

1 Introduction

- 1.1 An essential part of good practice in research is the honest, accurate and timely publication of its findings, commonly in academic journals. Since editors have a responsibility for ensuring the reliability of the material they publish, it may sometimes be necessary to retract a publication, for reasons including honest error and research misconduct.
- 1.2 The Committee on Publication Ethics (COPE) has issued guidance on retracting publications in academic journals. The guidance, *Retractions: Guidance from the Committee on Publication Ethics*, is available from COPE's website www.publicationethics.org and reflects best practice in this area.
- 1.3 Although the COPE guidance is aimed at editors and publishers of journals, it is important that all involved in research are aware of:
 - a) what circumstances might justify retracting a publication;
 - b) their professional responsibility to report such circumstances promptly to any journals that might be affected; and
 - c) the reliance of journal editors on research institutions and employers to investigate allegations of misconduct promptly and with due process.
- 1.4 This information note, produced jointly by COPE and the UK Research Integrity Office (UKRIO), is intended to raise awareness of the proper criteria for retractions and remind researchers that good practice in research includes reporting concerns about the conduct of research, including its publication and dissemination.
- 1.5 The guidance contained in this information note is not mandatory but reflects best practice in the conduct of research and addressing misconduct.

2 Suggested distribution

- 2.1 Researchers; research managers and administrators; research technicians and support staff; Heads/ Directors of Research; Chairs of Research Ethics Committees and Pro-Vice-Chancellors (Research). Directors of Human Resources may find this note of interest when addressing issues of research conduct relating to academic journals.
- 2.2 In addition to the above, this information note may be of particular interest to new researchers and student researchers.

3 Guidance

- 3.1 The guidance in this section reflects best practice in this area. The majority of the information and standards given are taken from *Retractions: Guidance from the Committee on Publication Ethics*, while some paragraphs draw upon UKRIO's *Code of Practice for Research*. Please note that this information note does not contain the full text of either document.
- a) For details of these publications, including links to online versions, see Section 5: Bibliography.
- 3.2 The particular responsibilities of researchers, organisations and authors in relation to retractions are given in paragraphs 3.13 – 3.16.
- 3.3 **Retraction** is a mechanism for correcting research literature and alerting readers to publications that contain such seriously flawed or erroneous data that their findings and conclusions cannot be relied upon. Such unreliable data may result from honest error or from research misconduct.
- a) Retractions are also used to alert readers to some forms of misconduct, such as redundant publication (publishing the same data or article in more than one journal without appropriate justification, permission or cross-referencing), plagiarism or failure to disclose conflicts of interest likely to influence interpretations or recommendations.
 - b) Retraction is usually reserved for publications that are so seriously flawed, for whatever reason, that their findings or conclusions should not be relied upon.
 - c) Journals generally rely on research institutions to investigate allegations of serious research misconduct (such as data fabrication) since, in most cases, editors do not have access to all the evidence and journals are not resourced or constituted to conduct investigations. Editors therefore rely on institutions to inform them of the outcome of such investigations and will usually wait for investigations to be concluded before issuing a retraction; however, if editors obtain clear evidence of misconduct such as plagiarism or redundant publication, they may retract publications independently of any institutional enquiry.
- 3.4 The main purpose of retractions is to correct the literature and ensure its integrity rather than to punish authors who misbehave. A retraction can help reduce the number of researchers who cite an erroneous article, act on its findings or draw incorrect conclusions, such as from 'double counting' redundant publications in meta-analyses.
- a) If retraction is due to the actions of some, but not all, authors of a publication, the notice of retraction should mention this; however, most editors consider that authorship entails some degree of joint responsibility for the integrity of the reported research so it is not appropriate for authors to dissociate themselves from a retracted publication even if they were not directly culpable of any misconduct.
- 3.5 **Disputes over authorship:** retractions are usually **not** appropriate when a change of authorship is required but there is no reason to doubt the validity of the findings.

- a) Authors may request an editor to retract an article when a dispute over authorship arises after publication; however, if there is no reason to doubt the validity of the findings or the reliability of the data, it is not appropriate to retract a publication solely on the grounds of an authorship dispute.
- b) In such cases, the editor will normally inform those involved in the dispute that he or she cannot adjudicate the matter but will be willing to publish a correction to the author or contributor lists if appropriate proof that such a change is justified can be provided by the authors or their institutions.

3.6 Partial retractions are not helpful because they make it difficult for readers to determine the status of the article and which parts may be relied upon.

3.7 Corrections: if only a small part of an article reports flawed data, especially if this is the result of genuine error, then the problem is best rectified by a correction or erratum. The term 'erratum' usually refers to a production error, caused by the journal, while a 'correction' usually refers to an author error.

- a) In the same way, if only a small section of an article, for example a few sentences in the discussion, is affected by research misconduct such as plagiarism, the appropriate action may be to issue a correction rather than retracting the entire article which may contain sound, original data in other parts. In this case, the correction would note the fact that text was used without appropriate acknowledgement.

3.8 Expressions of concern: if conclusive evidence about the reliability of a publication cannot be obtained, an expression of concern will normally be issued, rather than retracting the publication immediately.

- a) If more conclusive evidence about the publication's reliability becomes available later, the expression of concern will be replaced by: a notice of retraction if the article is shown to be unreliable; or by an exonerating statement linked to the expression of concern if the article is shown to be reliable and the author has been exonerated.

3.9 Circumstances where the retraction of a publication may be necessary include, but are not limited to:

- a) when there is clear evidence that the reported findings are unreliable, either as a result of misconduct, such as fabrication of data, or honest error, for example. miscalculation or experimental error;
- b) if the findings have previously been published elsewhere without proper cross-referencing, permission or justification, so the work constitutes redundant publication;
- c) cases of plagiarism; or
- d) reports of unethical research.

3.10 Circumstances where issuing an expression of concern may be necessary include, but are not limited to:

- a) conflicting or inconclusive evidence of research misconduct;
- b) suspicion that the findings are unreliable but the authors' institution is unwilling or unable to investigate the case;

- c) an investigation into alleged misconduct related to the publication either has not been, or would not be, fair and impartial or conclusive; or
- d) an investigation is underway but a judgement will not be available for a considerable time.

3.11 Circumstances where issuing a correction may be necessary include, but are not limited to:

- a) a small portion of an otherwise reliable publication proves to be misleading, especially because of honest error; or
- b) the author / contributor list is incorrect, such as when a deserving author has been omitted or somebody who does not meet the criteria for authorship has been included.

3.12 Retractions and expressions of concern should:

- a) be linked to the retracted article wherever possible, such as in all electronic versions;
- b) clearly identify the retracted article, for example by including the title and authors in the retraction heading;
- c) be clearly identified as a retraction, distinct from other types of correction or comment;
- d) be published promptly to minimise harmful effects from misleading publications, such as minimising the number of researchers who cite the erroneous work, act on its findings or draw incorrect conclusions;
- e) be freely available to all readers and not behind access barriers or available only to subscribers;
- f) state who is retracting the article; and
- g) state the reason(s) for retraction, in order to distinguish misconduct from honest error.

3.13 Organisations and researchers should recognise that as part of their duty to conduct, produce and disseminate work of the highest quality and conduct research of high ethical standards, they should report any concerns about publications to the journal editor as soon as they become aware of them.

3.14 Researchers who have concerns about a particular publication should raise those concerns with their line manager, or other appropriate person at their organisation, and with the editor of the journal in question. If the editor does not respond, researchers should raise their concerns with the journal's publisher or owner (such as an academic society).

3.15 Authors have a responsibility to notify editors of any problems with their published research as soon as possible.

3.16 Authors and editors should recognise that an admission of honest errors in research should in no way be construed as misconduct; on the contrary, the reporting of genuine mistakes is in accordance with good practice in research and part of the duty of authors to take public responsibility for their work. It is therefore important for retraction notices to state the reason for retraction to distinguish cases of honest error from those of misconduct.

4 Further information

- 4.1 Organisational policies on research practice normally contain information on the reporting of concerns about the conduct of research, including its publication and dissemination. Such policies usually draw attention to the requirements of regulatory, funding and other relevant bodies in this area but referring to the full text of the appropriate guidance documents may also be helpful.
- 4.2 Further guidance on this subject, regarding both general issues and individual cases, can be obtained from UKRIO. The COPE website also contains resources on publication ethics. Section 5 provides links to the published guidance on which this information note was based.
- 4.3 **The Committee on Publication Ethics (COPE)** provides advice to editors of peer-reviewed journals about all aspects of publication ethics. Much of its guidance (such as the full retraction guidelines and a series of flowcharts about how to handle ethical issues) is freely available on its website. In addition, COPE also provides a forum for its members to discuss and receive advice on specific cases. It publishes a Code of Conduct for editors and expects its members to follow this. It cannot provide advice to researchers about individual cases but it does consider complaints against its members if there is evidence that they have not followed the Code of Conduct. Failure to retract a publication after receiving clear evidence of serious research misconduct from a properly constituted investigation would normally be considered a breach of the Code.
- a) Further information about COPE can be found at www.publicationethics.org.
- 4.4 **The UK Research Integrity Office (UKRIO)**, established in 2006, is an independent body which offers confidential and expert advice and guidance to research organisations, individual researchers and members of the public about the conduct of research. UKRIO also publishes guidance on good research practice and investigating alleged misconduct and operates a help-line service where concerns can be reported in complete confidence. Set up in the first instance to provide support to the health and biomedical science research community, UKRIO now offers guidance applicable to all fields of research carried out in universities, NHS Trusts and other research organisations. UKRIO is not a regulatory body and has no formal legal powers. The advice and guidance it offers is not mandatory but reflects best practice in the conduct of research and addressing misconduct.
- a) Further information about UKRIO can be found at www.ukrio.org.

5 Bibliography

- 5.1 Wager, E., Barbour, V., Yentis, S. and Kleinert, S., 2009. *Retractions: Guidance from the Committee on Publication Ethics* [online]. Available from: <http://publicationethics.org/guidelines> [Accessed 29th July 2010]
- 5.2 UK Research Integrity Office, 2009. *Code of Practice for Research: promoting good practice and preventing misconduct* [online]. Available from: <http://www.ukrio.org/resources/UKRIO%20Code%20of%20Practice%20for%20Research.pdf> [Accessed 29th July 2010]

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- 6.2 This publication can be downloaded in pdf format from the website of the UK Research Integrity Office www.ukrio.org.