

EXPLANATION OF CHANGES BETWEEN ROUNDS 1 AND 2

Dorothy Bishop, 3rd Feb 2025

The survey results, including free text comments, were summarised in a report circulated to both the Advisory Board and the Moderators. A meeting was held with the Advisory Board on 20th Jan 2025 and with the Moderators on 22nd Jan 2025. The focus of the Advisory Board was mainly on high-level issues, whereas the Moderators considered each item in turn to discuss whether it should be retained, dropped or modified.

The Advisory Board members are:

Paula Williamson (Chair), Professor of Biostatistics, University of Liverpool, UK.

Csaba Szabo, Head of the Pharmacology Section and President of the Department of Oncology, Microbiology and Immunology (OMI), University of Fribourg, Switzerland.

Andrew Paskevich, Director of Academic and Research Integrity, Office of the Chief Scientific Officer, Perelman School of Medicine, University of Pennsylvania, USA.

The moderators are:

Dorothy Bishop: researcher in the field of neuropsychology, with an interest in research integrity and fraud, involved in acting as a research sleuth since retirement, and initiator of this project. She takes ultimate responsibility for the wordings in the current version of the survey.

Patricia Murray: expert in stem cell biology, with a particular interest in research misconduct around medical interventions and devices.

Shaun Khoo: university administrator who has worked as a research integrity officer in Australia, and is familiar with conducting investigations.

Stephanie Neave, Chief Executive Officer at UK Research Integrity Office (UKRIO).

General point

The original Item 1 was dropped, but an item about group identification is moved to this position, to avoid renumbering subsequent items. This makes it easier to compare responses across rounds.

Specific points from Advisory Board

Response format for summary data

The format of some items diverged from the planned 5-point scale. It was agreed that for 3-point and 4-point scales, results would be presented as % endorsing the top category, and for those on 5-point scales, the % endorsing options 4 or 5.

The original plan of retaining or dropping items depending on whether they met the criterion of 80% agreement seemed inappropriate, because some of the most relevant items did not give such strong agreement - and seemed the most important to discuss at an in-person meeting. In the account below, some items or sub-items are removed where there is very low endorsement overall, but in general items are retained, though in some cases with modification.

Group O

The original aim had been to categorise respondents into groups based on their responses on the expression-of-interest sheet. However, not all could be categorised, and so an item was added at the end of the survey where people could self-identify, as follows:

We anticipate that patterns of responses may be different for those who are primarily involved in raising concerns about serious research misconduct (e.g. sleuths, whistleblowers, victims of research fraud) and those whose job it is to respond to reports of such concerns (e.g. research integrity officers, those devising policies for research integrity). Could you please specify here which of those groups you identify with most strongly - or whether neither applies to you. Thanks.

- *Group 1: Sleuths, etc*
- *Group 2: Research integrity officers, etc*
- *Group 3: Neither of the above*

The numbers in each group were 37, 33 and 25. Group 3, specified as "Other" (O) in results appeared to be diverse: it included some people who identified both with Sleuths and Research Integrity Officers, and others from different constituencies, such as journal editors, funders, journalists. It was recommended that we revisit this categorisation in Round 2, and this point was discussed with Moderators.

Relevant literature

Several useful references were provided by respondents. It was agreed that these should be made available where possible, together with a synopsis. A start has been made on this: please see <https://osf.io/e25hf/>.

Nonrespondents

95 of the 116 who signed up took part in the survey. It was agreed that those who had not replied should be given to take part in Round 2 if they wished, but that no new panellists would be added.

Free text

The free text responses were extremely helpful in providing context to responses, but including them all in the report made it very long. It was agreed that if possible some general themes should be identified so that similar responses could be grouped. In practice, it proved more feasible to pull out selected free text comments to provide context to Round 2 items, and to generate a list of Topics for Discussion, representing ideas that came up in free text comments. This preliminary list is now provided at the end of the survey, with the opportunity to rate them.

Redactions

A few free text comments contained personal comments about other panel members. These have been redacted.

Anonymisation

One respondent had queried the description of the survey as anonymous. It was agreed to add a statement at the outset clarifying this point.

Some panel members made comments that could identify them. We redacted these: even where the panel member in question may be unconcerned about anonymity, awareness of someone's identity might influence how their comments were interpreted.

Need for clear definitions

There was some confusion around definitions, which emerged particularly with regard to item 1. We agreed that we would aim to create a glossary of common terms and acronyms, and also aim to present more context for round 2 items to avoid disagreement arising through different interpretations. Our definition of "serious research misconduct" is presented at the start of the survey and a response box has been added for panel members to confirm they have read it.

Specific points from discussion with Moderators

Preamble

Some respondents appeared not to have read the preamble, which specified that the focus was on serious research misconduct, where researchers intentionally commit fraud or disregard safety issues. It was felt that the best way of dealing with this was to be more specific when introducing individual items, as well as providing a glossary.

Free text comments: Respondents in round 2 are encouraged to include suggestions for topics for discussion in the April meeting, both with individual items responses, and at the end. Also added to the preamble "please be aware that the panel includes people from a wide range of countries, disciplines and backgrounds, and so please spell out acronyms that may not be familiar to people outside your usual circles."

Item 1 (original)

This item showed some evidence of confusion in some respondents. The purpose of the item was to try and specify what were the most important topics to discuss at our in-person meeting in April. It was decided to move an item on this topic to the end of the survey, and reword it radically, on the grounds that respondents would have a better idea of our definitions and the range of content we were considering after completing other items. This item now includes a much wider range of subitems, to include the material covered in the rest of the survey. For consistency with other items, a 5-point scale is used in Round 2.

Item 1 (new)

A question about group identification is now inserted as Item 1. We had not anticipated asking this question again in Round 2, but those reading the draft report were curious about the individuals who self-classified in the Other group. The classification is there revisited in a revised form in Item 1.

Item 2

Some respondents said it depended on the definition of serious research misconduct: since we had defined that in the preamble, we realised it was important to remind panel members, and so the definition is now provided with the item.

Several respondents pointed out this was an empirical question and they provided relevant source references to various kinds of data: mainly from surveys or existing databases. Summary data from these is now provided for respondents.

THE FOLLOWING TWO POINTS NOW APPLY TO ALL ITEMS:

Free text comments from round 1 are added in the pre-text for this item to provide contrasting perspectives. These are just a small subset of the comments, but the full list is available in the Report on Round 1.

In free text comments for Round 2, as well as asking for general responses to this item and source references, respondents are asked to contribute ideas for helping fill the evident data gap on this topic. This might form a discussion topic at the April meeting.

Item 3

We decided to omit the 4th subitem "Institutions whose resources are diverted to tackling misconduct" on the grounds that it was the only subitem with less than 50% endorsement overall - there was a sense that this was a bit nebulous; the costs are not known. We also omitted the 5th subitem about harms to society, as this overlaps with item 4.

We added another subitem "Other researchers who are based in the same lab, or collaborate with, a fraudulent researcher" - this topic of collateral damage to other researchers is mentioned by respondents as a concern at several points in the survey, and it seemed to belong with this item. One respondent provided this illustrative reference:

Kozlov, M. (2022). How a scandal in spider biology upended researchers' lives. *Nature*, 608(7924), 658–659. <https://doi.org/10.1038/d41586-022-02156-2>

Item 4

There was very low endorsement of the subitem "To punish offenders" by all groups (11% overall), so this was dropped.

Comments indicated lack of clarity in the interpretation in two subitems:

"To maintain academic integrity, including to correct the academic record" was simplified to "To correct the academic record"

"To maintain trust and rigour in research", so this was altered to "To maintain public trust in research".

A 5-point scale was used for consistency with other items.

Item 5

We deleted two subitems that had low endorsement by all groups:

The subitem item on vexatious/trivial accusations received only 17% endorsement overall.

The subitem on due process received 34% endorsement overall.

Item 6

The phrase "publish or perish" was removed from the subitem on culture and incentive structure, given that many comments noted that fraud was often committed by those who benefited from it in the current system, but were not at risk of perishing.

Item 7

It was unclear whether "social media" encompassed PubPeer. The item is now reworded to ask respondents to rate value of three separate options: PubPeer, Social media such as X, Bluesky etc, and Blogs/websites.

Item 8

Respondents noted that slow was not the same as obstructive, since some processes may be necessarily slow.

This has been reworded to: "Official channels for reporting misconduct seldom work efficiently"

This also removes the implication of intention in the word "obstructive". It is clear nevertheless, that some respondents believe inefficiency can be intentional.

Item 9

In response to suggestions by panellists, polarity of this item has been switched to be consistent with other items, where 5 = endorsement, and a 5-point rating scale is used, instead of rank ordering.

The order of the sub-items has been changed to be more logical.

This item seems to get at the core of what we want to discuss, so is retained despite the lack of agreement in Round 1.

In addition, additional options have been added on the basis of comments by panel members. These in effect are combinations or modifications of existing options.

Item 10

As suggested by several respondents, added an option to distinguish between cases where an investigation had occurred and cases where an investigation found evidence

of serious research misconduct. For consistency with other items, a 5-point scale is now used.

Item 11

Although there was broad agreement for this item, the comments indicated many barriers to its implementation - some of these are now provided to give context.

Item 12

In Round 1 this item required a ranking rather than a rating, and had reversed polarity from other items. It is now changed to make it consistent with other items.

"Research ethics training" changed to "Research integrity training" at suggestion of one panel member

Item 13

Some panel members disagreed with the premise of the question, and so it was added as an extra item.

Item 14

Transposed the last two sub-items, so all whistleblower items were together

Item 15

Retained, with added context from free text comments from Round 1.

Item 16

Sub-item 4 was dropped, as it was not very clear and addressed different kinds of issue to the other sub-items.

An additional sentence was added to explain the item referred to the current state of affairs, since one panel member found that unclear.

Item 17

Item 17 was dropped. The main reason for including it in Round 1 was to bring panel members back to the general importance of the topic of the survey, and it was felt this quote was likely to achieve some consensus, which was broadly true. For round 2, we want to conclude with ideas for in-person discussion, so the final item proposes some ideas that have arisen from Round 1. This is not an exclusive list, and there will be ample opportunity to raise additional topics.