Breaches in Research Integrity

Josephine Woodhams

July 2023

Should we be less British and more Australian when it comes to the use of the words *research misconduct*?

At the subscriber day of UKRIO's annual conference this year (2023), we heard a thought-provoking presentation from Dr Daniel Barr, Principal Research Integrity Advisor at RMIT University in Melbourne, Australia.

He said boldly that

> *"there is no research misconduct at RMIT"!*

Initially, I thought *what*, how do they know for sure? Daniel explained that they don't use the same language as us when it comes to investigating research misconduct.

At RMIT, concerns about research practice are described as **breaches** of the principles and responsibilities of research integrity. These are breaches of the principles of responsible research conduct set out in the *Australian Code for Responsible Conduct of Research 2018* (the Australian Code) and/or the *RMIT Research Policy*.

There is a scale (see Box 1 in *Guide to Managing and Investigating Potential Breaches of the Australian Code for the Responsible Conduct of Research*), with many factors involved, that determines how serious a breach is: when they investigate, it is called a 'research integrity investigation into potential breaches'.

At the bad end of the breach scale is **research misconduct**, where there was intent to deceive and manipulate the outcome of the research and at the opposite end there are breaches that are more likely influenced by the systems within the local research environment. The array of breaches is shown in Daniel's slide (Figure 1).

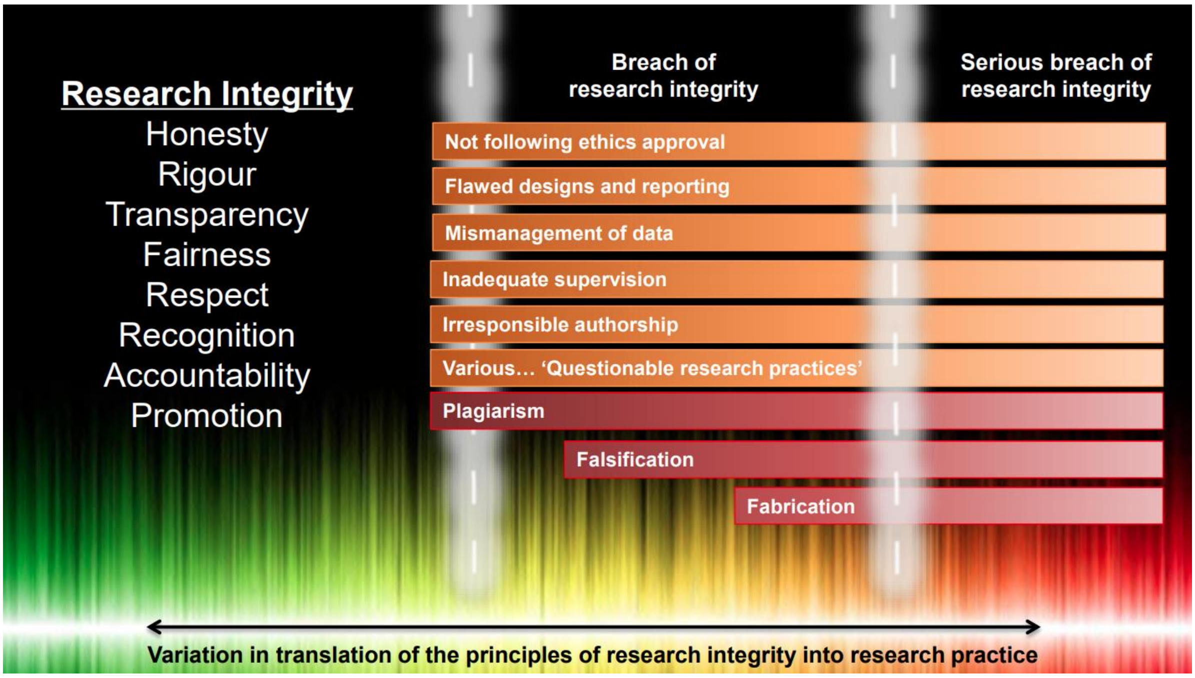

Figure 1: The research integrity breach scale

It is making us think at UKRIO whether this language is more appropriate than what we have adopted in the UK, which is an 'investigation into research misconduct'. It is interesting to note there is no inclusion of the word 'potential'.

- What should the goal be or is the goal already the same?
- What is the importance of differences in language?

There is continued debate on the scale of poor research practices and at what point this becomes, or has the potential to lead to, research misconduct – see for example our Trustee Dr Simon Kolstoe's discussion of the *spectrum of questionable research practices* (QRPs).

Although a 'procedure to investigate research misconduct' and a 'research integrity investigation into potential breaches' will each discover poor practice and misconduct, the language in the British version is focused on determining whether there was intent to carry out serious poor practice. This difference could distract from correcting the errors that can result from sloppy practices.

- Does the term 'potential breaches' enable a research organisation to concentrate more clearly on questionable research practices, allowing self-reflection and improving the trustworthiness of research?

As Daniel explained, at RMIT they focus on the trustworthiness of *research*, not on the trustworthiness of a *researcher*, i.e., misconduct.

Definitions of research misconduct

There continue to be discussions on the definitions of research misconduct. This has resulted in inconsistent use of definitions across the research community both in the UK and elsewhere. As an example, *The Office of Research Integrity (ORI)* in the US defines research misconduct as

> *"fabrication, falsification or plagiarism in proposing, performing or reviewing research, or in reporting research results... Research misconduct does not include honest error or differences of opinion (42 C.F.R. Part 93)".*

Using a narrow definition such as 'Fabrication, Falsification, Plagiarism (FFP)' will limit what can be investigated.

UKRIO has adopted the definitions of research misconduct in the UK's *Concordat to Support Research Integrity*. If an allegation of research misconduct is upheld, the repercussions to the researcher are often detrimental to their career and rightly so. Upheld serious allegations of research misconduct thankfully appear to be infrequent although the true scale of the research integrity problem isn't known (as discussed in the UK Parliamentary Science and Technology Select Committee's report on *research integrity*). Nonetheless, are we too focused on the 'bad researcher' when the spectrum of poor practices seems to be the main concern?

Conversely, if a researcher is accused of research misconduct and then the case is not upheld, this can still be detrimental to their reputation, to their colleagues, the department, and even the organisation. We know that, as Daniel said, being a responsible researcher all of the time appears to be difficult within the excessively competitive research system we have. Would the change in language and a shift towards the trustworthiness of the research minimise the reputational damage or would it still be thought of as the 'bad' researcher at play?

Normalising reporting

Towards the end of his talk, Daniel asked, *"Can we normalise the reporting of breaches of research integrity?"*.

Normalising the reporting of breaches could help establish a strong backbone of a healthy research culture. In fact, normalising reporting in our current system aside from the language should be encouraged.

There are psychological implications of either reporting a concern or being accused of research misconduct, no matter the outcome. Being transparent about the spectrum of breaches while not detracting from the seriousness of research misconduct could indicate areas to focus on for improvement and remove barriers to reporting. As an example, being accused of denying authorship is serious, but if this accusation was unfounded this could damage a reputation. However, calling this a breach of best practice in authorship changes the tone.

This could be helpful for organisations wanting to identify where to focus their training efforts and guidance if there is a trend, for example, around poor practice in publication ethics.

A key question to consider is whether this change in language would minimise repercussions and encourage reporting? In addition, would this change in language make the process less fraught if it were investigating concerns about the research rather than an allegation against an individual? The investigation can then determine where on the spectrum any breach sits, including the level of intention and recklessness. It can be extremely difficult and time-consuming for any investigation to prove that a researcher consciously intended to deceive. Whether there was deception or not, a key goal is to determine whether the research record is trustworthy.

Supporting change in the current system

As established in many UK research organisations, an approachable and knowledgeable local liaison who can facilitate an informal discussion around concerns in research practices is a useful option outside of formal reporting. In other words, possibilities to change the narrative of raising concerns at a local level can be implemented (see *UKRIO's Research Integrity Champions, Leads and Advisers*). Other examples to encourage positive, open discussions to support these changes have been described in the *Integrity in Practice Toolkit* (e.g., section 1, creating informal channels to openly discuss research integrity).

The downside of our current system appears to be variation in the definition of research misconduct. Some are very narrow, not giving enough weight to breaches that fall outside of the definition where these can be just as important for the trustworthiness of research.

- Should the definitions of research misconduct be unified throughout all the research organisations in the UK, e.g., the national definition in the *Concordat*?
- Could the term 'breaches in research integrity' allow for greater scope in acknowledging and reviewing questionable research practices?

Summary

We have a system that has incentives that can lead to 'bad' researcher behaviour, but does the RMIT's approach put more onus on the system rather than the individual researcher to produce trustworthy research? As described in the *Concordat*, the responsibility to produce trustworthy research does not lie with the individual researcher alone.

Using the language "investigating breaches" rather than "investigating misconduct" does seem advantageous in that it allows both the research organisation and researchers to reflect on and improve the trustworthiness of research rather than the trustworthiness of the researcher from the outset.

Acknowledgments

Author - concept, initial draft, editing, reviewing.

Dr Josephine Woodhams is a Senior Research Integrity Manager at UKRIO and has a PhD in Medicine (Clinical Studies). She previously worked as a Senior Research Associate in the field of photobiology and nanomedicine at University College London (UCL).

Contributors and Reviewers

Matt Hodgkinson – *reviewed and commented on draft*.

Dr Mohi Ahmed – *reviewed and commented on draft*.

Nicola Sainsbury – *reviewed and commented on draft*.

James Parry – *reviewed and commented on draft*.

Special thanks to:

Dr Daniel Barr – *(Principal Research Integrity Advisor at RMIT University, Melbourne, Australia) for presenting at UKRIO's Annual Conference 2023.*

Competing Interests

Dr Josephine Woodhams, Matt Hodgkinson, Dr Mohi Ahmed, Nicola Sainsbury, and James Parry are employees of UKRIO.

Further Reading

- Taylor P and Barr DP. (2016). We don't need a definition of research misconduct. *Research Ethics Monthly*. Retrieved from: https://ahrecs.com/research-integrity/dont-need-definition-research-misconduct.

DOI: https://doi.org/10.37672/UKRIO.2023.07.breachesinresearchintegrity