



# JUTLP

Journal of University Teaching & Learning Practice

## Ethical Standards in Social Science Publications

Dr Alison J. Purvis<sup>a</sup> and Dr Joseph Crawford<sup>b</sup>

<sup>a</sup>Sheffield Hallam University, United Kingdom; <sup>b</sup>University of Tasmania, Australia.

### Abstract

With a rise in unethical conduct in research across social science disciplines, there is clearly an issue with the approaches and understanding of requirements to meet ethical standards of research. Peer-reviewed journals rely on establishing and developing quality literature that scholars, practitioners, and policy makers can use for the benefit of humanity. Journals in higher education practice and policy aim to provide a forum for educational practitioners in a wide range of disciplines to communicate their teaching and learning innovations and outcomes in a scholarly way. For publication of research, particularly that which involves human participants, journal editors must set clear expectations and guidance for authors to adhere to recognised ethical standards, practices, and laws. Authors must declare that they have met the required standards, ensuring that independent ethical scrutiny for their study has been carried out before embarking on data collection, that the study was conducted with prior scrutiny to the methods and potential risk to participants, and that all participants were fully informed before giving their voluntary consent to the appropriate use of their data. Submitted manuscripts that do not meet these standards and expectations must therefore be rejected. This Commentary offers guidance for social sciences authors, reviewers, and editors to follow, and outlines practices that should be adopted to ensure published articles meet ethical standards.

### Editors

Section: Developing Teaching Practice  
Senior Editor: A/Prof Rebekkah Middleton  
Associate Editor: Dr Averil Grieve

### Publication

Received: 23 July 2024  
Accepted: 15 August 2024  
Published: 19 August 2024

### Copyright

© by the authors, in its year of first publication. This publication is an open access publication under the Creative Commons Attribution [CC BY-ND 4.0](https://creativecommons.org/licenses/by-nd/4.0/) license.

### Citation

Purvis, A. & Crawford, J. (2024). Ethical Standards in Educational Research and Publication. *Journal of University Teaching and Learning Practice*, 21(9). <https://doi.org/10.53761/hqnqr710>

## Introduction

In 2023, more than 10,000 scientific manuscripts were retracted, and retractions are rising at a rate higher than the growth of papers. The majority of these relate to misconduct (van Noorden, 2023) and others, on grounds of paper mill production (Else, 2022). More than a decade ago, Fanelli (2013) proposed that an increase in retractions was a positive sign of increasing standards and more recently Oransky (2022) added that the increase is too low. In the era of artificial intelligence (AI) a further layer of challenge is the responsibility of editors (e.g., Perkins et al., 2022) in how the role of AI is considered in the ethical standards of submitted and published manuscripts.

In a knowledge production system, there is an expectation of a certain level of productivity among researchers – the proverbial *publish or perish* – and the growth in unethical research conduct and research integrity is perhaps linked with that pressure (Madikizela-Madiya, 2023). Similar to heightened failings of ethical behaviour in leaders in high stake environments like national sports (Crawford et al., 2017) and ethical blind spots in aircraft manufacture (Englehardt et al., 2021). In these examples, moral judgements and consequential behaviours are influenced by the organisational ethical culture.

Human research in social sciences is typically a low-risk activity that should not present significant likelihood of harm to participants. However, low risk is not no risk, and therefore high standards of ethical consideration and scrutiny are still to be expected from researchers. The scholarship of teaching and learning (SoTL) is often a journey for practitioners. They may begin by reflecting on their practice, move to evaluation, and then embark on more formal research and analysis. The move from evaluation and reflection of one's own practice, to the process and procedures of research is not binary and there is often a grey area where evaluation as research is being conducted without ethical approval. It may not occur to practitioners that they have crossed a boundary and moved into practice where their work now needs further consideration supported by independent scrutiny.

Editors have a critical role in maximising the likelihood that research is conducted ethically, and authors have a responsibility to be effective in communicating the ethical processes and scrutiny that their work has undergone. To ensure that ethical standards are core to articles published, standards of publication must therefore be clearly defined. In this Commentary, we propose a series of ethical standards that we argue should be adopted in all social science research and share our expectations of best practice for all social science researchers regardless of where they publish their work. We take the perspective of supporting both editors seeking to assess manuscripts for quality and ethical research, and authors in how they communicate their approach to meeting expectations of ethical standards. In this work, there is recognition that there are processes of ethics (e.g., institutional review boards) that may have occurred prior to submission, and that editors consider ethics of research beyond a statement declaring that ethics was approved and a citation to a relevant IRB number. Likewise, authors must actively communicate how they have met ethical standards beyond any short statement of institutional ethical approval.

The importance of this Commentary is situated in the growing need for the peer review process to be more diligent in the detection of unethical, false, or misleading research as the corpus of

published and retracted research grows. While some scholars articulate that retractions increasing are a good thing, retractions may also evidence a broken knowledge ecosystem that prioritises feedback of poor papers post-production rather than greater rigour in the feedforward controls editors have the discretionary power to influence. We provide a call to action for all social science editors and reviewers to seek greater clarity on ambiguous methods and research ethics ahead of registering acceptance, and for authors to communicate their approach to upholding ethical standards clearly and transparently.

## Background

### Historical Context

In medical research, the *Declaration of Helsinki* was developed following grossly unethical medical practices that took place during World War II and which became apparent in the years after the end of the war. The declaration was originally developed in 1964 by the World Medical Association (WMA) and has been updated several times since then. The current version of the declaration was published in 2013 (WMA, 2013) and a public consultation is taking place in 2024 for new updates. While the declaration is primarily focused on medical research, the core principles and expectations can largely be applied to any human participatory research.

Institutional Review Boards (IRBs) are a relatively new concept in higher education, with the approval of the National Research Act (1974) in the United States in response to concerns of malpractice in research on humans. These were primarily derived in response to unethical medical studies such as the Willowbrook hepatitis experiments and Tuskegee Syphilis Study (Moon, 2009). The 'Willowbrook Letters' (Goldby et al., 1971) describe the Willowbrook Experiments where children were intentionally infected with hepatitis with the justification that consent was gained from parents, that influential medical boards had approved the studies, and that the research conformed with the then *Medical Association Draft Code of Ethics on Human Experimentation* (World Medical Association, 1964). However, the study was far from being ethical or justifiable (Goldby et al., 1971) because there was no resulting benefit for the infected children and there was clear evidence of dishonest coercion of the parents to obtain their consent. Despite the high-profile *Declaration of Helsinki* only 10 years earlier and studies being approved by review groups ostensibly adhering to a code of ethics, the studies were not transparent or open about their consideration of ethical standards and protection of the dignity and wellbeing of participants.

A fictitious test submission by the US Government Accountability Office (2009) highlighted standing concerns with the capacity of review groups to adequately detect all issues with one IRB approving the application and failing to verify credentials and claims of official clearance with the federal agency for Food and Drug Administration (FDA). More reassuringly, two other IRBs rejected the proposals saying they were "junk", "awful", and "the riskiest thing I've ever seen on this board" (Kutz, 2009, p. 5). While this is a demonstration of how malicious intent to deceive can result in approval to continue, it also highlights that sloppy research planning which does not have full consideration of ethical standards and prioritisation of participant wellbeing, may also be given the formal stamp of IRB approval. Therefore, the confirmation of IRB approval alone cannot provide sufficient transparency of how ethical standards have been met.

The role of an ethics review process is to ensure independent feedforward scrutiny is given, and improvements made before research and engagement with participants can safely begin. Without this independent perspective from outside of the research team, these issues would not be identified and the risk of harm to participants would be greater. An analysis by Regan et al., (2012) demonstrated the critical role of ethical review in educational research. The most common issues with ethical standards that were identified through the review process were:

1. Insufficient or inaccurate information for participants to be able to make an informed decision about their participation.
2. Potential for bias, including invalid data to be collected, and/or inappropriate analysis to be carried out.
3. Misunderstandings about the risks and benefits by the researcher.
4. Recruitment techniques that were not appropriate for the research or not thought through thoroughly.
5. Insufficient or inappropriate provision for vulnerable groups to participate in the research.
6. Insufficient or inappropriate consideration of data management.
7. Poor management or unrealistic management of anonymity and confidentiality.
8. Potential for undue influence of participants to take part in the research.

Globally, however, IRBs are not consistently deployed across countries and each jurisdiction can have different variations on the standards they accept for 'ethical research'. In the UK, these are typically considered by Research Ethics Committees (RECs), and in Australia, Human Research Ethics Committees (HREC). In social science publications, there are mixed views as to the relevance of IRBs to low-risk human research, and the mission creep of such committees within a context of already strong ethical expectations underwritten by the National Statement on Ethical Conduct in Human Research (2023). The balance between overbearing bureaucracy and appropriate ethical scrutiny can be challenging to achieve (Martyn, 2003).

### **Global Standards**

There are many approaches to ethical standards across the globe. High quality journals seek to address an international audience and therefore need to ensure an internationally appropriate approach to transparency of ethics within their published articles. Many countries have long established and mandated standards while others have much more limited infrastructures to be able to support a national consistency of approach. It is common for disciplines and professional areas to have their own ethical standards and codes of practice. and there are many national examples focused on medical research. In Table 1 we provide key English language examples of national and international guidelines, standards, and codes of practice that focus on educational research, are discipline agnostic, or cover a broad discipline in such a way as to be useful to inform educational research practices. The table is not exhaustive and provides examples only.

**Table 1***Examples of national and international ethical standards, codes, and guidelines*

<b>Organisation</b>	<b>Country</b>	<b>Summary</b>
American Educational Research Association (AERA)	United States of America (USA)	<b>Standards for Research Conduct</b> split into standards for empirical social science research and standards for humanities-oriented research (AERA, 2024).
Australian Association for Research in Education (AARE)	Australia	A <b>Code of Ethics</b> which “is intended to guide the behaviour of members, and to protect them against unacceptable demands and pressures from superordinates and sponsoring institutions” (AARE, 1993).
British Educational Research Association (BERA)	United Kingdom (UK)	<b>Ethical Guidelines for Educational Research</b> which take the format of underpinning principles and responsibilities: Responsibilities to: participants; sponsors, clients and stakeholders in research; the community of educational researchers. Responsibilities for: publication and dissemination; researchers’ wellbeing and development (BERA, 2018).
Committee on Publication Ethics (COPE)	Global, registered in the UK.	A set of resources for <b>Ethical Oversight</b> guidance documents cover areas of practice including “policies on consent to publication, publication on vulnerable populations, ethical conduct of research using animals, ethical conduct of research using human subjects, handling confidential data and ethical business/marketing practices” (COPE, 2024).
European Educational Research Association (EERA)	Europe, registered in Germany	<b>Ethical Guidelines</b> which include an overarching statement, a constitution, and links to other national, regional and international standards (EERA, n.d.).
Centre For Media Studies (CMS)	India	<b>Guidance</b> for ethical considerations for social research and evaluation (Srivastava, 2020)
Korean Council of Science Editors (KCSE)	South Korea	A <b>manual</b> which covers a wide range of issues regarding research and publication ethics and was written to raise standards in research and publication ethics (Hwang et al., 2016).
Science Council of Japan (SCJ)	Japan	A <b>code of conduct</b> developed due to concerns about misconduct by scientists to prevent the recurrence of unfair practices. The code includes expected responsibilities, research integrity, connection with society, and legal compliance (SCJ, 2013).
UK Evaluation Society	UK	<b>Guidelines for good practice in evaluation</b> which are structured into four parts with guidance for evaluators, evaluation commissioners, self-evaluation, and evaluation participants. A set of principles underpin the guidelines (UK Evaluation Society, 2019).

In publishing, the international organisation COPE (Committee on Publication Ethics) aims to educate and support editors, publishers, institutions to place ethical standards as an embedded part of research culture. The work of COPE goes some way to address the role of editors, authors, and reviewers in ethical practices, but with a gap in how each protagonist in the

publication process can support ensuring ethical practices were carried out during the research and communicated in a way that is transparent and clear. It is this gap which this Commentary seeks to address.

We can take learning from other disciplines where more invasive techniques with human participants have demanded ethical consideration and transparent statements of ethical standards for many years (Harriss et al., 2019). In these examples the needs and dignity of the human are clearly placed as the primary concern for the research practices and outcomes. In the example of Harriss et al. (2019), authors submitting to that journal are expected to read, engage with the standards, and then cite the article as evidence of how their submission adheres to ethical standards. This approach ensures authors are clear about their responsibilities and publishers have thought carefully about how to support their authors to undertake those responsibilities. Transparency of expectation also gives confidence to readers that the editorial process has upheld standards of human dignity and safety.

### **The Mismatch Between Expectations of Approval and *Actual* Ethical Research**

Typical of papers submitted to journals is a statement such as “this research was approved by University of X’s institutional review board, approval number 123”, with the assumption that internal institutional control means the research was subsequently conducted ethically.

As part of a suite of retractions Walumbwa and colleagues received, the errors that resulted in retraction were in the analysis of data. In the statement by editor in chief, Neal M. Ashkanasy (see Walumba et al., 2014), on a paper that did not list ethical approval:

The retraction is on the grounds of the authors’ advice that they made an error in relation to the level of analysis used. As a result of this error, the authors incorrectly calculated key fit statistics. When correctly estimated, the fit statistics do not provide an acceptable level of support for the hypothesized model, rendering the authors’ conclusions, as stated in the article, unsustainable.

There are also many studies that have been retracted that had IRB approval clearly stated. For example, Jiang et al. (2023, p. e330) write that their research “was undertaken with ethical approval from the UK North West Multi-Centre Research Ethics Committee (11/NW/0382)”. Despite this approval, third party authors identified issues with replication of the data, and a later admission by the authors that the output format of coding led to their findings being false and misleading.

The Illinois White Paper (Gunsalus et al., 2007) highlights some challenges with the application of IRBs to the social science setting with questions like:

Why can a journalist working for a newspaper interview and publish articles and books about sensitive issues, subject only to professional ethical guidance and legal consequences, while a journalism professor must additionally seek prior approval from those outside journalism (i.e., an IRB) for the same activities? (p. 621).

The outcomes of much social science research are published without assurance of ethical approval through a formal body. All codes of ethical standards do agree that where humans are participating in primary research and where research affects individuals, ethical scrutiny must be

evidenced. Indeed, journalists may not be required to obtain ethical approval for their work, but they do have codes of ethics, conduct and/or practice that they must adhere to (e.g. the National Union of Journalists (2024) Code of Conduct), which is reinforced by an editorial process that should uphold ethical standards and challenge poor practices. Transparency in journalistic practices is a core value shared with academic publishing, and is critical for increasing credibility, accountability, and trustworthiness of the published materials (Koliska, 2022).

## **Editorial Principles for Evaluating Ethical Research**

So far, we have acknowledged jurisdictional, disciplinary, and global attempts to assure ethical research across diverse contexts. While these attempts have likely led to growth in the ethical standards in research practices, there remains an apparent acceleration of unethical practices in research. In this following section, we propose core principles of ethical research that extend on and complement IRB approval processes. These are provided pragmatically from the perspective of supporting authors in thinking about their research design and then preparing a manuscript for submission, but we also include advice that editors can apply to the evaluation of articles ahead of publication. The underpinning value that the rights, dignity, and safety of all involved in research is always the primary concern (Harriss et al., 2019) is threaded through all these principles.

### **Principle 1. *Disclose the Approach to Scrutiny of Ethical Research Practice***

Research protocols must be submitted for consideration by a research ethics committee, ethics review group, or other appropriate independent ethical scrutiny which includes individuals who cannot be unduly influenced and who are appropriately trained. Scrutiny must take place before the research begins. In jurisdictions where ethics committees are established, formal approval must be obtained. Where formal approval is not available, evidence of ethical scrutiny and rigorous review should be provided by explaining the approach taken. An example is a review of the planned research by two independent researchers using an agreed set of guidelines, standards, or a code of practice (such as those in Table 1) to guide their scrutiny. Independent reviewers are not close to the research but are able to understand the context and discipline, have insight to make an appropriate analysis of risk, and to have sufficient experience to be able to critique the aspects covered in the principles below.

Where secondary data is being analysed (e.g. systematic and scoping reviews, meta-analyses) authors do not require formal ethical approval. However, the ethical status of the published research and data being used and analysed should be a consideration. The absence of a statement about ethical approval where human participants are involved in primary research is usually considered as a significant limitation and a marker of low-quality in assessment tools, for example the Mixed Methods Assessment Tool (MMAT) by Hong et al. (2018). Suggested approaches for authors are to either provide a summary of the evidence of ethical standards within the included research, to score all papers without an ethics statement as low quality, or to exclude any article which does not have an ethics statement. The specific approach should be communicated clearly within the methods.

Research that does not involve human participants would also be exempt from formal ethical approval. Such research is unusual in educational and social sciences and even where this takes place, ethical considerations should still be given to how the outcomes or recommendations resulting from research could or would be intended to impact on people. The act of undertaking research may also pose physical and/or psychological risks to the researchers. Applying and communicating ethical standards about research practices ensures scrutiny and thoughtfulness that will benefit the researchers, readers, and any intended beneficiaries.

**Principle 3:** *Summarise the Risks, Burdens, and Benefits*

Involvement in research may involve risks and burdens and must only be conducted if the intended benefit outweighs those potential risks and burdens. An assessment of risk to participants must be carried out before the research begins and should only commence if risks can be appropriately managed to avoid harm. Harm in educational research is less likely to be physical and more typically will relate to issues such as psychological harm, reduced well-being, reputational damage, financial cost, misuse of participants' time, inconvenience, misrepresentation, or being publicly wronged. A manuscript should therefore summarise the risks, burdens, and benefits in such a way that the balance of these factors is clearly in favour of benefit.

**Principle 4:** *Where Vulnerable People Are Targeted, Clarify How Their Specific Needs Have Been Met*

Vulnerable groups and individuals must have specific consideration of how research could create additional harm. Vulnerable people should only be targeted if the research benefits them specifically and if the specific research can only be carried out in that group. An inclusive approach to research where a representative sample of participants is sought, would likely include individuals considered to be vulnerable or have characteristics that are protected under law, e.g. the UK Equality Act 2010 (HM Government, 2013). In these circumstances the equitable needs of all participants should be considered and that the appropriate safeguarding of individuals is in place.

**Principle 5:** *Ensure the Research Protocol is Clear and Could be Replicated by Other Researchers*

Research should be based on generally accepted and established principles and robust evidence that the methods are appropriate and safe should be included. Where new methods are used, their theoretical basis should be clearly explained. Studies should be described using a research protocol which indicates how ethical considerations have been addressed and in such a way so other researchers would be able to both interrogate the approach and replicate it. Some of the retraction examples given above highlight how the use of inappropriate methods and analysis can be cause for retraction. Therefore, stating the methods clearly will avoid misunderstandings and allow for the review and editorial process to pick up issues to prevent future retractions.



**Principle 6:** *Summarise how Privacy and Confidentiality has Been Assured and Maintained*

The privacy of participants and the confidentiality of their personal data must always be protected. Participants must be informed about how their data is being used and stored, including the measures taken to ensure security of that data, who will have access, and how long the data will be kept for. Where identifiable information is used (i.e. job titles, gender, age, location, employer etc.) it should not be collated in a way that would allow a person's identity to be deducted. Where names are used, they should be pseudonyms, and clearly noted as being pseudonyms to assure readers that anonymity has been protected. If anonymity is deliberately not maintained, it should be very clear that full permissions have been granted and the reasons for the disclosure clearly articulated. In publications, it is possible to meet one ethical end to the limitation of another. For example, while anonymisation is common, it may be unclear that the individuals who have shared their views have not explicitly been asked for their consent to be quoted in publications. When researchers conduct studies, they make decisions about the inclusion and design of the quotes and may not include particularly contentious views.

**Principle 7:** *Summarise the Process of Obtaining Informed Consent*

Consent for data to be collected, analysed, and outcomes disseminated is clearly an important aspect of ethical practice. However, providing information about the way in which the data is collected and how it will be used in advance of any data collection is a core ethical practice. If an individual was engaged in a private conversation only to discover it was recorded and their statements were then shared widely, they would be rightly upset because the collection and use of their personal data was not agreed, and their informed consent has not been obtained. The individual would likely have phrased their contributions more formally or been more thoughtful about any eventual audience had they been informed about the purpose of the conversation, how it was being captured, and how the information would be used before they shared their thoughts.

Participation must be voluntary and by individuals who are able to give their informed consent. Participants must be informed about:

- Aims and purpose of the research.
- Methods to be carried out and expectations of the participant.
- Sources of funding and possible conflicts of interest.
- Affiliations of the researcher(s).
- Risks and benefits, including potential discomfort for the individual.
- Any post-research provision or requirements.
- How data and information will be used and how it will be stored.

Clearly obtaining informed consent from participants, and being transparent about how data will be used, is a moral obligation of researchers and all those involved in publishing that research. In the next section we outline the obligations in publication and the role that authors, reviewers and editors play in meeting their individual obligations.

## **Obligations in Publication**

All persons involved in the publication of research have obligations to uphold ethical standards. We outline the obligations of each protagonist:

## **Author Obligations**

Authors submitting primary research papers to a journal should include a statement about the nature of the ethical scrutiny that the research plans were subjected to. The statement would typically appear near the beginning of the method section to clearly articulate the ethical stance of the study and how standards were upheld. The statement would normally include information about the approval granted by an ethics committee or review group. For authors in countries or organisations where this formality is not established or available, a short commentary on the implementation of the principles presented in this paper would be a suitable alternative. Where ethical approval is formally provided, authors should be able to provide full evidence of this if challenged to do so. Such an expectation is rare, but such evidence would be called for if the veracity and authenticity of a paper is questioned.

At the end of a paper a statement or statements should be included which cover the nature of authorship of the paper, disclosure of interests, conflicts of interests, and a description of the use of artificial intelligence (Crawford et al., 2023). The CRediT, Contributor Roles Taxonomy, approach is one of the most commonly used and clear ways of defining author contributions (CRediT, 2024). Journals have different policies and guidelines which will need to be followed in relation to some or all of these considerations. Where a journal does not specify how or where these statements should be presented, authors should still include them as a matter of good practice, and only remove a statement if instructed to do so by an editor.

## **Reviewer Obligations**

The reviewer is a critical role in maintaining standards and challenging where expected standards of research are not evidenced (Gonzalez et al., 2022). The reviewer should read and engage with this paper before reviewing papers for an educational journal. During the review process, a reviewer should look for how authors have applied ethical standards and in review feedback, highlight any omissions or opaque statements. The review report should provide constructive feedback which supports authors in how they communicate their approach to ethical standards and practice and clarify the ethical standards of the paper to support editors in their decision making.

## **Editor Obligations**

Editors have the responsibility of ensuring that appropriate statements of ethical approval and adherence to expected standards are included in papers that present primary research involving human participants. Where secondary research has been undertaken, the editor should check that the analysis has considered the ethical standards of the included data.

Editorial boards should review their ethical standards in line with any significant changes to the publishing landscape or updates to key ethical guidelines. The recent developments in artificial intelligence (AI) and the impact of AI on integrity in publishing is a pertinent example of where unanticipated changes can make significant and unexpected impacts on ethical standards in publishing (Crawford et al., 2023). Editorial boards should establish guidelines, templates, and resources (or links to already published resources) which support authors, reviewers and their editorial teams, to meet their obligations in the most straightforward and clear way.

## Confirmation of Ethical Standards

In applying the principles of this paper, authors submitting to journals can thereby confirm the following standards have been met:

1. The principles of ethical standards outlined in this article have been considered, actioned, and addressed fully.
2. Institutional ethical review and approval, where available, has been granted for primary research which involves human participants. Where institutional approval is not available, a rigorous alternative has been sought and independent scrutiny can be evidenced.
3. Consent and agreement to participate in the research has been obtained in advance of collecting data. Participants have been provided with suitable information in advance, consent was obtained voluntarily, and individuals were competent to be able to provide that consent.
4. Where vulnerable individuals or groups are a targeted part of the research, the research was ethical, justified for carrying out with these individuals, and additional measures were in place to protect the needs and requirements of the vulnerable individuals.
5. Secondary research using existing data has explored the ethical standards applied to the collection of the original data.
6. Privacy, confidentiality, and anonymity of participants and their data has been rigorously upheld. Data will continue to be secure and protected for the duration of its existence and disposed of or deleted carefully.
7. Conflict of interests and impact on ethical standards has been considered and disclosed.

## Acknowledgements

The authors disclose that they have no actual or perceived conflicts of interest. The authors disclose that they have not received any funding for this manuscript beyond resourcing for academic time at their respective universities. The authors confirm that they adhere to the ethical standards described in this article and that they have not used artificial intelligence in the ideation, design, or write-up of this research as per Crawford et al. (2023). The authors list the following CRediT contributions: AP: Conceptualisation, Visualisation, Writing – original draft, Writing – review & editing. JC: Writing – original draft, Writing – review & editing.

## References

- American Educational Research Association [AERA] (2024). Standards for Research Conduct. <https://www.aera.net/Publications/Standards-for-Research-Conduct>
- Australian Association for Research in Education [AARE] (1993) AARE Code of Ethics. <https://www.aare.edu.au/research-and-advocacy/research-ethics/>
- British Educational Research Association [BERA] (2018) Ethical Guidelines for Educational Research, fourth edition, London. <https://www.bera.ac.uk/researchers-resources/publications/ethicalguidelines-for-educational-research-2018>

- Crawford, J., Cowling, M., Ashton-Hay, S., Kelder, J., Middleton, R., & Wilson, G. S. (2023). Artificial intelligence and authorship editor policy: ChatGPT, Bard Bing AI, and beyond. *Journal of University Teaching and Learning Practice*, 20(5). <https://doi.org/10.53761/1.20.5.01>
- Crawford, J., Dawkins, S., Martin, A., & Lewis, G. (2017). Understanding the organizational climate of unethical leadership in the Australian Football League. *Journal of Leadership Studies*, 11(2), 52-54. <https://doi.org/10.1002/jls.21525>
- Committee on Publication Ethics [COPE] (2024). Ethical oversight. <https://publicationethics.org/oversight>
- CRedit (2024). Contributor Roles Taxonomy. <https://credit.niso.org/>
- Else, H. (2022). Paper-mill detector tested in push to stamp out fake science. *Nature*, 612, 386-387. <https://doi.org/10.1038/d41586-022-04245-8>
- Englehardt, E., Werhane, P.H., & Newton, L.H. Leadership, engineering and ethical clashes at Boeing. *Science and Engineering Ethics*, 27, 12. <https://doi.org/10.1007/s11948-021-00285-x>
- European Educational Research Association [EERA] (n.d.) Ethical Guidelines. <https://eera-ecer.de/about-eera/ethical-guidelines>
- Fanelli, D. (2013). Why growing retractions are (mostly) a good sign. *PLoS medicine*, 10(12), e1001563. <https://doi.org/10.1371/journal.pmed.1001563>
- Goldby, S., Krugman, S., Pappworth, M., & Edsall, G. (1972). The Willowbrook Letters: Criticism and Defense. *The Lancet*, April 10, May 8, June 5, and July 10. This reference is drawn from a reprint in Munson, R. (1996). *Intervention and Reflection: Basic Issues in Medical Ethics* (5th edition, pp. 273-381). Wadsworth.
- Gonzalez, P., Wilson, G. S., & Purvis, A. J. (2022). Peer review in academic publishing: Challenges in achieving the gold standard. *Journal of University Teaching and Learning Practice*, 19(5). <https://ro.uow.edu.au/jutlp/vol19/iss5/01>
- Gunsalus, C. K., Bruner, E. M., Burbules, N. C., Dash, L., Finkin, M., Goldberg, J., Greenough, W. T., Miller, G. A., & Pratt, M. G., (2016). "The Illinois White Paper". *Qualitative Inquiry*, 13(5), 617–649. <https://doi.org/10.1177/1077800407300785>
- Harriss, D. J., MacSween, A., & Atkinson, G. (2019). Ethical standards in sport and exercise science research: 2020 update. *International Journal of Sports Medicine*, 40(13), 813–817. <https://doi.org/10.1055/a-1015-3123>
- HM Government. (2013). Equality Act 2010 - Guidance. HMSO. <https://www.gov.uk/guidance/equality-act-2010-guidance>

- Hong, Q. N., Fàbregues, S., Bartlett, G., Boardman, F. K., Cargo, M., Dagenais, P., Gagnon, M., Griffiths, F., Nicolau, B., O’Cathain, A., Rousseau, M., Vedel, I., & Pluye, P. (2018). The mixed methods appraisal tool (MMAT) version 2018 for information professionals and researchers. *Education for Information*, 34(4), 285-291. <https://doi.org/10.3233/EFI-180221>
- Hwang, E.S., Cho, E.H., Kim, Y.M., Park, K., Son, W.C., Yoon, T.W., and Lim, J.M. (2016). Manual for research and publication ethics in science and engineering. *Korean Council of Science Editors*.  
<https://www.kcse.org/books/files/1F77A55574A4E4D/Manual%20for%20Research%20and%20Publication%20Ethics%20in%20Science%20and%20Engineering.pdf>
- Jiang, F., Mishra, S. R., Shrestha, N., Ozaki, A., Virani, S. S., Bright, T., Kuper, H., Zhou, C. & Zhu, D. (2023). RETRACTED: Association between hearing aid use and all-cause and cause-specific dementia: an analysis of the UK Biobank cohort. *The Lancet Public Health*, 8(5), e329-e338. [https://www.thelancet.com/pdfs/journals/lanpub/PIIS2468-2667\(23\)00048-8.pdf](https://www.thelancet.com/pdfs/journals/lanpub/PIIS2468-2667(23)00048-8.pdf)
- Koliska, M. (2022). Trust and journalistic transparency online. *Journalism Studies*, 23(12), 1488–1509. <https://doi.org/10.1080/1461670X.2022.2102532>
- Kutz, G. (2009). Human subjects research: Undercover tests show the institutional review board system is vulnerable to unethical manipulation. *U.S. Government Accountability Office*, GAO-09-448T. <https://www.gao.gov/products/gao-09-448t>
- Madikizela-Madiya, N. (2023). Transforming higher education spaces through ethical research publication: a critique of the publish or perish aphorism. *Higher Education Research and Development*, 42(1), 186-199. <https://doi.org/10.1080/07294360.2022.2048634>
- Martyn, C., The ethical bureaucracy. *QJM: An International Journal of Medicine*, 96(5), 323–324. <https://doi.org/10.1093/qjmed/hcg060>
- Moon, M.R. (2009). The history and role of institutional review boards: A useful tension. *Virtual Mentor*, 11(4):311-316. <https://doi.org/10.1001/virtualmentor.2009.11.4.pfor1-0904>.
- National Research Act of 1974 (1974), Pub. L. no. 93-348 Stat 88.  
<http://history.nih.gov/research/downloads/PL93-348.pdf>
- NHMRC (2023). National Statement on Ethical Conduct in Human Research 2023.  
<https://www.nhmrc.gov.au/about-us/publications/national-statement-ethical-conduct-human-research-2023>
- National Union of Journalists (2024). Code of Conduct. <https://www.nuj.org.uk/about-us/rules-and-guidance/code-of-conduct.html>

- Oransky, I. (2022). Retractions are increasing, but not enough. *Nature*, 608(7921), 9. <https://doi.org/10.1038/d41586-022-02071-6>
- Perkins, M. (2023). Academic Integrity considerations of AI Large Language Models in the post-pandemic era: ChatGPT and beyond. *Journal of University Teaching and Learning Practice*, 20(2), 07. <https://doi.org/10.53761/1.20.02.07>
- Regan, J., Baldwin, M. A., & Peters, L. (2012). Ethical Issues in Pedagogic Research. *Journal of Pedagogic Development*, 2(3). <https://www.beds.ac.uk/jpd/journal-of-pedagogic-development-volume-2-issue-3/ethical-issues-in-pedagogical-research/>
- Science Council of Japan [SCJ] (2013). Code of conduct for scientists. [https://www.scj.go.jp/en/report/Code\\_of\\_Conduct\\_for\\_Scientists.pdf](https://www.scj.go.jp/en/report/Code_of_Conduct_for_Scientists.pdf)
- Srivastava, A. (2020). Guidelines for Ethical Considerations in Social Research and Evaluation in India. [https://cmsindia.org/sites/myfiles/Guidelines-for-Ethical-Considerations-in-Social-Research-Evaluation-In-India\\_2020.pdf](https://cmsindia.org/sites/myfiles/Guidelines-for-Ethical-Considerations-in-Social-Research-Evaluation-In-India_2020.pdf)
- Van Noorden, R. (2023). More than 10,000 research papers were retracted in 2023—a new record. *Nature*, 624(7992), 479-481. <https://doi.org/10.1038/d41586-023-03974-8>
- Walumba, F. O., Luthans, F., Avey, J. B., & Oke, A. (2014). Retraction statement: Authentically leading groups: The mediating role of collective psychological capital and trust. *Journal of Organizational Behavior*, 35(5), 746. <https://doi.org/10.1002/job.1936>
- World Medical Association [WMA] (1964). Human experimentation. Code of ethics of the World Medical Association. Declaration of Helsinki. *British Medical Journal*, 2(5402), 177. <https://doi.org/10.1136/bmj.2.5402.177>
- World Medical Association [WMA] (2013). Declaration of Helsinki ethical principles for medical research involving human subjects. *JAMA*, 310, 2191–2194. <https://doi.org/10.1001/jama.2013.281053>
- US Government Accountability Office. (2009). Undercover Test Shows the Institutional Review Board System is Vulnerable to Unethical Manipulation. United States of America Government. <https://www.gao.gov/assets/gao-09-448t.pdf>
- UK Evaluation Society (2019) Guidelines for Good Practice in Evaluation – New Edition. <https://www.evaluation.org.uk/2019/04/guidelines-new-edition/>