Critical Reflections on the Article “What is Ethics in Research and Why is it Important?” by David B. Resnik

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Abstract: The article titled “What is Ethics in Research & Why is it Important?” by David B. Resnik highlights the meaning of ethics, its defining characteristics, the codes and policies for research ethics, ethical decision making in research, promoting ethical conduct in science and three thought-provoking case studies. Dr. Resnik commences the essay with the connotations of the term “ethics”. He lays out different rules for distinguishing between right and wrong, like the Golden Rule, the Hippocratic Oath, the Ten Commandments, sagacious aphorisms of eminent historical figures like Confucius, etc. The run-of-the-mill definition of the word “ethics” is this: norms for conduct that distinguish between acceptable and unacceptable behaviour. There is a fundamental loophole in this commonly accepted definition: acceptable and unacceptable behaviours vary from culture to culture. For instance, in Russia, smiling at strangers is considered an “Americanism” and is looked upon as being insincere. In addition, if you smile at strangers, they might label you as a “simpleton”. While this may not be the norm or unacceptable in Russia, it is not the case in India or USA.

Keywords: ethics, research, ethical conduct, behaviour

1. Introduction

Ethical norms are ubiquitous according to Dr. Resnik, yet several ethical disputes prevail. Ethical norms are broader in scope when compared to laws. Disciplines that study ethics include philosophy, psychology, law, theology, sociology, economics, media studies, journalism, and so on. David contends that ethics may be defined as a method, procedure or perspective in view of the analysis of the complexities of the world. For example, in analyzing the issue of Postcolonialism, psychological, sociological perspectives and literary criticism (Postmodernism) come into play.

A specialized discipline called Research Ethics studies ethical norms. It is important to abide by ethical norms in research because norms promote the objectives of research, ethical standards promote the values quintessential to collaboration, they ensure that researchers are held accountable to the public, they facilitate public support for research and finally give voice to moral and social values. Some of the principles addressed by various codes are Honesty, Objectivity, Integrity, Carefulness, Openness, Respect for Intellectual Property, Confidentiality, Responsible Publication, Responsible Mentoring, Respect for Colleagues, Social Responsibility, Non-Discrimination, Competence, Legality, Animal Care and Human Subjects Protection. Author David hasn’t included some other ethical principles worth mentioning such as Informed Consent, giving participants the Right to Withdraw from the Research, and avoiding excessively Deceptive Research Practices. With regard to the last rule on avoidance of excessively Deceptive Research Practices, it is important to note that covert researches engage in deceptive research practices to a certain degree. Whilst covert research practices, especially where used intentionally, may be viewed as controversial, it can be argued that they do have a place in research. For instance, researching attitudes in a naturalistic environment where the researcher acts as a covert observer of the subjects is an example of covert research where some amount of deception is involved.

Ethical behavioural conduct is crucial to science practitioners and researchers. Dr. Resnik opines that it is advisable to undergo training in research ethics. Although individuals may be ethical and conscientious, it is recommended that they take up specialized training in research ethics. Dr. Resnik cites a statistical fact, stating that 1% is the highest percentage of researchers per year that have been responsible for misconduct (Shamoo & Resnik, 2009). One needs to scrutinize this fact and ascertain the reality across the world. While naming and shaming the unethical researchers seems to be the immediately available solution, long-term bans from publishing would be difficult to police, what with the significant rise in predatory journals across the globe. The number of predatory journals is gradually increasing and hence it is becoming harder to identify. Jeffrey Beall, a librarian at the University of Colorado in Denver, first coined the term “predatory journals” and maintained a listing of predatory scholarly journals. According to Texas–based Company Cabell’s International, there are over 4,000 predatory journals, which is called Cabell’s Blacklist. If there are indeed 4,000 fake journals, how can the annual percentage of research misconduct be just one percent? What about other seemingly acceptable research practices which actually get compartmentalized into research misconduct, objectively speaking? A pooled weighted average of 1.97% of scientists admitted that they have fabricated, falsified or modified data or results at least once, and up to 33.7% admitted other questionable research practices (Fanelli, 2009).

Scientific journals must maintain their high standard by recognizing and eradicating misconduct. Potentially suspicious submissions must be flagged. (Müller & Soares, 2017).
All said and done, research misconduct and unethical practices may occur unnoticed and in stealth. In such cases, who is held responsible and how do you hold the perpetrator responsible when nobody knows what he/she did? In this context, the personal, home, educational environments must be the moulding institutions of the individual, wherein he/she imbibes morality, culturally acceptable behaviour and also ethical research practice. Ultimately, the onus is on the individual to maintain integrity and adhere to all the codes.

2. The Case of the Mathematical Error

Anything potentially misleading in a journal research paper is unacceptable. A mathematical error refers to a mistake in mathematical calculation, etc. Mathematical errors are of different types, some of which encompass careless errors, computational errors and conceptual errors. Careless errors include copying the problem wrongly, writing a wrong number, dropping a negative sign, illegible handwriting leading to miscopying, typing digits wrong into the calculator, etc. Computational errors consist of incorrect addition, subtraction, multiplication or division. Conceptual errors occur because the mathematician/researcher has misunderstood the underlying concepts or has employed incorrect logic. This is the most difficult type of error to recognize, but it is also the most important error that needs correction.

Ignorance of the error by Dr. T is an indirect manner of research misconduct. The erratum must be acknowledged and the editor must be notified as soon as possible. Due to the controversial and debatable nature of what “Research Misconduct” essentially is, it is difficult to come to a unified consensus. It does not merely confine itself to Falsification, Fabrication or Plagiarism. Research Misconduct must be understood in terms of the context. Dr. T is initially innocent, but the fact that he does not inform the journal editorial board even after learning about the mathematical error makes him a culprit. His honesty, integrity, objectivity, carefulness, and openness are at stake. Dr. Resnik is of the view that this is considered by the government as being part of “other deviations”. Dr. T must have immediately reported the math error in his manuscript, which is a realistic solution. If Dr. T never reports the error, it would be erroneous on his part, on his personal integrity, value system, compromises on high standards and on the impeccability of his research.

Historically speaking, on 22nd July 1962, a typo destroyed a NASA rocket. The rocket embarked, and in less than 5 minutes into flight, Mariner I exploded, costing the U.S. government $80 million. What was the root cause for this catastrophe? A single omitted hyphen, in hand-transcribed mathematical code. Therefore, a mathematical error, no matter whether big or small, is an error because it can have far-reaching consequences at times, (especially if it is a conceptual error), if not just being misleading.

3. Conclusion

Ethics are the building blocks of research and must be adhered to relentlessly. Unethical conduct, as examined can occur in various forms and types and the legal bodies are the ones looking after misconduct. An ethical track record goes a long way in one’s career and thus the importance of ethics cannot be emphasized enough by words.

References