Indian Journal of Information Sources and Services
ISSN: 2231-6094 Vol. 9 No. 3, 2019, pp. 12-16

Research Ethics for Twenty-First Century LIS Professionals

Khaiser Jahan Begum[1] and Chikku Balachandran[2]
[1]Professor & Chairperson, [2]Research Scholar, UGC JRF
[1&2]Department of Studies and Research in Library and Information Science, University of Mysore, Mysore, Karnataka, India
E-Mail: khaiser.nikam6@gmail.com, chikkubalachandran@gmail.com

***Abstract* - Research in several disciplines is gaining importance in the 21st century. In India, agencies like University Grant Commission (UGC) assessing the performance of the faculty based on the Academic Performance Index (API). Irrespective of the aptitude, ability and interest in research, aspiring researchers are pushing themselves to publish research papers and also are aiming to do Ph.D. Therefore there is sudden proliferation in number of journal publications and Ph.Ds. But the most important part of maintaining international standards in publishing research papers and doing Ph.D. is not taken seriously. In fact, researchers are failing to maintain good research standards and ethics in research. This has resulted in misconduct both at individual level and at the organisational level. There are guidelines available for doing good research. If these guidelines are followed systematically along with general ethical principles, the research performance will be good and will result in avoiding data falsification, fabrication and redundant publications. Keeping these points in mind the authors have elaborately discussed research ethics for 21st century in general and LIS professional in particular.**
***Keywords:* Ethics Literacy, Information Ethics, Fraudulent Research, Academic Honesty, Plagiarism, Academic Performance Index: Bad Research, Information Ethics**

I. INTRODUCTION

"Most people learn ethical norms at home, at school, in church, or in other social settings. Although most people acquire their sense of right and wrong during childhood, moral development occurs throughout life and human beings pass through different stages of growth as they mature. Ethical norms are so ubiquitous that one might be tempted to regard them as simple common sense. On the other hand, if morality were nothing more than common sense, then why are there so many ethical disputes and issues in our society" (Resnik, 2011)?

Resnik (2011) is also of the view that "when most people think of ethics (or morals), they think of rules for distinguishing between right and wrong, such as:(i) the Golden Rule ("Do unto others as you would have them do unto you"), (ii) a code of professional conduct like the Hippocratic Oath ("First of all, do no harm"), (iii) a religious creed like the Ten Commandments ("Thou Shalt not kill..."), or a wise aphorisms like the sayings of Confucius. This is the most common way of defining "ethics": norms for conduct that distinguish between acceptable and unacceptable behaviour".

Resnik in his work 'what is ethics in research and why it is important' (2011) further laments that "most societies also have legal rules that govern behaviour, but ethical norms tend to be broader and more informal than laws. Although most societies use laws to enforce widely accepted moral standards and ethical and legal rules use similar concepts. It is important to remember that ethics and law are not the same. An action may be legal but unethical or illegal but ethical. We can also use ethical concepts and principles to criticize, evaluate, propose, or interpret laws. Indeed, in the last century, many social reformers urged citizens to disobey laws in order to protest what they regarded as immoral or unjust laws. Peaceful civil disobedience is an ethical way of expressing political viewpoints".

The work of Resnik (2011) is so unique that it has been borrowed by many authors who are working on ethics in research. In this work he says that "There are several reasons why it is important to adhere to ethical norms in research:

1. Norms promote the aims of research, such as knowledge, truth, and avoidance of error. For example, prohibitions against fabricating, falsifying, or misrepresenting research data promote the truth and avoid error.

2. Since research often involves a great deal of cooperation and coordination among many different people in different disciplines and institutions, ethical standards promote the values that are essential to collaborative work such as trust, accountability, mutual respect, and fairness. For example, many ethical norms in research, such as guidelines for authorship, copyright and patenting policies, data sharing policies, and confidentiality rules in peer review, are designed to protect intellectual property interests while encouraging collaboration. Most researchers want to receive credit for their contributions and do not want to have their ideas stolen or disclosed prematurely.

3. Many of the ethical norms help to ensure that researchers can be held accountable to the public. Ethical lapses in research can significantly harm human and animal subjects, students, and the public. For example, a researcher who fabricates data in a clinical trial may harm or even kill patients and a researcher who fails to abide by regulations and guidelines relating

to radiation or biological safety may jeopardize his health and safety or the health and safety of staff and students".

II. PREVIOUS STUDIES

The purpose of research is to work on a new topic; bringing improvements over existing situations; add to the existing knowledge in a discipline; stimulate advanced and constructive changes and not to expose personal weaknesses, drawbacks and be universal and vindictive in the work process of research. This is possible when the investigators are genuinely and honestly involved in research work from the beginning to the end. An attempt is made here to find out what others have to say on this, by peeping into the previous studies on ethics in research and librarianship. Many scholars have made insightful contributions, which are presented below.

Buchanan (2004) says that everybody must remain committed to the ethical principles presented by the American Library Association (ALA) code in the field of Library and Information Science. Wilkinson (2014) argues that "librarians must augment their normative professional codes with a rational decision procedure when faced with a moral dilemma involving a library service." He establishes "the limits of professional codes of ethics, identifies a candid set of core principles of library service". Barsh and Lisewski (2008) examine that "library research and literature, do not emphasize management ethics". Fallis (2007) shows "that in order to deal effectively with the ethical dilemmas, the library professionals must have a good working knowledge of information ethics". Lankes (2008) presents an ethics of librarianship from the point of view of participatory librarianship. Schöpfel (2016) has conducted a case study "with 50 Masters students in Library and Information Sciences (LIS) at the University of Lille (France) in 2014-2015".Gerolami (2005) discusses the importance of values in librarianship and information ethics with reference to the concepts of power and freedom created by French philosopher Gilles Deleuze and French psychologist Felix Guattari. Cope (2012) has proposed "a model of librarianship as an intellectual craft that can be used as an "ideal type" in comparison to recent transformations in the practice of librarianship". Carlin (2003) has explored "the place of ethics in Library and Information Science (LIS) research rather than in applied or professional settings". Burke, Davis, Hernon & Nicholls (1996) has examined fraudulent research in the context of library and information science. Shachaf (2005) has studied "a comparative content analysis of the English versions of 28 countries codes of ethics proposed by professional associations". Munigal (2018) suggests "any professional association of national stature or LIS associations in India can meet on a common platform to brainstorm and bring out a final collaborative document on the subject". Eldredge & Petree (2009) has examined "the methodology of librarian research involving human subject in the U.S. Ndwandwe". Ocholla & Dube (2009) have explored "the nature and level of information ethics education in Library and Information Science (LIS) departments in South Africa". Miller (2006) has discussed "the need to enhance academic honesty and respect of students for research as plagiarism becomes prevalent in the schools". Thus, there are many studies which have repeated different aspects of ethics in LIS research.

III. ETHICS IN LIBRARY PROFESSION

In the profession of librarianship, the topic of ethics has been the focus of considerable attention in recent years. Professional ethics is the embodiment of the ideals and responsibilities of a professional group. Codes can be "a way of enhancing the profession's reputation and professional trust and of defining and sensitizing persons to their professional responsibility". (Sturgeon, 2007)

A. Elements of Misconduct and Fraud in Research

Some of the reasons for hazardous and grappling quality in research is the concept of introducing things like the academic performance appraisal index etc. According to Dutta (2009) "The Academic Performance Index (API) – part of the assessment structure evolved by the UGC for appointment and promotion of faculty, and calculated annually – has forced research on everyone, irrespective of aptitude, ability and interest. And the huge body of new and aspiring 'researchers' has resulted in journals with no clear ethics policies, but armed with the easily procured ISSNs., and with claims about peer review and international status. This cart-before-the-horse approach of the UGC – insisting on research for everybody and then when widespread plagiarism was discovered, trying to fight it with policing the dissertation and mandating journal legitimacy with the easily procurable ISSN number – has been responsible for the sudden proliferation of bad research. This is perhaps the reason why ethics in research is institutionally perceived as being primarily about refraining from plagiarism. As the codes of ethical research formulated and displayed prominently on the websites of many respected universities show, there are several other key aspects to good and honest research. Apart from plagiarism the following are the widely seen misconduct in research"

Though these behaviours are not considered as serious misconduct, they are treated as 'some deviations' in research ethics (Resnik, 2011). Some of them are;

1. "Publishing the same paper in two different journals without telling the editor". Likewise "indulging a colleague as an author on a paper even though the colleague did not make a serious contribution to the paper". Similarly "discussing with your colleague's confidential data from a paper that you are reviewing for a journal". "Using inappropriate statistical technique in order to enhance the significance of research work; Conducting a review of literature that fails to acknowledge the contributions of other people in the

field or relevant prior work; Stretching the truth on job application or curriculum vita; Failing to keep good research records; Failing to maintain research data for a reasonable period".

2. According to the "stressful" or "imperfect" environment theory (Resnik 2011) "misconduct occurs because various institutional pressures, incentives, and constraints encourage people to commit misconduct, such as pressures to publish or obtain grants or contracts, career ambitions, the pursuit of profit or fame, poor supervision of students and trainees, and poor oversight of researchers. Misconduct probably results from environmental and individual causes, i.e. when people who are morally weak and ignorant. In any case, a course in research ethics is useful in helping to prevent deviations from norms even if it does not prevent misconduct. Many of the deviations that occur in research may occur because researchers simply do not know some of the ethical norms of research".

B. Elements and Guidelines for Good Research

In 2005 (Office of Research Integrity, 2008), the federal government finalized its definition of misconduct in research. The current definition found in the federal regulations is as follows:

1. "Research misconduct means fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results".

2. "Fabrication is making up data or results and recording or reporting them; 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; Plagiarism is the appropriation of another person's ideas, processes, results, or words without giving appropriate credit; Research misconduct does not include honest error or differences of opinion."

IV. GENERAL PRINCIPLES IN FOLLOWING ETHICS

Following are the general ethical principles suggested by Shamoo and Resnik (2016):

1. *Honesty:* Keep honesty in reporting data, results, methods and procedures and publication.
2. *Objectivity:* Strive to avoid bias in experimental design, data analysis, data interpretation, peer review, personal decisions, grant writing etc.
3. *Openness:* Share data, results, ideas, tools, resources. Be open to criticism and new ideas.
4. *Confidentiality:* protect confidential communications.
5. *Carefulness:* Avoid careless errors and negligence. Keep good record of research activities.
6. *Respect for Colleagues:* Treat them fairly.
7. *Respect for Intellectual Properties:* Honour patents, copyright and the forms of Intellectual property. Give proper acknowledgement or credit for all contributions to research. Never plagiarize.
8. *Respect for the Law:* Know and obey relevant laws and institutional and governmental policies.
9. *Respect for Research Subjects:* Show proper respect and care for animal when using them in research. Do not conduct unnecessary or poorly designed animal experiments. When conducting research on human subjects minimize harms and risks and maximize benefits, respect human dignity, privacy and autonomy; take special precautions with vulnerable groups and strive to distribute the benefits and burdens fairly.
10. *Stewardship:* Make good use of humans, financial and technological resources.
11. *Social Responsibility:* Strive to promote social good and prevent social harms through research, public education and advocacy.
12. *Freedom:* Research institutions and governments should not interfere with freedom of thought and inquiry".

V. ETHICAL GUIDELINES FOR RESEARCH IN LIS

Busha and Harter (1980) points out some widely accepted general principles in the scientific community as fundamentals of research. They are:

1. Maintain high standards of work directed towards the constant improvement of the quality of the study.
2. Strive to preserve open channels of communication among research workers, scholars, participating professionals, and other persons or groups who might benefit from or apply research results.
3. In planning, conducting, and reporting studies, does not misrepresent the investigative competencies and abilities of research workers or associates.
4. Protect human subjects by taking all possible measures to respect privacy and the confidentiality of personalised research data.
5. Unless subjects have been fully informed of psychological or other risks involved in a given project and have consented to serve as research subjects in full realization of the possibility of stress or discomfort, do not utilize techniques that pose threats to subjects' well-being.
6. Let the studies nature and purpose determine the degree of condor to be displayed regarding the exact purpose of a study; as a general rule, however, follow the principle of full disclosure of intend to subjects.
7. Report procedures and findings as accurately as possible.
8. Give credit to persons whose earlier research was especially useful in the conduct of another project.

9. Give credit to research associates who provided direct assistance.
10. Acknowledge the aid of persons who served as consultants or helped to plan, conduct, or report research activities.
11. When applicable, acknowledge sources of financial grants and other forms of direct or indirect aid.
12. Always resist the temptation to accept premature explanations; have the patience to wait for more verified data related to an observed but heretofore inadequately explained phenomenon.
13. Always place a high value on intellectual honesty".

VI. ETHICS AND PUBLICATION

According to Menezes *et al.*, (2014), "Academic publication is the cornerstone of scientific progress. However, powerful intellectual, financial and political interests may be involved in academic publication, which potentially can distort scientific literature.This can result in plagiarism, data fabrication and falsification, redundant publication and illegitimate authorship".

A. Plagiarism: The term plagiarism denotes intentional or unintentional borrowing of ideas or words of others without giving appropriate credit.As per the World Association of Medical Editors, plagiarism occurs when six consecutive words are copied, or 7 to 11 words are overlapping in a set of 30 letters.Plagiarism can be of several types.

B. Plagiarism of Ideas: Plagiarism of ideas may occur when an author presents someone else's ideas, thoughts or inventions as his own without giving appropriate credit.This is very difficult to detect as the scripts from the original paper are not directly reproduced.

C. Plagiarism of Text: Plagiarism of text also known as word-for-word plagiarism is the complete or partial copying of words without credit to its author.With the advancement of technology and the digitalisation of medical literature, this is increasingly common.

D. Mosaic Plagiarism: The third type of plagiarism, mosaic plagiarism, is perhaps more common: authors copy ideas and sentences from an original source and admix it with a few words of their own here and there.This practice is unethical when the original author is not acknowledged, and the reference is not cited appropriately.

E. Self-Plagiarism: Self-plagiarism is another form of plagiarism which refers to the reuse of author's own previous work without appropriate quotation and permission to reproduce text from the copyright holder. Avoiding simultaneous submission of the same manuscript to two or more journals and waiting to hear from the editor of one journal before submitting the manuscript to another is best practice.Generally, an author must confirm at the time of submission that the manuscript has been submitted solely to that journal and is not published, or in press.

F. Data Fabrication: Data fabrication and falsification are serious forms of scientific misconduct.Data fabrication involves invention of data or cases while data falsification is the intentional distortion of data or the results.

*G. Data Falsification: D*ata falsification is probably more common. Scientific results can be distorted to show a statistically significant result to meet the expected outcome of a study. A study can be selectively published only when it meets the researchers' expectations.Clearly, scientific misconducts of this kind impact detrimentally on the scientific and the wider community [17].

H. Redundant Publication: Redundant publication involves the publication of the same work more than once in the same or different languages without acknowledging the original source. Two papers need not be identical: there could be sharing or substantial overlapping of data and the presentation of similar findings. Redundant publication creates several problems in the scientific community. It can distort the scientific literature by showing the same scientific observation more than once, was requested to be withdrawn by the authors. We consider the wilful and deliberate practice of redundant publication by the same authors as an ''academic perversion'' that needs to be strongly criticised by the scientific community.

VII. AUTHORSHIP

An important area of scientific misconduct relates to authorship, which is generally conferred upon individuals who make significant intellectual contributions to a published study and who are responsible for the content of a study. The International Committee of Medical Journal Editors states that any author of a scientific publication should meet all the following criteria:

1. Substantial contributions to the conception and design, acquisition of data, or analysis and interpretation of data.
2. Drafting the article or revising it critically for important intellectual content.
3. Final approval of the version to be published.

The Council of Scientific Editors describes a range of authorship misconducts that includes honorary or gift authorship and ghost authorship.

A. Honorary or Gift Authorship: The practice of offering authorship to individuals who have made no or an insignificant contribution to a manuscript is often referred to as honorary or gift authorship.[34] This may be due to coercion from a senior colleague, or to boost the chances of publication by including a renowned figure as co-author".

B. Ghost Authorship: Here is an example cites by Menezes *et al.*, (2014) where they say that "Ghost authorship involves an undisclosed conflict of interest where a

pharmaceutical industry employee or contractor co-authors a study but is not listed as an author in the publication".

VIII. CONCLUSION

In academics, research forms an important component followed by publications. According to Resnik (2011) "Ethics is norms of conduct, which distinguish between acceptable and unacceptable" behaviours of a researcher. Ethical norms many times are informal and implicit compared to laws and regulations. There is no regulatory authority to present unethical practices like misconduct, falsification of data, fabrication of data, dishonesty, and disrespect to the fellow colleagues and researchers etc. Maintaining high standards of work, constant improvement of the quality of research will benefit not only the individual researchers but also the organisation. Care must be taken to give due credit to the persons who collaborate in research and research associates. Acknowledgement, gratification, intellectual honesty and avoiding plagiarism will result in healthy research habits and will benefit the researcher in the long run and it will be highly rewarding and appreciable.

REFERENCES

[1] Buchanan, E. A. (2004). Ethics in Library and Information Science: What Are We Teaching? *Journal of Information Ethics*, *13*(1), 51–60.

[2] Wilkinson, L. (2014). Principalism and the Ethics of Librarianship. *Reference Librarian*, *55*(1), 1–25.

[3] Barsh, A., & Lisewski, A. (2008). Library Managers and Ethical Leadership: A Survey of Current Practices from the Perspective of Business Ethics. *Journal of Library Administration*, *47*(3,4), 27–37.

[4] Fallis, D. (2007). Information ethics for twenty-first century library professionals. *Library Hi Tech*, *25*(1), 23–36.

[5] Lankes, R. D. (2008). The Ethics of Participatory Librarianship. *Journal of Library Administration*, *47*(3,4), 233–241.

[6] Schöpfel, J. (2016). Open Access, Privacy, and Human Rights: A Case Study on Ethics in Library and Information Sciences Education. *Advances in Librarianship*, *41*, 349–371.

[7] Gerolami, N. (2005). Freedom or micro-fascisms: debates in ethics & information studies. *Progressive Librarian*, (25), 76–85.

[8] Cope, J. (2012). Librarianship as Intellectual Craft: The Ethics of Classification in the Realms of Leisure and Waged Labor. *Knowledge Organization*, *39*(5), 356–362.

[9] Carlin, A. P. (2003). Disciplinary debates and bases of interdisciplinary studies: The place of research ethics in library and information science. *Library & Information Science Research*, *25*(1), 3.

[10] Burke, M., Davis, C., Hernon, P., & Nicholls, P. (1996). Fraud and misconduct in library and information science research. *Library & Information Science Research*, *17*(3), 199–206.

[11] Shachaf, P. (2005). A global perspective on library association codes of ethics. *Library & Information Science Research (07408188)*, *27*(4), 513–533.

[12] Munigal, A. (2018). Suggested code of ethics and professional conduct for library and information science professionals in India. *Annals of Library & Information Studies*, *65*(1), 70–76.

[13] Eldredge, J., & Petree, L. (2009). The Research Mentor. *Hypothesis: Journal of the Research Section of MLA*, *21*(2), 8–11.

[14] Ndwandwe, S. C., Ocholla, D. N., & Dube, L. (2009). Information Ethics Education in Library and Information Science Departments and Schools in South Africa. *Mousaion*, *27*(2), 75–88.

[15] Miller, W. (2006). Enhancing Students' Academic Honesty and Respect for Research. *Library Issues*, *26*(5), 1–3.

[16] Dutta, Nandana(n.d).Research Ethics in India. *eSSH*

[17] Sturgeon, Roy L. (2007). Laying down the Law: ALA's Ethics codes. *American Libraries.38*(10), 56-57

[18] Resnik, B. (2011). What is Ethics in Research and Why is it Important. *National Institute of Environmental Health*.

[19] Shamoo, Adil E., Resnik, & David, B. (2009). Responsible conduct of Research. Ed.2.*Oxford University Press*.

[20] Menezes, *et al*., (2014). Publication Ethics. *Medico- Legal Journal*. *82*(4), 155-158.