



ETHICAL ISSUES AND CHALLENGES IN RESEARCH

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Abstract

Research can be defined as a collection of information and a systematic investigation in order to discover or interpret or revise some already existing facts or theories. Everyone, who is there in the legal field, be it be a Lawyer, Student or a Judge is involved in legal research every day. Research is the search for knowledge. According to Hudson “All progress is born of inquiry. Doubt is often better than over confidence, for it leads to inquiry, and inquiry leads invention.” The Advanced Learners Dictionary defines Research as a careful investigation or inquiry for finding new facts. According to Encyclopedia Britannica (1911) Research is “the act of searching into a matter closely and carefully, inquiry directed to the discovery of truth and in particular the trained scientific investigation of the principles and facts of any subject based on original and first-hand study of authorities or experiment.” The aim of every researcher is to find something new or to add something more to the existing knowledge which we can call it as knowledge and which to be shared to all.¹The main purpose of every research ultimately will be to find some relevant facts or to find solutions to a fundamental problem. The researcher would be examining the ethical issues and challenges in research and the various measures to Maintain Research Ethics and avoid research misconduct.

Keywords: *Research Misconduct, Research Ethics, Committee on publication Ethics*

Introduction

Better research will ultimately help the society to strive better. The research would be trying to prove or to disprove the hypothesis formulated. Law is a tool for social change and hence legal research should be done with due diligence. Law and ethics, both intends to guide the human conduct so as to ensure a civilized social existence on the basis of right and wrong. Research ethics is all about how the researcher does his or her research without causing any harm to others. What constitutes ethical practices and what doesn't is being defined by various institutes and agencies. Ethical issues relating to research and publication are to be addressed on a very serious note in today's world of research. Every researcher will be identifying a broad area and will come down to a specific area after doing a pilot study. Each

¹ Runkel, Philip J., and McGrath, Joseph E. *Research on Human Behaviour: A Systematic Guide to Method* (1972)

and every research ends up with Research Report, Research Paper or Book. But what matters is how the research and publication of the same is done. One has to follow certain basic ethics being a researcher. Research ethics is to be followed by the researcher at every stage of research. Research ethics lays down basic principles of just & fair research and which has to be followed by every researcher. By sticking on to research ethics a researcher would be clear about Do's & Don'ts while doing the research. Six key features of research ethics as per ESRC are that the research should ensure integrity and quality while designing and conducting the research, Confidentiality and anonymity of those involved in the research should be respected, Participation of members in the research should be without coercion and should be voluntary, Researcher should not be biased while doing the research and finally ensure that there is no harm to participants is being caused during the research.²

Ethical issues and challenges in Research

There are many numbers ethical issues that are involved in research & publication. But there is no proper set of principles or codes clearly down. To name few among such issues in the realm of research and publication are Fabrication, Falsification, Plagiarism, Duplication, 'Salami' Publication, Conflicts of Interest, Auto-Citation, and Duplicate Submission & Publications. One can find at any stage such variety of issues and that too all throughout the research and publication from time immemorial. The American Sociological Association's says about 5 important principles of research ethics which is required to be followed in socio-legal Research; which are Professional Competence, Integrity, Professional and Scientific Responsibility, Respect for people's right, dignity and diversity and social responsibility³The most important thing that a researcher should remember that the participants privacy should be respected. Privacy includes right not to participate in the research, right to remain anonymous etc. Highly sensitive information related to the participants should be kept confidential which they need not want to disclose. Researchers need to inform the participants about the research and should take their consent when they are being interview for data collection as well as being recorded when they open up on questions addressed to them. The above key points need to be taken care both in quantitative and qualitative method of research.

Scientific misconduct is can be defined very broadly. Scientific misconduct can be defined as fabrication falsification and plagiarism in short in layman's point of view and it is considered as the worst behaviour in the arena of scientific misconduct and is a clear cut deviation from a good research⁴. During the 1980's United State very seriously addressed the issues of scientific misconduct and based upon that various studies and researches on scientific misconduct and its content and contours happened throughout the country. The study proved that scientific misconduct is involved in all types of research and all steps of research conducted⁵ Scientific Misconduct is defined as "*fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results.*"⁶ Federal Policy on Research Misconduct, says "*Falsification is manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented in the research record.*" There are other research agencies or institutions which did not confine them to fabrication falsification and

² UK Economic and Social Research Council (ESRC) : *Research Ethics Framework*

³ American Sociological Association. Available at: <https://www.asanet.org/about/governance-and-leadership/ethics>

⁴ Nicholas Steneck, 2006

⁵ *Scientific Misconduct* by Charles Gross *Annual Review Vol 67:693-711 ; January 2016 ;* at least 10% of the scientists sampled reported having observed scientific misconduct.

⁶ *The U.S. Office of Research Integrity. Definition of Research Misconduct.* Available at: http://ori.hhs.gov/misconduct/definition_misconduct.shtml

plagiarism in the definition of scientific misconduct.⁷ According to them the list is not exhaustive it will include other behaviours as well. Scientific Misconduct is a threat against the integrity credibility and objectivity of any type of research.⁸

To find out whether there is a scientific misconduct or not a detailed and full guidance would be provided by bodies like Committee on publication Ethics namely COPE. Scientific misconduct is the violation of the standard codes of scholarly conduct and ethical behaviour in professional scientific research. One can say that Research Misconduct is an important problem emerging in the recent years as it causes wrong tendencies in the society and also violates the true intention of the scholar. Research misconduct can be divided mainly into three heads; Falsification, Fabrication & Plagiarism.

Falsification & Fabrication

Falsification means to make changes in the real purpose of the research. what actually happens is that a researcher is Misrepresenting the resources used for it. At the same time changing the original goal and contrary to what that scholar intended. According to previous record scientific misconduct is more occurs through falsification. Fabrication and falsification is a very serious issue that is faced by many authors. The authors of the manuscript should not fabricate or falsify any results or findings or study or reframe any images or any column. If any such falsification or fabrication is found out then one may have to incur sanctions for the same and if it is published then it may get retracted.

Fabrication is a kind of process in which someone else finds a different kind of result using the same resources and data. This is an abuse of intention of the real inventor. Further changes were made to the findings and making new results for the running experiments. Fabrication is one of the important problems under the scientific misconduct and also there is an increase in the rate of fabrication in the modern world. Fabrication is the battle between fabricated facts and real facts. This takes us to a conclusion that while writing the report one should not fabricate the data received and one should represent the data completely and should be ready to take up the responsibility of errors if any during the verification of data and finally due acknowledgment should be given to those contributed for the research.⁹

Plagiarism

The development of Science and Technology provides many changes in the society and also witnessed the development in the amount of plagiarism. It's a very common concept under the scientific misconduct. Plagiarism means to use or represent other work as own. The researcher should not use any sentences words phrases figures table's columns or thoughts and ideas of any other person without due reference or attribution. Whatever they use should be given due attributes and referencing at the same place or sentence and on the same paragraph to which it is being used. If the author is going to use quoted text then in such cases they should use those sentences or words should be quoted in as well as should be in Italics and should be indented differently than the body text of the rest of the document.

⁷ Kristel Toom, Pamela F. Miller, *Research Management* 2018

⁸ Fanelli, Daniele. 2009. How many scientists fabricate and falsify research? A systematic review and meta-analysis of survey data. *PLoS ONE*. <https://doi.org/10.1371/journal>

⁹ How to Conduct research ethically <https://www.emeraldgrouppublishing.com/how-to/research-methods/conduct-research-ethically>

Publishing the same material more than once by the same author the same publisher and which is other than the issue of plagiarism and copyright violation. In this case the topic or heading or the subheadings or conclusion of the abstract may be changed by the author for the sake of publishing it again but the main theme and content and data will be remaining the same. In that case the author will incur sanctions for the same. There are different forms of plagiarism; direct plagiarism, Indirect Plagiarism, Patch Plagiarism, Unintended plagiarism and self-plagiarism¹⁰. The only way you can get away with this is they should cite the previous articles as well as should provide an explanation with respect to how the original article and this manuscript which is under consideration differ from the previous manuscript which is published. Plagiarism is not only an unethical behaviour but also a legal wrong will also amount to Copy Right violation.

Measures to Maintain Research Ethics and avoid Research Misconduct

There might be various reasons for getting into any of the activities resulting in research misconduct like academic Pressure, Publication pressure, monetary benefits, and personal reasons¹¹. Before doing the research one should make sure that the research plan is well developed and well researched and is well followed as well as set the standards for supervision. During the research is on-going one need to ensure a thorough check on data as well as approved synopsis. After the completion of research researcher should ensure that the researched community avail the goodness out of research and ensure the publication ethics. There might be certain after effects to the research misconduct which may range from loss of job as a faculty, losing the grants for research. Once a researcher is blacklisted then she will not be hired by any reputed institutions or universities as well as your projects will never be funded by good universities or Government. This may also result in blacklisting from publication of your articles as well. It might also result in losing of all academic achievements like your Doctoral or Post-Doctoral degree would be taken back.

One needs to be very careful while reporting or filing the misconduct. One should not misreport misconduct done by one person simply to defame him or take vengeance against him. One needs to be very sure that there is serious misconduct or fabrication of data is there before reporting the same against research misconduct.

Instances of Misconduct

- ❖ **YIN LIBIN – U. S CASE** - Yin Libin got his Ph.D. from University of Texas Health Science Centre. The office of Research Integrity found out that Yin Libin was engaged in serious Scientific Misconduct by without any coercion intentionally falsified, fabricated and plagiarised the research in his various publications. The committee on the basis of scientific misconduct retracted all the publications of Yin Libin
- ❖ **Jan Hendrik Schon** -His doctorate degree by the University of Konstanz was taken away after a committee formed by Bell Labs found that he is guilty of fabrication with respect to research done during his tenure of employment.
- ❖ Nearly 130 research papers published by Institute of Toxicology Research were alleged to be falsified fabricated and plagiarised image content and duplication.
- ❖ Nearly 30 research papers from CSIR – Indian Institute of Chemical Biology also was also alleged to be duplicated and plagiarized

^{10 10} Research Methodology, Available at EPG Pathshala

https://epgp.inflibnet.ac.in/epgpdata/uploads/epgp_content/law/09_research_methodology/17_research_ethics/et/5800_et_17_et.pdf

¹¹ Elizabeth DePoy, Laura N. Gitlin PhD, *Introduction to Research* (Fifth Edition) 2016

- ❖ Nearly 35 research papers from CSIR – Central Drug Resarch Institute also was also alleged to be duplicated and plagiarized
- ❖ Nearly 50 papers of the total fraudulent publications done by IITR is from Yogeshwar Shukla IITRs chief Scientist.
- ❖ CSIR –ICB– Chitra Mandals paper has been retracted
- ❖ CSIR –CDRI – Naibedyia Chattopadhyay has been pointed out with highest number of papers with falsified images.
- ❖ Nearly 1000 papers have been retracted from India until now.

Conclusion

The University Grants Commission have made new regulations to address the issues of plagiarism in India where the students needed to be made aware about the plagiarism software and should be promote them to use such software during their submissions done throughout their academic period. The strata of plagiarism were mentioned clearly by University Grants Commission:0-10% of plagiarism are considered as less serious offences and hence no penalties.60 and above % of plagiarism are considered as Serious offence.

But this new regulation of UGC was widely criticized by saying that plagiarism is not the only one which can be categorized as scientific misconduct. India is considered as the hub of predatory Journals as being the largest contributor to it. University Grants Commission on their website now maintains a list of Journals called White Listed Journals. Researcher should be cautious enough right from the beginning of the research till the completion so as to ensure that there is no misconduct from his part. Researcher should never compromise on the quality of the research. Researcher should always aim for value based and ethical research. Researcher should keep in mind that his research should be done with utmost sincerity as it will further help future researchers working on the same realm.