UKRN Position on Correcting the Research Record

The UK Reproducibility Network Steering Group
21st September 2021

UKRN is committed to identifying and helping to implement research practices that improve the robustness of the research process, and the quality of resulting research outputs. However, we recognise that this can only be achieved through the coordinated action of relevant stakeholders in the research ecosystem – researchers themselves, but also institutions, funders, and publishers.

We also recognise that every human endeavour is susceptible to honest error. This is different to deliberate malpractice, although this occurs, and also distinct from a lack of due care and attention – even careful researchers can make mistakes. Our research processes should therefore be designed to mitigate these inevitable human errors without being inappropriately punitive – to identify them when they occur, correct them once they have been identified, and ultimately learn from them. Self-correction will be encouraged by removing the stigma associated with error. We consider that research transparency makes an important contribution to this approach.

We also need to draw a distinction between research outputs that contain *errors* (i.e., methodological flaws, data transcription errors, etc.) and those where there may be different opinions about which methods and data are most suitable to address a particular research question, or disagreement in the interpretation of findings. The research record should be a record of what was done and how, not simply an archive of confirmed truths (not least because many “truths” are contested, and rightly so).

As a community we need to better recognise the inevitability of human error, and work to minimise its impact and mitigate its effects. A part of this is that we should treat the identification of error as healthy and valuable; it provides an opportunity for improvement. Indeed, there is evidence that recognising and correcting their own errors can enhance researchers’ reputations.

Given this, we are concerned that many research outputs that have been identified as containing errors often remain an unqualified part of the research record (in the form of the published Version of Record), despite those errors having been identified by the community. We need coordinated, collective action – by institutions, funders, editors, and publishers – to address this. We propose three changes:

1. Retraction is a blunt instrument that is often inadequate, for example if it does not clearly delineate the difference between authors who have themselves identified an honest error in their work and requested a retraction, and fraudulent misrepresentation of work only brought to light by a whistleblower. More complete permanent retraction notices will address this, describing *why* the retraction was issued.
2. We should seek to reduce the stigma associated with honest error, and encourage the submission of (self-) corrections, either as retractions if the work is rendered fundamentally unsound, or as amendments or notes to published articles in more minor cases. We should, as a community, applaud instances when this happens.

3. When authors are resistant to attempts to correct the research record, institutions, publishers and editors need to be more assertive. If there is clear evidence of error, publishers – as the custodians of the research record – should recognise their responsibility to highlight, and to correct or remove, erroneous information that is in the public domain. If only a correction is required, this may take the form of a note attached to the online Version of Record (and included in the downloadable PDF), perhaps supported by an email to table-of-contents subscribers. As a minimum, the existence of a correction should be visible when accessing the Version of Record. If the problems are such that the work is rendered fundamentally unsound, a retraction (with a complete retraction notice) is appropriate.

We appreciate that there may be legal and practical considerations in taking action to correct the research record, but ignoring error is not an option. Research findings communicated as the Version of Record in a peer-reviewed journal are widely interpreted as having passed quality control, and may be used for policy or clinical purposes, as well as for building future research programmes by other researchers. There is the potential for real damage to society if erroneous work is allowed to stand without comment or correction.

Finally, we once again emphasise the role of research transparency in this. The ability to scrutinise research processes provides both an internal and an external quality control process. Errors are more likely to be detected if research processes can be scrutinised and understood by the wider community, and the fact that they can be scrutinised provides an incentive to ensure these processes are robust. This will also make fraud – which is already rare – even less prevalent.

This work is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/).