and parameters: Reducing application form length or cutting sections	51.16%	22	2.33%	1	32.56%	14	13.95%	6	43
9	Process design: 'Sandpits' or matching events	33.33%	15	15.56%	7	6.67%	3	44.44%	20	45
10	Process design: Two-stage application process	65.91%	29	15.91%	7	11.36%	5	6.82%	3	44
11	Process design: Applicant anonymisation	13.33%	6	4.44%	2	20.00%	9	62.22%	28	45
12	Process design: Automation-assisted reviewer allocation	34.88%	15	0.00%	0	39.53%	17	25.58%	11	43

13	Process design: Dragon's Den style pitch	13.64%	6	4.55%	2	9.09%	4	72.73%	32	44
14	Process design: External review only (no panel)	41.86%	18	9.30%	4	4.65%	2	44.19%	19	43
15	Process design: Group review	77.78%	35	6.67%	3	2.22%	1	13.33%	6	45
16	Process design: Changing the number of reviewers	65.12%	28	6.98%	3	4.65%	2	23.26%	10	43
17	Process design: Interviews	73.33%	33	6.67%	3	8.89%	4	11.11%	5	45
18	Process design: Moderation of reviews	40.00%	18	8.89%	4	6.67%	3	44.44%	20	45
19	Process design: Moderation panel	52.27%	23	4.55%	2	6.82%	3	36.36%	16	44
20	Process design: Panel only (no postal or external review)	52.17%	24	17.39%	8	2.17%	1	28.26%	13	46
21	Process design: Peer allocation	9.09%	4	13.64%	6	4.55%	2	72.73%	32	44
22	Process design: Programme manager's discretion	16.67%	7	4.76%	2	0.00%	0	78.57%	33	42
23	Process design: Standing panels versus portfolio panels	50.00%	22	0.00%	0	13.64%	6	36.36%	16	44
24	Process design: Use of international assessors	80.00%	36	0.00%	0	8.89%	4	11.11%	5	45
25	Process design: Use of metrics	47.73%	21	13.64%	6	2.27%	1	36.36%	16	44
26	Process design: Use of non-academic assessors (including industry, policy and practice, patients, 'user' representatives)	63.64%	28	2.27%	1	11.36%	5	22.73%	10	44
27	Process design: Virtual panel	79.55%	35	4.55%	2	9.09%	4	6.82%	3	44
28	Decision-making: Wildcard	13.64%	6	0.00%	0	9.09%	4	77.27%	34	44
29	Decision-making: Partial randomisation	18.18%	8	0.00%	0	18.18%	8	63.64%	28	44
30	Decision-making: Scoring mechanisms	70.45%	31	0.00%	0	9.09%	4	20.45%	9	44
31	Decision-making: Sequential application of criteria (rather than simultaneous application of criteria)	40.91%	18	2.27%	1	4.55%	2	52.27%	23	44
32	Decision-making: Use of quotas	20.93%	9	13.95%	6	18.60%	8	46.51%	20	43
33	Training and feedback: Bringing in reviewers from earlier careers and providing mentoring	39.53%	17	2.33%	1	30.23%	13	27.91%	12	43
34	Training and feedback: Embedding equity, diversity and inclusion in assessment	77.78%	35	0.00%	0	20.00%	9	2.22%	1	45
35	Training and feedback: Expanding or reducing the amount of detail of feedback to unsuccessful applicants	70.45%	31	0.00%	0	11.36%	5	18.18%	8	44
36	Training and feedback: Funder representation on review panels	70.45%	31	4.55%	2	2.27%	1	22.73%	10	44
37	Training and feedback: Improving quality of reviews	65.12%	28	0.00%	0	16.28%	7	18.60%	8	43

38	Training and feedback: Open review or	50.00%	22	2.27%	1	15.91%	7	31.82%	14	44
	rebuttal									

Q5.2 - [Optional] In your organisation, are there any other deviations from the baseline application assessment process detailed above (steps 1-4) which are not captured in the 38 peer review interventions listed in Question 5.1?

#	Answer	%	Count
1	Yes (please elaborate)	33.33%	15
2	No	46.67%	21
3	Unsure	20.00%	9
	Total	100%	45

*Free-text answer components redacted to ensure anonymity

Q5.3 [Optional] What was your experience when adopting new peer review interventions? For example, what worked well and what did not? How did your research community react to the new interventions?

[Question was free-text only. Answers redacted to ensure anonymity. Aggregate description of answers are noted in the main report where relevant]

Q6.1 - Has the GRC statement of principles on peer/merit review informed your approach on the assessment of research proposals?

#	Answer	%	Count
10	Yes	41.67%	20
11	No	39.58%	19
12	Unsure	18.75%	9
	Total	100%	48

Q6.2 [Optional] Please elaborate on what ways the GRC statement of principles on peer/merit review informed your approach on the assessment of research proposals

[Question was free-text only. Answers redacted to ensure anonymity. Aggregate description of answers are noted in the main report where relevant]

Q6.3 - [Optional] Which of the following statements about the assessment of proposals apply to your organisation?

#	Question	Please select all that a					
		(m	ultiple answers possible)				
1	All units/departments in your organisation follow the same processes to assess research proposals under the same schemes	48.89%	22				
2	Your organisation adapts its research assessment systems for different research fields	55.56%	25				

3	Your organisation adapts its research assessment systems where different research outputs are intended	68.89%	31
4	Your organisation adapts its research assessment system based on the candidates which will be funded	51.11%	23
5	Your organisation adapts its research assessment system based on the type of project for which funds are requested	77.78%	35
6	Your organisation adapts its research assessment systems based on a response to global challenges and emergencies	55.56%	25
7	Your organisation adapts its research assessment systems based on indigenous and local research requirements.	35.56%	16
	Total	n/a	45

Q6.4 - [Optional] How are individual reviewers involved in the assessment process informed of their research assessment expectations?

#	Question	Please select all t answers possible	hat apply (multiple)
1	Your organisation offers training to individuals involved in the assessment of research proposals	54.35%	25
2	Your organisation provides written guidelines to individuals (e.g. external reviewers, panel members, etc.) involved in the assessment of research proposals	93.48%	43
3	Reviewers/panel members are explicitly informed of tools and criteria that should not be used in the assessment	76.09%	35
	Total	n/a	46

Q6.5 - [Optional] If training and/or guidelines are available to reviewers involved in the assessment of proposals and applicants, what elements are covered in the training?

#	Question	Please select all t answers possible)	nat apply (multiple
1	Information pertaining to conflicts of interest	93.18%	41
2	Roles of reviewers/panel members	95.45%	42
3	Tools, metrics and criteria used in research assessment	95.45%	42
4	Consideration of written reviews by external reviewers/panel members	75.00%	33
5	Information pertaining to the administration of panel meetings and procedures to be followed	86.36%	38
6	Importance of ensuring impartiality with respect to gender	75.00%	33
7	Importance of ensuring impartiality with respect to ethnicity	47.73%	21
8	Importance of ensuring impartiality with respect to career stage	70.45%	31
9	Other (please specify)	18.18%	8
	Total	n/a	44

*Free-text answer components redacted to ensure anonymity

Q7.1#1 - Please indicate if your organisation instructs/recommends reviewers to consider any of the following aspects of an applicant's track record. Please tell us for each option whether your organisation recommends it to reviewers now, has done in the past or plans to in the future. As this question is mandatory, you will need to select an answer for each row.

#	Question	Currently instruct/ recommen using	nd	Recomment d reviewers past, but no	Recommended/instructed Not Never d reviewers to use in the past, but not anymore instructed/recommended to use yet but considering doing so in future and not considering doing so in the future						Unsure		
1	Publication outputs of the applicant/s	82.98%	39	0.00%	0	4.26%	2	10.64%	5	2.13%	1	47	
2	Preprints produced by the applicant/s	38.30%	18	0.00%	0	14.89%	7	29.79%	14	17.02%	8	47	
3	Non-publication outputs of the applicant/s (e.g. research dataset and database, exhibition, performance and other outputs)	68.09%	32	0.00%	0	12.77%	6	12.77%	6	6.38%	а	47	
4	Previous funded research projects of the applicant/s	78.72%	37	0.00%	0	6.38%	3	8.51%	4	6.38%	3	47	
5	Awards of the applicant/s	70.21%	33	0.00%	0	4.26%	2	17.02%	8	8.51%	4	47	
6	Citations and publication-based indicators	40.43%	19	8.51%	4	14.89%	7	27.66%	13	8.51%	4	47	
7	Open access publications of the applicant/s	40.43%	19	2.13%	1	27.66%	13	21.28%	10	8.51%	4	47	
8	Open research data of the applicant/s	46.81%	22	2.13%	1	25.53%	12	14.89%	7	10.64%	5	47	
9	Teaching activities of the applicant/s	51.06%	24	4.26%	2	8.51%	4	21.28%	10	14.89%	7	47	
10	Mentoring by the applicant/s	59.57%	28	2.13%	1	10.64%	5	12.77%	6	14.89%	7	47	
11	Internal responsibilities within the applicant/s research organisation (e.g. head of department, or being a champion for open research, or a member of a research ethics committee)	55.32%	26	2.13%	1	10.64%	5	21.28%	10	10.64%	5	47	
12	Data curation conducted by the applicant/s	51.06%	24	2.13%	1	12.77%	6	19.15%	9	14.89%	7	47	
13	Applicants' participation in international research projects	76.60%	36	2.13%	1	4.26%	2	10.64%	5	6.38%	3	47	
14	Applicants' knowledge transfer/commercialisati on (i.e. patents, clinical trials, spin-offs)	80.85%	38	2.13%	1	4.26%	2	8.51%	4	4.26%	2	47	

15	Applicants' participation in conferences	70.21%	33	2.13%	1	6.38%	3	14.89%	7	6.38%	3	47
16	Applicants' services for the research community (i.e. organisation of conferences, editorship of journals)	57.45%	27	2.13%	1	12.77%	6	12.77%	6	14.89%	7	47
17	Applicants' services for peer review and research evaluation	44.68%	21	2.13%	1	12.77%	6	21.28%	10	19.15%	9	47
18	Public engagement activities of the applicant/s	61.70%	29	0.00%	0	12.77%	6	17.02%	8	8.51%	4	47
19	International representation of the team of applicants	48.94%	23	2.13%	1	10.64%	5	17.02%	8	21.28%	1 0	47
20	Activities of the applicant/s to promote diversity and inclusion	42.55%	20	2.13%	1	17.02%	8	23.40%	11	14.89%	7	47
21	Activities to support indigenous ways of knowing	27.66%	13	2.13%	1	12.77%	6	36.17%	17	21.28%	1 0	47
22	Activities to support research integrity	44.68%	21	2.13%	1	19.15%	9	17.02%	8	17.02%	8	47

Q7.2 - [Optional] What type of outputs from the applicants are assessed when evaluating research proposals? (Multiple answers possible)

#	Answer	%	Count
1	Authored book	71.43%	30
2	Edited book	64.29%	27
3	Chapter in book	73.81%	31
4	Scholarly edition	64.29%	27
5	Journal article	85.71%	36
6	Pre-print	45.24%	19
7	Conference contribution	73.81%	31
8	Working paper	52.38%	22
9	Artefact	42.86%	18
10	Devices and products	61.90%	26
11	Exhibition	50.00%	21
12	Performance (e.g. artistic)	45.24%	19
13	Patent/published patent application	73.81%	31
14	Composition	40.48%	17

15	Design	50.00%	21
16	Research report for external body	59.52%	25
17	Confidential report for external body	42.86%	18
18	Software including code	52.38%	22
19	Web content	35.71%	15
20	Digital media	40.48%	17
21	Research dataset and database	64.29%	27
22	Translation	35.71%	15
23	Policy advice	64.29%	27
24	Public engagement	59.52%	25
25	Psychological tests and questionnaires	33.33%	14
26	Other (please specify)	30.95%	13
	Total	n/a	42

*Free-text answer components redacted to ensure anonymity

Q7.3 - [Optional] Are there any additional stipulations to the assessment of these output types? Please select all that apply (multiple answers possible). You may need to scroll across to see all stipulations that can be selected.

#	Question	Unsure if any additional stipulation s apply		Question Unsure if any additional stipulation s apply		No additic stipula ns app	onal tio ly	Outpu have to be pee review	t(s) o r red	Output must b publish gold or diamor open access	(s) e ied nd	Output(must be publish in a reposito (green open access route)	s) ed ory	Outpu should be shared as pre-pu s	ıts d d rint	Output must be cited to certain level (e a thresho	(s) 2 .a .g. old)	Output(s) must be recomme d by the applicant) ende :/s	Output must be the mo recent (e.g. within i years)	(s) e st 3	Tot al
1	Authored book	12.90%	4	38.71 %	1 2	19.35 %	6	3.23%	1	3.23%	1	0.00 %	0	3.23%	1	6.45%	2	12.90%	4	31		
2	Edited book	10.71%	3	42.86 %	1 2	17.86 %	5	3.57%	1	3.57%	1	0.00 %	0	0.00%	0	3.57%	1	17.86%	5	28		
3	Chapter in book	10.34%	3	37.93 %	1	24.14 %	7	3.45%	1	3.45%	1	0.00 %	0	3.45%	1	3.45%	1	13.79%	4	29		
4	Scholarly edition	7.14%	2	39.29 %	1	28.57 %	8	3.57%	1	3.57%	1	0.00 %	0	0.00%	0	3.57%	1	14.29%	4	28		
5	Journal article	5.26%	2	18.42 %	7	31.58	1 2	7.89%	3	7.89%	3	0.00 %	0	5.26%	2	5.26%	2	18.42%	7	38		
6	Pre-print	17.39%	4	39.13 %	9	8.70%	2	8.70%	2	8.70%	2	0.00 %	0	0.00%	0	4.35%	1	13.04%	3	23		
7	Conference contribution	6.90%	2	31.03 %	9	17.24 %	5	6.90%	2	10.34%	3	0.00 %	0	0.00%	0	6.90%	2	20.69%	6	29		
8	Working paper	20.83%	5	45.83	1	12.50 %	3	0.00%	0	4.17%	1	0.00 %	0	0.00%	0	4.17%	1	12.50%	3	24		
9	Artefact	30.43%	7	43.48 %	1 0	4.35%	1	0.00%	0	0.00%	0	0.00 %	0	4.35%	1	4.35%	1	13.04%	3	23		
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10	Devices and products	30.77%	8	38.46 %	1 0	7.69%	2	0.00%	0	0.00%	0	0.00 %	0	0.00%	0	7.69%	2	15.38%	4	26		
11	Exhibition	26.09%	6	52.17 %	1 2	8.70%	2	0.00%	0	0.00%	0	0.00 %	0	0.00%	0	4.35%	1	8.70%	2	23		
12	Performance (e.g. artistic)	28.57%	6	57.14 %	1 2	0.00%	0	0.00%	0	0.00%	0	0.00 %	0	0.00%	0	4.76%	1	9.52%	2	21		
13	Patent/published application	34.48%	1 0	34.48 %	1 0	6.90%	2	6.90%	2	0.00%	0	0.00 %	0	0.00%	0	6.90%	2	10.34%	3	29		
14	Composition	33.33%	7	52.38 %	1	0.00%	0	0.00%	0	0.00%	0	0.00 %	0	0.00%	0	4.76%	1	9.52%	2	21		
15	Design	21.74%	5	47.83 %	1	8.70%	2	4.35%	1	0.00%	0	0.00 %	0	0.00%	0	4.35%	1	13.04%	3	23		
16	Research report for external body	16.00%	4	52.00 %	1 3	16.00 %	4	0.00%	0	0.00%	0	0.00 %	0	0.00%	0	4.00%	1	12.00%	3	25		
17	Confidential report for external body	21.74%	5	52.17 %	1 2	8.70%	2	0.00%	0	0.00%	0	0.00 %	0	0.00%	0	4.35%	1	13.04%	3	23		
18	Software including code	20.83%	5	45.83 %	1 1	12.50 %	3	0.00%	0	0.00%	0	0.00 %	0	0.00%	0	4.17%	1	16.67%	4	24		
19	Web content	23.81%	5	57.14 %	1 2	4.76%	1	0.00%	0	0.00%	0	0.00 %	0	0.00%	0	4.76%	1	9.52%	2	21		
20	Digital media	27.27%	6	54.55 %	1 2	4.55%	1	0.00%	0	0.00%	0	0.00 %	0	0.00%	0	4.55%	1	9.09%	2	22		
21	Research dataset and database	14.81%	4	44.44 %	1 2	7.41%	2	3.70%	1	7.41%	2	0.00 %	0	0.00%	0	3.70%	1	18.52%	5	27		
22	Translation	21.05%	4	63.16 %	1 2	10.53 %	2	0.00%	0	0.00%	0	0.00 %	0	0.00%	0	0.00%	0	5.26%	1	19		
23	Policy advice	13.33%	4	50.00 %	1 5	10.00 %	3	0.00%	0	3.33%	1	3.33 %	1	0.00%	0	3.33%	1	16.67%	5	30		
24	Public engagement	14.81%	4	55.56 %	1 5	11.11 %	3	0.00%	0	0.00%	0	3.70 %	1	0.00%	0	3.70%	1	11.11%	3	27		
25	Psychological tests and questionnaires	20.00%	4	65.00 %	1 3	5.00%	1	0.00%	0	0.00%	0	0.00 %	0	0.00%	0	5.00%	1	5.00%	1	20		
26	Other (please specify)	0.00%	0	83.33 %	5	0.00%	0	0.00%	0	0.00%	0	0.00 %	0	0.00%	0	0.00%	0	16.67%	1	6		

*Free-text answer components redacted to ensure anonymity

Q7.4#1 - Please indicate if your organisation instructs/recommends reviewers to use any of the following author-level approaches/tools to measure research productivity and academic impact in the assessment of research proposals.

#	Question	Currently instruct/ recommen using	nd	Recommended/inst reviewers to use in f past, but not anymo	ructed the ore	Not instructed/recomm to use yet but consi doing so in future	ended dering	Never instructed/recomr and not considerin so in the future	nended Ig doing	Unsure		Tot al
1	Cumulative number of citations	17.02% 8		12.77%	6	12.77%	6	48.94%	23	8.51%	4	47
2	H-index	17.02%	8	19.15%	9	14.89%	7	44.68%	21	4.26%	2	47
3	Number of highly cited publications	17.02%	8	14.89%	7	14.89%	7	44.68%	21	8.51%	4	47

4	Field-weighted citation scores	12.77%	6	12.77%	6	14.89%	7	48.94%	23	10.64 %	5	47
5	Number of publications	34.04%	1 6	14.89%	7	4.26%	2	40.43%	19	6.38%	3	47
6	Number of publications in high-ranking journals	25.53%	1 2	17.02%	8	6.38%	3	42.55%	20	8.51%	4	47
7	Alternative metrics (e.g. Altmetrics)	6.38%	3	4.26%	2	19.15%	9	51.06%	24	19.15 %	9	47
8	Qualitative assessment of the content of authored publication/research output	53.19%	2 5	2.13%	1	14.89%	7	17.02%	8	12.77 %	6	47

Q7.5#1 – Please indicate whether your organisation instructs/recommends reviewers use any of the following journal-level approaches/tools to measure research excellence in the assessment of research proposals.

#	Question	Currently instruct/ recomment using	d	Recommended reviewers to us but not anymo	/instructed e in the past, re	Not instructed/reco to use yet but o doing so in futu	ommender considering ure	Never instructed/rec and not consic so in the futur	ommender Iering doing e	Unsure		Total
1	Presence of the journal on an internally curated list of high-quality journals	21.28%	10	10.64%	5	4.26%	2	57.45%	27	6.38%	3	47
2	Presence of the journal on an publicly curated list of high-quality journals	29.79%	14	10.64%	5	4.26%	2	51.06%	24	4.26%	2	47
3	Membership of an editorial board	21.28%	10	6.38%	3	6.38%	3	53.19%	25	12.77%	6	47
4	Journal reputation	29.79%	14	12.77%	6	4.26%	2	42.55%	20	10.64%	5	47
5	H-5 index	12.77%	6	6.38%	3	8.51%	4	59.57%	28	12.77%	6	47
6	H-5 median	2.13%	1	6.38%	3	8.51%	4	63.83%	30	19.15%	9	47
7	Journal Impact Factor	27.66%	13	19.15%	9	2.13%	1	44.68%	21	6.38%	3	47
8	Source Normalised Impact per Paper (SNIP)	12.77%	6	6.38%	3	12.77%	6	53.19%	25	14.89%	7	47
9	Eigenfactor	2.13%	1	6.38%	3	6.38%	3	59.57%	28	25.53%	12	47

10	Scimago	17.02%	8	4.26%	2	8.51%	4	53.19%	25	17.02%	8	47
	Journal Rank											
	(SJR)											
11	Citescore	10.64%	5	6.38%	3	6.38%	3	55.32%	26	21.28%	10	47

Q7.6 - Please indicate whether your organisation considers making any of the following changes to the way research proposals are assessed

#	Question	This has been longstanding practice of ou organisation	ıa	Our organisa has made thi change	tion s	Our organisa planning to this change	ation is make	Our organis has not mad change and planning to the future	ation de any is not do so in	Not applicab	le	Total
1	Reducing the use of journal-based metrics	27.66%	13	21.28%	10	19.15%	9	8.51%	4	23.40%	11	47
2	Eliminating the use of journal-based metrics	25.53%	12	14.89%	7	17.02%	8	17.02%	8	25.53%	12	47
3	Broadening the range of non-publication research outputs that reviewer/panel members are required to assess, such as software, hardware, data, etc.	14.89%	7	36.17%	17	23.40%	11	2.13%	1	23.40%	11	47
4	Encouraging or supporting a qualitative (contents- or ideas-based) mode of assessment	40.43%	19	23.40%	11	17.02%	8	2.13%	1	17.02%	8	47
5	Considering qualitative indicators of research impact, such as influence on policy and practice	21.28%	10	25.53%	12	21.28%	10	14.89%	7	17.02%	8	47
6	Considering the research content of the scholarly publications of the applicants	42.55%	20	14.89%	7	12.77%	6	8.51%	4	21.28%	10	47
7	Increasing transparency around the use of assessment criteria during the assessment of research proposals	59.57%	28	10.64%	5	17.02%	8	2.13%	1	10.64%	5	47
8	Assessing how well a proposal contributes to the open science agenda	8.51%	4	19.15%	9	29.79%	14	21.28%	10	21.28%	10	47
9	Assessing the open science track record of a candidate or team submitting a proposal.	8.51%	4	8.51%	4	25.53%	12	25.53%	12	31.91%	15	47
10	Reducing the use of brand name-based journal evaluations	21.28%	10	6.38%	3	21.28%	10	8.51%	4	42.55%	20	47
11	Increasing the use of diversity policies and data	21.28%	10	10.64%	5	27.66%	13	10.64%	5	29.79%	14	47
12	Increasing the assessment of the use of indigenous knowledge systems and cultural practices	23.40%	11	2.13%	1	10.64%	5	23.40%	11	40.43%	19	47

Q7.7 - Has your organisation experimented with or implemented a new narrative CV format for applicants? Please select all that apply (multiple answers possible). An example of a narrative CV: https://www.nwo.nl/en/dora

#	Answer	%	Count
1	Yes, a pilot with a narrative CV	8.51%	4
2	Yes, a narrative CV which is implemented across all funding opportunities	17.02%	8
3	Yes, a narrative CV which is implemented for some funding opportunities	19.15%	9
4	Yes, a pilot with another CV format	8.51%	4
5	Yes, another new CV format is implemented across all funding opportunities	6.38%	3
6	Yes, another new CV format is implemented for some funding opportunities	0.00%	0
7	Not yet, but considering one of the above for the near future (if so, please state which option above)	17.02%	8
8	No, it has not been considered at all	17.02%	8
9	Unsure	6.38%	3
	Total	100%	47

Q7.8 [Optional] What was the rationale for trialling or implementing this new approach? Please explain which narrative format you are referring to.

[Question was free-text only. Answers redacted to ensure anonymity. Aggregate description of answers are noted in the main report where relevant]

Q7.9 [Optional] What is your experience with this new narrative format?

[Question was free-text only. Answers redacted to ensure anonymity. Aggregate description of answers are noted in the main report where relevant]

Q7.10 - [Optional] To what extent does the new narrative format increase the following? Please only respond where you have evidence to support the claims.

#	Question	Much better		Somewh better	at	About th same	e	Somewha worse	at	Much worse		No evidence yet	2	To tal
1	Efficiency of decision making How much quicker and easier is it for reviewers to complete an assessment following the new narrative format?	11.7 6%	2	5.88%	1	11.76 %	2	23.53 %	4	0.00 %	0	47.06 %	8	17
2	Inclusivity of decision making Does the new format help reviewers to consider equity and inclusion of research ideas and researchers?	23.5 3%	4	23.53 %	4	0.00%	0	0.00%	0	0.00 %	0	52.94 %	9	17
3	Objectivity of decision making How does the new format help mitigate biases during the research assessment process?	17.6 5%	3	17.65 %	3	11.76 %	2	0.00%	0	0.00 %	0	52.94 %	9	17
4	Accountability of the decision making Does the new format strengthen the confidence of reviewers in their assessment?	11.7 6%	2	17.65 %	3	5.88%	1	5.88%	1	0.00 %	0	58.82 %	1 0	17

7.11 [Optional]

Please elaborate on your answers to the previous question and provide links to any evidence or evaluation you have conducted.

[Question was free-text only. Answers redacted to ensure anonymity. Aggregate description of answers are noted in the main report where relevant]

Q7.12 - Has your organisation experimented with or implemented another narrative assessment (for example a narrative to assess research culture)?

#	Answer	%	Count
1	Yes, a pilot narrative summary	2.13%	1
2	Yes, a narrative statement which is implemented across all funding opportunities	8.51%	4
3	Yes, a narrative statement which is implemented across some funding opportunities	2.13%	1
4	Not yet, but considering one of the above in the near future (If so, please state which option above)	12.77%	6
5	No, it has not been considered at all	55.32%	26
6	Unsure	19.15%	9
	Total	100%	47

*Free-text answer components redacted to ensure anonymity

Q7.13 [Optional] Please describe the narrative assessment(s) that your organisation has experimented with or implemented.

[Question was free-text only. Answers redacted to ensure anonymity. Aggregate description of answers are noted in the main report where relevant]

Q7.14 [Optional] What was the rationale for trialling or implementing this narrative approach?

[Question was free-text only. Answers redacted to ensure anonymity. Aggregate description of answers are noted in the main report where relevant]

Q7.15 [Optional] What is your experience with this narrative format?

[Question was free-text only. Answers redacted to ensure anonymity. Aggregate description of answers are noted in the main report where relevant]

Q7.16 - [Optional] To what extent does the new narrative format increase the following? Please only respond where you have evidence to support the claims. If there is no evidence, please select 'no evidence yet'.

#	Question	Much		Somewh	at	About t	he	Somew	hat	Much		No evide	nce	То
		better		better		same		worse		worse		yet		tal
			_				-							
1	Efficiency of decision making: Does the new format help reviewers	0.00	0	40.00	2	0.00	0	0.00	0	20.0	1	40.00	2	5
	complete their assessments more quickly? How much easier is it for	%		%		%		%		0%		%		
	reviewers to complete an assessment following the new narrative													
	format?													
2	Inclusivity of decision making: Does the new format help reviewers to	0.00	0	50.00	2	0.00	0	0.00	0	0.00	0	50.00	2	4
	consider equity and inclusion of research ideas and researchers?	%		%		%		%		%		%		
3	Objectivity of decision making: How does the new format help	0.00	0	50.00	2	0.00	0	0.00	0	0.00	0	50.00	2	4
	mitigate biases during the research assessment process?	%		%		%		%		%		%		
4	Accountability of the decision making: Does the new format	0.00	0	0.00%	0	0.00	0	0.00	0	0.00	0	100.00	4	4
	strengthen the confidence of reviewers in their assessment?	%				%		%		%		%		

Q7.17 [Optional] Please elaborate on your answers to the previous question and provide links to any evidence or evaluation you have conducted.

[Question was free-text only. Answers redacted to ensure anonymity. Aggregate description of answers are noted in the main report where relevant]

Q7.18#1 - What elements does your organisation instruct/recommend reviewers to consider when assessing research proposals? -Please tell us for each element whether your organisation instructs/recommends reviewers to consider it now, have done so in the past or plans doing so in future.

#	Question	Currently instruct/recor reviewers to o	nmend consider	Instructed/recon reviewers to use past, but not any	nmended in the more	Have not instructed/recor reviewers to cor but are thinking doing so in futur	nmended Isider yet, about 'e	Have neve asked reviewers consider a are not thinking o doing so in future	r to nd f	Unsure		Total
1	Soundness of proposed methodology	91.49%	43	2.13%	1	4.26%	2	0.00%	0	2.13%	1	47
2	Feasibility of the proposed research	93.62%	44	0.00%	0	4.26%	2	0.00%	0	2.13%	1	47
3	Resource allocation in line with objectives	85.11%	40	2.13%	1	2.13%	1	2.13%	1	8.51%	4	47
4	Feasibility of the proposed research in relation to the expertise and the prior experience of the applicant(s)	87.23%	41	0.00%	0	4.26%	2	2.13%	1	6.38%	3	47
5	Complementarity and balance of expertise of the researchers involved in the proposal	87.23%	41	0.00%	0	4.26%	2	2.13%	1	6.38%	3	47
6	Dissemination plan of proposed research	76.60%	36	0.00%	0	6.38%	3	6.38%	3	10.64%	5	47

7	Novelty of the research question	87.23%	41	0.00%	0	4.26%	2	2.13%	1	6.38%	3	47
8	Potential economic impacts of the research results	63.83%	30	2.13%	1	4.26%	2	19.15%	9	10.64%	5	47
9	Potential societal impact of the research results	72.34%	34	2.13%	1	4.26%	2	12.77%	6	8.51%	4	47
1 0	Potential economic results of the research results	59.57%	28	2.13%	1	6.38%	3	23.40%	1 1	8.51%	4	47
1 1	Potential transfer/commercialisation of knowledge (patents, clinical trials, spin-offs)	70.21%	33	2.13%	1	8.51%	4	10.64%	5	8.51%	4	47
1 2	Potential contribution of the proposed research to public policies	63.83%	30	2.13%	1	12.77%	6	12.77%	6	8.51%	4	47
1 3	Potential contribution of the proposed research to Sustainable Development Goals (SDG), grant challenges, or other mission-based initiatives	55.32%	26	0.00%	0	14.89%	7	17.02%	8	12.77%	6	47
1 4	Ethical considerations (e.g. the proposed research should be ethically acceptable)	89.36%	42	0.00%	0	6.38%	3	0.00%	0	4.26%	2	47
1 5	Gender considerations in proposed research	59.57%	28	0.00%	0	17.02%	8	12.77%	6	10.64%	5	47
1 6	Gender considerations in research team of applicant(s)	51.06%	24	0.00%	0	17.02%	8	17.02%	8	14.89%	7	47
1 7	Equity considerations in the research team of applicant(s)	46.81%	22	0.00%	0	14.89%	7	23.40%	1	14.89%	7	47

Q8.1 - Please select the option that best corresponds to the following statement: "My funding organisation has complete autonomy from governmental oversight when it comes to priority-setting (i.e. selecting the areas of research on which we prioritise funding)."

#	Answer	%	Count
1	Completely agree	29.79%	14
2	Somewhat agree	17.02%	8
3	Neither agree nor disagree	19.15%	9
4	Somewhat disagree	12.77%	6
5	Completely disagree	21.28%	10
	Total	100%	47

Q8.2 - Please select the option that best corresponds to the following statement: "My funding organisation has complete autonomy from governmental oversight when it comes to choosing mechanisms through which we distribute funding (e.g. autonomy to choose between a competitive versus lottery-based funding allocation system)."

Answer	%	Count
Completely agree	48.94%	23
Somewhat agree	17.02%	8
Neither agree nor disagree	4.26%	2
Somewhat disagree	14.89%	7
Completely disagree	14.89%	7
Total	100%	47
	Completely agree Somewhat agree Somewhat disagree Completely disagree Total	Completely agree 48.94% Completely agree 48.94% Somewhat agree 17.02% Neither agree nor disagree 4.26% Somewhat disagree 14.89% Completely disagree 14.89% Total 100%

Q8.3 - Please select the option that best corresponds to the following statement: "My funding organisation has complete autonomy from governmental oversight when it comes to pre-defining performance criteria used for reviewing funding applications."

#	Answer	%	Count
1	Completely agree	68.09%	32
2	Somewhat agree	8.51%	4
3	Neither agree nor disagree	4.26%	2
4	Somewhat disagree	12.77%	6
5	Completely disagree	6.38%	3
	Total	100%	47

Q8.4 - [Optional] Please select the answer option that best corresponds to the following statement: "My funding organisation has complete autonomy from researcher communities when it comes to priority-setting (i.e. selecting the areas of research on which we prioritise funding)."

#	Answer	%	Count
1	Completely agree	33.33%	15
	Communitation of the second	24.449/	
2	Somewnat agree	24.44%	11
3	Neither agree nor disagree	11.11%	5
4	Somewhat disagree	22.22%	10
5	Completely disagree	8.89%	4
	Total	100%	45

Q8.5 - [Optional] Please select the answer option that best corresponds to the following statement: "My funding organisation has complete autonomy from researcher communities when it comes to pre-defining performance criteria used for reviewing funding applications."

#	Answer	%	Count
1	Completely agree	51.11%	23
2	Somewhat agree	22.22%	10
3	Neither agree nor disagree	2.22%	1
4	Somewhat disagree	20.00%	9
5	Completely disagree	4.44%	2
	Total	100%	45

Q8.6 - [Optional] Please select the answer option that best corresponds to the following statement: "My funding organisation has complete autonomy from researcher communities when it comes to writing funding calls."

#	Answer	%	Count
1	Completely agree	46.67%	21
2	Somewhat agree	31.11%	14
3	Neither agree nor disagree	4.44%	2
4	Somewhat disagree	11.11%	5
5	Completely disagree	6.67%	3
	Total	100%	45

Q8.7 [Optional]

Please provide any additional information about the level of autonomy you consider your organisation to have from governmental oversight and/or researcher communities, when it comes to changing the design of your funding instruments.

[Question was free-text only. Answers redacted to ensure anonymity. Aggregate description of answers are noted in the main report where relevant]

According to the GRC Dimensions Report:

"Funders should establish well-supported and sustainable organisational framework to explore, analyze, develop, implement, monitor, and evaluate responsible research assessment practices. This includes the provision of sufficient resources and support to staff charged with developing, administering, and monitoring research assessment activities, so that they can effectively guide those carrying out the assessment and ensure they follow best practices and do not resort to implicit biases or irresponsible metrics during the assessment process."

The following two questions are designed to explore whether your organisation sets aside 'slack resources' for staff to dedicate to exploring, implementing, and monitoring novel responsible research assessment practices (as laid out in the GRC Dimensions Report).

#	Question	Yes		No		Unsure		То
								tal
1	Capturing knowledge from outside the organisation (e.g. attending conferences, research consortia, professional societies) on research assessment reforms	89.36%	42	8.51%	4	2.13%	1	47
2	Reporting back and sharing among colleagues externally captured knowledge about research assessment reforms	76.60%	36	10.64 %	5	12.77%	6	47
3	Developing responsible research assessment practices	89.36%	42	6.38%	3	4.26%	2	47
4	Implementing responsible research assessment processes and methodologies	87.23%	41	6.38%	3	6.38%	3	47
5	Evaluating existing research assessment processes and methodologies	80.85%	38	10.64 %	5	8.51%	4	47
6	Staff to attend training on new assessment processes and methodologies	68.09%	32	12.77 %	6	19.15%	9	47
7	Attending internal meetings where research assessment reform is regularly on the agenda	78.72%	37	8.51%	4	12.77%	6	47

Q9.1 - Does your organisation set aside time in workload allocation models for its staff to spend on any of the following activities?

Q9.2 - [Optional] Please select the answer option best matches the following statement: "Top management of our funding organisation has circulated several or more internal communications to staff within the past three years about the importance of our organisation adopting responsible research assessment practices."

#	Answer	%	Count
1	Yes	61.36%	27
2	No	22.73%	10
3	Unsure	15.91%	7
	Total	100%	44

Q9.3 [Optional] Please provide any further details or context about the resources available for staff to invest in responsible research assessment related activities

[Question was free-text only. Answers redacted to ensure anonymity. Aggregate description of answers are noted in the main report where relevant]

Q10.1 - How much weight do you instruct/recommend reviewers to assign to the following factors when they are assessing the merits of research proposals?

#	Question	A lot		Some		None at a	II	Unsure		Total
1	Ethics	48.94%	23	36.17%	17	4.26%	2	10.64%	5	47

2	Research integrity	55.32%	26	25.53%	12	8.51%	4	10.64%	5	47
3	Open access to research publications	12.77%	6	46.81%	22	23.40%	11	17.02%	8	47
4	Open science (including, but not limited to, open access to research data, software, code, methods, etc.)	10.64%	5	44.68%	21	27.66%	13	17.02%	8	47
5	Equity, diversity and inclusion	31.91%	15	40.43%	19	12.77%	6	14.89%	7	47
6	Interdisciplinarity, multidisciplinarity, and/or transdisciplinarity	38.30%	18	38.30%	18	10.64%	5	12.77%	6	47
7	Promote longer research contract lengths for early career researcher	10.64%	5	31.91%	15	31.91%	15	25.53%	12	47
8	Research security (including, but not limited to, considerations for safeguarding sensitive or dual-use research)	12.77%	6	36.17%	17	27.66%	13	23.40%	11	47

Q10.2 - [Optional] Has your organisation instructed/recommended reviewers to more or less actively consider the following in the assessment of research proposals in 2024, as compared to 2021?

#	Question	More active	У	About the s	Less activ	/ely	Unsure		Total	
1	Ethics	31.58%	12	60.53%	23	2.63%	1	5.26%	2	38
2	Research integrity	28.95%	11	60.53%	23	2.63%	1	7.89%	3	38
3	Open access to research publications	26.32%	10	55.26%	21	5.26%	2	13.16%	5	38
4	Open science (including, but not limited to, open access to research data, software, code, methods, etc.)	27.03%	10	56.76%	21	2.70%	1	13.51%	5	37
5	Equity, diversity and inclusion	42.11%	16	44.74%	17	5.26%	2	7.89%	3	38
6	Interdisciplinarity, multidisciplinarity, and/or transdisciplinarity	40.54%	15	45.95%	17	2.70%	1	10.81%	4	37
7	Promote longer research contract lengths for early career researcher	21.05%	8	39.47%	15	7.89%	3	31.58%	1 2	38
8	Research security (including, but not limited to, considerations for safeguarding sensitive or dual-use research)	28.95%	11	44.74%	17	7.89%	3	18.42%	7	38

Q10.3 [Optional] For each of the areas you have ticked in Question 10.2, what actions are you taking, if any, to exercise influence on research performing institutions in these areas?

[Question was free-text only. Answers redacted to ensure anonymity. Aggregate description of answers are noted in the main report where relevant]

Q10.4 [Optional] For each of the areas you have ticked in Question 10.2, please briefly describe how your organisation incentivises or mandates responsible behaviour of applicants and funded researchers.

[Question was free-text only. Answers redacted to ensure anonymity. Aggregate description of answers are noted in the main report where relevant]

Q10.5 - [Optional] Has your organisation implemented any of the following adjustments to their processes to select research proposals in order to tackle any potential bias or observed discrimination? If yes, which considerations are included? Please select all that apply (multiple answers possible).

#	Question	Gender		Disabilit	y	Age		Race		Religion		Disciplin	ie	Seniorit	У	Affiliation		Total
1	Introduction of quotas to balance the selection of applicants with a certain profile	42.86%	12	10.71%	3	14.29%	4	3.57%	1	0.00%	0	17.86%	5	7.14%	2	3.57%	1	28
2	Introduction of policy to give priority to the selection of proposals from applicants with underrepresented profiles when the quality of their proposal and research outputs is as high as that of the other proposals	44.44%	12	7.41%	2	7.41%	2	11.11%	3	0.00%	0	22.22%	6	3.70%	1	3.70%	1	27
3	Introduction of quotas to balance the selection of applicants with a certain profile	29.63%	8	14.81%	4	18.52%	5	3.70%	1	0.00%	0	18.52%	5	14.81%	4	0.00%	0	27
4	Limiting reviewers' access to personal identifiers throughout the review process	28.57%	8	10.71%	3	14.29%	4	14.29%	4	10.71%	3	7.14%	2	10.71%	3	3.57%	1	28
5	Selection of groups of reviewers with diverse profile	29.58%	21	2.82%	2	7.04%	5	7.04%	5	1.41%	1	22.54%	16	16.90%	12	12.68%	9	71
6	Other adjustment(s). Please specify	23.08%	3	15.38%	2	7.69%	1	15.38%	2	15.38%	2	15.38%	2	7.69%	1	0.00%	0	13

*Free-text answer components redacted to ensure anonymity

Question 11 of this survey aims to understand how research funding organisations ensure that their selection processes indeed identify the best proposals in a fair and transparent matter. Robustness is understood as the capacity of selection processes to, in line with the objective of the evaluation, reliability and fairly assess the quality of proposals and to select them for funding.

Q11.1 - How often does your organisation perform evaluations of its selection processes of research proposals with the view to testing their robustness?

#	Answer	%	Count
1	At fixed intervals: every year	14.89%	7
2	At fixed intervals: every 2-3 years	8.51%	4
3	At fixed intervals: every 4-5 years	2.13%	1
4	At fixed intervals: more than 5 years	2.13%	1
5	Has done this more than once, but not at fixed intervals	36.17%	17
6	Has done this once, and there is no rule to do so at fixed intervals	2.13%	1

7	Has never done this, but plans to do so in future	14.89%	7
8	Has never done this, and does not plan to do so in future	4.26%	2
9	Other, please specify	14.89%	7
	Total	100%	47

*Free-text answer components redacted to ensure anonymity

Q11.2 - [Optional] Who are the intended audiences of these evaluations? (Select as many as applicable)

#	Answer	%	Count
1	Internal	75.61%	31
2	Government	48.78%	20
3	General public	39.02%	16
4	Research performing organisations	39.02%	16
5	Industry	26.83%	11
6	Other (please specify)	14.63%	6
7	Not applicable	9.76%	4
	Total	n/a	41

*Free-text answer components redacted to ensure anonymity

Q11.3 - [Optional] Are any of the evaluations for	the audiences (as listed in Question	11.2 above) published openly?
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#	Question	Yes		No To some extent		Unsure		Total		
1	Internal	41.18%	14	29.41%	10	20.59%	7	8.82%	3	34
2	Government	47.83%	11	21.74%	5	17.39%	4	13.04%	3	23
3	Research performing organisations	27.78%	5	38.89%	7	16.67%	3	16.67%	3	18
4	General public	45.00%	9	20.00%	4	20.00%	4	15.00%	3	20
5	Industry	33.33%	5	40.00%	6	13.33%	2	13.33%	2	15
6	Other	12.50%	1	37.50%	3	25.00%	2	25.00%	2	8

The next section of this survey addresses the use of artificial intelligence (AI) or machine learning (ML) within research assessments. These questions were co-developed with the <u>RoRI GRAIL project</u> and were not asked in the 2020 survey.

Q12.1#1 - What processes in research assessment have you used/are you considering using artificial intelligence (AI) or machine learning (ML) as part of? Please indicate all relevant processes. Please also tell us how beneficial the use of AI/ML is for each process. You can select 'Not applicable (N/A) for processes that have not been used - Please select the option that best describes your organisation's engagement with AI/ML in the following research assessment processes.

#	Question	Currently u	sing	Experiment and conside in future	ed in past ering using	Experiment and not cou using in fut	ted in past nsidering ure	Not used b considering future	Not used but considering using in future		nd not ; using in	Tot al
1	Assessment of researcher contributions and achievements	2.13%	1	2.13%	1	0.00%	0	48.94%	23	46.81%	22	47
2	Assessment of research impact	2.13%	1	2.13%	1	0.00%	0	53.19%	25	42.55%	20	47
3	Reviewer and/or panel assignment/recruitment	23.40%	11	8.51%	4	0.00%	0	40.43%	19	27.66%	13	47
4	Classification of proposals/research outputs	8.51%	4	8.51%	4	0.00%	0	46.81%	22	36.17%	17	47
5	Portfolio analysis and management	6.38%	3	2.13%	1	0.00%	0	38.30%	18	53.19%	25	47
6	Strategic analysis and investment	8.51%	4	0.00%	0	0.00%	0	40.43%	19	51.06%	24	47

Q12.1#2 – What processes in research assessment have you used/are you considering using artificial intelligence (AI) or machine learning (ML) as part of? Please indicate all relevant processes. Please also tell us how beneficial the use of AI/ML is for each process. You can select 'Not applicable (N/A) for processes that have not been used – Please specify for each item selected if they are very beneficial, moderately beneficial, marginal/no benefits. If you have never used an aspect, please select 'Not applicable (N/A)'

#	Question	Very beneficial Moderately N beneficial b		Marginal/no benefits		Not applicable (N/A)		Total		
1	Assessment of researcher contributions and achievements	19.15%	9	10.64%	5	0.00%	0	70.21%	33	47
2	Assessment of research impact	14.89%	7	14.89%	7	2.13%	1	68.09%	32	47
3	Reviewer and/or panel assignment/recruitment	25.53%	12	25.53%	12	0.00%	0	48.94%	23	47
4	Classification of proposals/research outputs	23.40%	11	19.15%	9	0.00%	0	57.45%	27	47
5	Portfolio analysis and management	19.15%	9	14.89%	7	0.00%	0	65.96%	31	47
6	Strategic analysis and investment	19.15%	9	10.64%	5	0.00%	0	70.21%	33	47

Q12.2 [Optional] Could you give us more detailed information and examples about the ways in which your organisation is using/has used AI or machine learning in research assessment? (if applicable)

[Question was free-text only. Answers redacted to ensure anonymity. Aggregate description of answers are noted in the main report where relevant]

Q12.3#1 - [Optional] In governance and strategy of research assessment, how much benefit and risk do you see being presented by AI/ML technologies? - For each aspect of research assessment governance and strategy, please tell us the level of potential benefit of AI/ML technologies to your organisation

#	Question	Great		Moderate		Little		Unsure		Total
1	Administration of research assessment processes	39.39%	13	24.24%	8	12.12%	4	24.24%	8	33
2	Monitoring of research assessment processes	39.39%	13	21.21%	7	12.12%	4	27.27%	9	33
3	Enhancement/improvement of research assessment processes	33.33%	11	21.21%	7	12.12%	4	33.33%	11	33
4	Reform of research assessment processes	24.24%	8	12.12%	4	24.24%	8	39.39%	13	33

Q12.3#2 - [Optional] In governance and strategy of research assessment, how much benefit and risk do you see being presented by AI/ML technologies? - Please also indicate the level of potential risk the use of these technologies poses for your organisation on each aspect

#	Question	Great		Moderate		Little		Unsure		Total
			_		_					
1	Administration of research assessment processes	12.90%	4	25.81%	8	25.81%	8	35.48%	11	31
2	Monitoring of research assessment processes	12.90%	4	29.03%	9	25.81%	8	32.26%	10	31
3	Enhancement/improvement of research assessment processes	16.67%	5	30.00%	9	20.00%	6	33.33%	10	30
4	Reform of research assessment processes	25.81%	8	16.13%	5	12.90%	4	45.16%	14	31

Q12.4 [Optional] Could you please give us more detailed information and examples about the benefits and/or risks of Al/ML in research assessment governance and strategy?

[Question was free-text only. Answers redacted to ensure anonymity. Aggregate description of answers are noted in the main report where relevant]

Q12.5#1 - [Optional] When your organisation has explored or is seeking to explore any type of automated research assessment tool such as AI or machine learning, what key factors affect decision making in the process? - Effect on decision making

#	Question	Strong effec	t	Moderate effect		Marginal or	Total	
1	Financial factors	50.00%	11	36.36%	8	13.64%	3	22
2	Technical factors	59.09%	13	40.91%	9	0.00%	0	22
3	Data factors	63.64%	14	27.27%	6	9.09%	2	22
4	Ethical factors (including Equity, Diversity and Inclusion, EDI)	59.09%	13	22.73%	5	18.18%	4	22
5	Human resources management factors	60.00%	12	20.00%	4	20.00%	4	20
6	Operational factors	60.00%	12	35.00%	7	5.00%	1	20
7	Strategic factors	50.00%	10	35.00%	7	15.00%	3	20
8	Legal and regulatory factors	66.67%	14	23.81%	5	9.52%	2	21
9	Other factors (please specify)	50.00%	1	50.00%	1	0.00%	0	2

*Free-text answer components redacted to ensure anonymity

#	Question	Sourced in	nternally	Sourced externally		Not sourced		Growing internal expertise		Total
1	Financial factors	66.67%	12	11.11%	2	11.11%	2	11.11%	2	18
2	Technical factors	27.78%	5	27.78%	5	11.11%	2	33.33%	6	18
3	Data factors	38.89%	7	11.11%	2	16.67%	3	33.33%	6	18
4	Ethical factors (including Equity, Diversity and Inclusion, EDI)	35.29%	6	11.76%	2	29.41%	5	23.53%	4	17
5	Human resources management factors	56.25%	9	0.00%	0	18.75%	3	25.00%	4	16
6	Operational factors	62.50%	10	0.00%	0	6.25%	1	31.25%	5	16
7	Strategic factors	56.25%	9	0.00%	0	12.50%	2	31.25%	5	16
8	Legal and regulatory factors	38.89%	7	11.11%	2	16.67%	3	33.33%	6	18
9	Other factors (please specify)	33.33%	1	0.00%	0	33.33%	1	33.33%	1	3

Q12.5#2 - [Optional] When your organisation has explored or is seeking to explore any type of automated research assessment tool such as AI or machine learning, what key factors affect decision making in the process? - Expertise location

*Free-text answer components redacted to ensure anonymity

Q12.6 [Optional] Could you please give us more detailed information and examples about engaging with these different key factors informing your use of AI/ML?

[Question was free-text only. Answers redacted to ensure anonymity. Aggregate description of answers are noted in the main report where relevant]

Q12.7 - [Optional] What topics do you cover as part of your discussions on using AI or machine learning in research assessment? Please select all that apply for your organisation (multiple answers possible).

#	Answer	%	Count
1	Selection of appropriate data	75.00%	15
2	Selection of appropriate models/algorithms	60.00%	12
3	Evaluation of AI/ML systems	55.00%	11
4	Evaluation of impact using AI/ML on organisational goals	75.00%	15
5	Evaluation of impact using AI/ML on researcher community	70.00%	14
6	Potential impacts on research integrity	65.00%	13
7	Potential impacts on responsible conduct of research	65.00%	13
8	Approaches to encourage open research using AI/ML	35.00%	7
9	Employing open research practices in use of AI/ML	50.00%	10
10	Equity, diversity and inclusion (EDI) considerations	55.00%	11
	Total	n/a	20

Q12.8 [Optional] Could you please give us more detailed information and examples about these topics in your discussions of AI/ML use in research assessment?

[Question was free-text only. Answers redacted to ensure anonymity. Aggregate description of answers are noted in the main report where relevant]

APPENDIX 4: Background

The GRC RRA working group

The Responsible Research Assessment (RRA) <u>Working Group</u> of the Global Research Council (GRC) was established in 2021 to support the promotion and implementation of RRA practices in the international research and innovation system, through the development of a collective understanding of RRA and the sharing of guidance and best practices between research funding agencies worldwide.

GRC RRA Working Group members played a key role in designing the survey questions, building upon the first GRC RRA survey in 2020. Working Group members further supported the dissemination of the survey across all five regions of the GRC and they supported their respective organisations in the completion of the survey. Members were further invited to provide editorial review to a draft of the present report.

The Working Group's Secretariat members Claire Fraser (Research England, UK Research and Innovation) and Dr. Anh-Khoi Trinh (Natural Sciences and Engineering Research Council of Canada) coordinated Working Group member's input to the survey design and worked closely with the RoRI team to complete the development of the survey design and to support the drafting of the report. The Working Group's co-chairs Shawn McGuirk (Natural Sciences and Engineering Research Council of Canada) and Prof. Mohammed Ahmad Alshamsi (Research Development and Innovation Authority of the Kingdom of Saudi Arabia) provided strategic direction and leadership to the Working Group, led the initial design of the survey questions, and provided editorial feedback to the report's drafts.

The Global Research Council (GRC)

The <u>GRC</u> is a virtual participant organisation, composed of the heads of science and engineering funding agencies from around the world, dedicated to promote the sharing of data and best practices for high-quality collaboration among funding agencies worldwide. The purposes of the Global Research Council are: To improve communication and cooperation among funding agencies; To promote the sharing of data and best practices for high-quality research cooperation; To provide a forum for regular meetings of the Heads of Research Councils; To respond to opportunities and to address issues of common concern in the support of research and education; To be a resource for those institutions wishing to build a world-class research landscape; To explore mechanisms that support the global science enterprise and the worldwide research community.

The GRC's Executive Secretariat and the Executive Support Group (ESG) facilitated the distribution of the survey to GRC participant organisations and provided editorial input to the report.

The GRC has drafted multiple statements of principles that are related to the Dimensions of RRA. The relevant statements of principles are found in the table below and are mapped to related RRA Dimensions labelled in accordance with the report.

Year	Statement of Principles (with hyperlink)	Related Dimension of RRA
2024	Sustainable Research	1, 3, 5, 6, 8, 9, 10, 11
2023	Recognising and Rewarding Researchers	3, 5, 6, 8, 9
2023	Climate Change Research Funding	1, 10
2022	Research Ethics, Integrity, and Culture in the Context of Rapid-Results Research	1, 3, 11
2022	Development of the Science and Technology Workforce Development	3
2021	RRA Call to Action	All
2020	Public Engagement	5, 8, 9
2020	Mission-Oriented Research	10
2019	Expectations of Societal and Economic Impact	9, 10
2018	Peer/Merit Review	1, 3, 8, 9, 10, 11
2017	The Dynamic Interplay Between Fundamental Research and Innovation	3, 10
2017	Capacity Building and Connectivity Among Granting Agencies Worldwide	2, 10
2016	Promoting the Equality and Status of Women in Research	3, 5, 6
2016	On Interdisciplinarity	6, 10
2015	Building Research and Education Capacity	6, 7
2015	Funding Scientific Breakthroughs	10
2014	Shaping the Future: Supporting the Next Generation of Researchers	1, 6
2013	Research Integrity	1

Table 1: GRC Statements of Principles related to RRA dimensions

The Research on Research Institute (RoRI)

<u>RoRI</u> was founded in 2019 by a group of researchers, funders and data providers with a mission to accelerate transformative research on research systems, cultures and decision-making. Based in University College London (UCL) with a global network of researchers and 19 research funders as institute partners, RoRI translates ideas and evidence into practical, real-world solutions. RoRI's mission is to gather evidence and data, undertake experiments and develop tools to improve how research is funded, practised, communicated and evaluated.

Since 2020, RoRI has collaborated with the GRC's RRA Working Group to deliver on two global surveys on RRA (Curry et al 2020 and the present paper) and the team has been invited to present at multiple GRC Annual and Regional meetings.

The AGORRA project

RoRI's <u>AGORRA (A Global Observatory of Responsible Research Assessment)</u> project is a collaboration between research funders, evaluation agencies and meta-researchers across 14 countries which aims to generate comparative data, evidence and analysis to support and accelerate responsible research assessment (RRA). With a specific focus on national-level assessment frameworks, it also aims to inform and accelerate the broader reform and transformation of research assessment systems, supporting and complementing global initiatives like CoARA (The Coalition for Advancing Research Assessment) and DORA (Declaration on Research Assessment).

The GRAIL project

RoRI's <u>GRAIL</u> project is exploring good principles and practices for ethically and effectively using AI and machine learning (ML) in the research funding ecosystem. The project aims to create an inter-funder community of learning around opportunities, challenges, and facilitators for using AI/ML in research funding and evaluation, and to use funder insights and experiences to explore what more grounded use of AI in their settings looks like. To inform future actions and use of AI/ML, the project will characterise current approaches to and use of AI within research funding and develop practical guidance to manage social and organisational impact of AI research funding and assessment.

About the authors

Alexander Rushforth is a senior research fellow at RoRI and Assistant Professor at the Centre for Science and Technology Studies (CWTS), Leiden University, the Netherlands. a.d.rushforth@cwts.leidenuniv.nl; ORCID <u>https://orcid.org/0000-0003-3352-943X</u>; <u>https://www.cwts.nl/people/AlexRushforth</u>

Anh-Khoi Trinh is a Senior Policy Advisor at the Natural Sciences and Engineering Research Council of Canada (NSERC, Canada) and member of the Global Research Council Responsible Research Assessment Working Group Secretariat. anh-khoi.trinh@nserc-crsng.gc.ca; ORCID https://orcid.org/0000-0002-6892-6753

Claire Fraser is a Senior Policy Advisor at Research England, UK Research and Innovation, United Kingdom and member of the Global Research Council Responsible Research Assessment Working Group Secretariat. claire.fraser@re.ukri.org; ORCID https://orcid.org/0009-0004-9984-1121

Denis Newman-Griffis is a research fellow at RoRI and Senior Lecturer and Al-Enabled Research Lead at University of Sheffield. d.r.newman-griffis@sheffield.ac.uk; ORCID http://orcid.org/0000-0002-0473-4226

Nino Gogadze is a research fellow at RoRI and a PhD candidate at CWTS, Leiden University, the Netherlands. n.gogadze@cwts.leidenuniv.nl; ORCID <u>https://orcid.org/0009-0006-4498-9481;</u> <u>https://www.universiteitleiden.nl/en/staffmembers/nino-gogadze#tab-1</u>

James Wilsdon is Executive Director of the Research on Research Institute and Professor of Research Policy in the Department of Science, Technology, Engineering and Public Policy at University College London (UCL), United Kingdom. j.wilsdon@ucl.ac.uk; ORCID https://orcid.org/0000-0002-5395-5949; https://orcid.org/0000-0002-5395-5949; https://orcid.ac.uk/93009-james-wilsdon/about

Mohammed Ahmad Alshamsi is professor in engineering and a general manager in National Policy and economic affairs sector in Research, Development, and Innovation Authority (RDIA), and Co-Chair of the Global Research Council Responsible Research Assessment Working Group. mass414@hotmail.com; <u>https://orcid.org/0000-0002-7239-637X</u> **Peter Kolarz** is Head of Programmes of the Research on Research Institute (RoRI) and an associate staff member in the Department of Science, Technology, Engineering and Public Policy at University College London (UCL). p.kolarz@researchonresearch.org; ORCID https://orcid.org/0000-0003-4443-580X; https://orcid.org/team/peter-kolarz/

Shawn McGuirk is a Director at the Natural Sciences and Engineering Research Council of Canada (NSERC, Canada) and Co-Chair of the Global Research Council Responsible Research Assessment Working Group. shawn.mcguirk@nserc-crsng.gc.ca; ORCID https://orcid.org/0000-0002-7183-7962



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