

RESEARCH ETHICS

Objectives in research ethics

1. The first and broadest objective is to protect human participants.

2. The second objective is to ensure that research is conducted in a way that serves interests of individuals, groups and/or society as a whole.

3. Finally, the third objective is to examine specific research activities and projects for their ethical soundness, looking at issues such as the management of risk, protection of confidentiality and the process of informed consent.

Introduction:

Research ethics involves the application of fundamental ethical principles to a variety of topics involving scientific research. The applications of fundamental ethical principles to topics like,

1. The design and implementation of research involving human experimentation, animal experimentation

2. Various aspects of academic scandal, including scientific misconducts (such as fraud, fabrication of data and plagiarism)

3. Whistle blowing (wrongdoing within an organization to the public or to those in positions of authority); regulation of research, etc. Research ethics is most developed as a concept in all the scientific research.

4. Research in the social sciences presents a different set of issues than those in medical research.

The following is a rough and general summary of some ethical principles that various codes address:

1. Honesty: Strive for honesty in all scientific communications. Honestly report data, results, methods and procedures, and publication status. Do not fabricate, falsify, or misrepresent data. Do not deceive colleagues, granting agencies, or the public.

2. Objectivity: Strive to avoid bias in experimental design, data analysis, data interpretation, peer review, personnel decisions, grant writing, expert testimony, and other aspects of

research where objectivity is expected or required. Avoid or minimize bias or self-deception. Disclose personal or financial interests that may affect research.

3. Integrity: Keep your promises and agreements; act with sincerity; strive for consistency of thought and action.

4. Carefulness: Avoid careless errors and negligence; carefully and critically examine your own work and the work of your peers. Keep good records of research activities, such as data collection, research design, and correspondence with agencies or journals.

5. Openness: Share data, results, ideas, tools, resources. Be open to criticism and new ideas.

6. Respect for Intellectual Property: Honour patents, copyrights, and other forms of intellectual property. Do not use unpublished data, methods, or results without permission. Give credit where credit is due. Give proper acknowledgement or credit for all contributions to research. Never plagiarize.

7. Confidentiality: Protect confidential communications, such as papers or grants submitted for publication, personnel records, trade or military secrets, and patient records.

8. Responsible Publication: Publish in order to advance research and scholarship, not to advance just your own career. Avoid wasteful and duplicative publication.

9. Responsible Mentoring: Help to educate, mentor, and advise students. Promote their welfare and allow them to make their own decisions.

10. Respect for colleagues: Respect your colleagues and treat them fairly.

11. Social Responsibility: Strive to promote social good and prevent or mitigate social harms through research, public education, and advocacy.

12. Non-Discrimination: Avoid discrimination against colleagues or students on the basis of sex, race, ethnicity, or other factors that are not related to their scientific competence and integrity.

13. Competence: Maintain and improve your own professional competence and expertise through lifelong education and learning; take steps to promote competence in science as a whole.

14. Legality: Know and obey relevant laws and institutional and governmental policies.

15. Animal Care: Show proper respect and care for animals when using them in research. Do not conduct unnecessary or poorly designed animal experiments.

16. Human Subjects Protection: When conducting research on human subjects minimize harms and risks and maximize benefits; respect human dignity, privacy, and autonomy; take special precautions with vulnerable populations; and strive to distribute the benefits and burdens of research fairly.

17. There are many other activities that do not define as "misconduct" but which are still regarded by most researchers as unethical.

These are called "other deviations" from acceptable research practices and include: Publishing the same paper in two different journals without telling the editors

- **4** Submitting the same paper to different journals without telling the editors
- Not informing a collaborator of your intent to file a patent in order to make sure that you are the sole inventor
- Including a colleague as an author on a paper in return for a favour even though the colleague did not make a serious contribution to the paper
- Discussing with your colleagues confidential data from a paper that you are reviewing for a journal
- Trimming outliers from a data set without discussing your reasons in paper
- Using an inappropriate statistical technique in order to enhance the significance of your research
- Bypassing the peer review process and announcing your results through a press conference without giving peers adequate information to review your work
- Conducting a review of the literature that fails to acknowledge the contributions of other people in the field or relevant prior work
- Stretching the truth on a grant application in order to convince reviewers that your project will make a significant contribution to the field
- **4** Stretching the truth on a job application or curriculum vita
- Giving the same research project to two graduate students in order to see who can do it the fastest
- Overworking, neglecting, or exploiting graduate or post-doctoral students• Failing to keep good research records
- 4 Failing to maintain research data for a reasonable period of time

- Making derogatory comments and personal attacks in your review of author's submission
- **4** Promising a student a better grade for sexual favours
- **Using a racist epithet in the laboratory**
- Making significant deviations from the research protocol approved by your institution's Animal Care and Use Committee or Institutional Review Board for Human Subjects Research without telling the committee or the board
- ↓ Not reporting an adverse event in a human research experiment
- **Wasting animals in research**
- Exposing students and staff to biological risks in violation of your institution's biosafety rules
- **W** Rejecting a manuscript for publication without even reading it
- Sabotaging someone's work
- Stealing supplies, books, or data
- **W** Rigging an experiment so you know how it will turn out
- **Waking unauthorized copies of data, papers, or computer programs**
- Deliberately overestimating the clinical significance of a new drug in order to obtain economic benefits.



For More information

UGC Guideline for Research Ethics

Sources: https://www.ugc.ac.in/ebook.aspx