

# Writing Sample 1 - Research Ethics

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## 1 Introduction

In any act of life, to progress, all parties have to agree to some code of conduct. No one wants to play a board game with someone sneaking cards under the table. A workplace does not want an employee racking up pay hours without any work to show for it. In the field of academic research, there are also rules established. The existence of rules ensures all parties are helping to build upon each other, instead of tearing one another apart. Individuals often violate research ethics codes without understanding what they have done. The following seeks to address some common issues and misunderstandings about conducting ethical research.

## 2 Research Ethics

### 2.1 Plagiarism

Notorious playwright Wilson Mizner is attributed with the saying "When you steal from one author, it's plagiarism; if you steal from many, it's research." [6] All fields of academic research are founded upon the principles of adding knowledge to those who have come before. The idea that Mr. Mizner failed to mention in his claim is the importance of citations in research. Citations are what distinguish unethical stealing from ethical use with permission. It is also important to note that plagiarism is an umbrella term for many different kinds of research misconduct. Dr. Eric Rapos has provided an outline of four of the major categories that are associated with the term "Plagiarism", which will aid in the discussion of this topic. [7]

#### 2.1.1 Improper or Missing Attribution

This subtopic is the closest to the idea that plagiarism is a form of stealing. If Dr. Rapos was not credited as the source of the four subtopics of plagiarism shown here, the reader would assume the author of this paper designed it themselves. This is a clear act of intellectual theft. Likewise, if someone other than Dr. Rapos was credited as the designer of this framework, or if the citation does not

provide information to locate used resources, future writers will lose all ability to build on existing work. An entire field of study slows down due to ignoring due diligence and protocol. Clear and articulate demonstration of sources is what enables research to continue in a manner that is truthful and effective.

### **2.1.2 Improper Paraphrasing**

While it is okay to assert that the IEEE believes "Instances of improper paraphrasing occur when only a few words and phrases have been changed", it would be unethical to do so without the quotation marks surrounding the block of text extracted from their web-page, paired with a proper citation.[2] As the IEEE definition has already provided, copying a large body of text word for word is unethical research. Someone who does is not only stealing someone else's ideas but also their words. The moral burden of being a thief is not the only weight the individual who incorrectly paraphrases has to bear. Historically, legal action has been pursued in academia, leading in at least one instance to the complete revocation of a student's Ph.D. [4]

### **2.1.3 Self Plagiarism**

This is arguably the most difficult form of plagiarism to avoid. Self-plagiarism requires the author to determine what they have already written and published. A common point posed against the idea of self-plagiarism, discussed by Dr. Eric Rapos is "So what? I wrote it, so I have the right to do with it as I please." [7] This argument holds up until the point the paper is published to a conference or some other outlet. After acceptance and even sometimes during processing, a research paper becomes subject to copyright law. At that point in the process, the copyright holder is either the conference or the publishing company. [5] There are serious legal repercussions for an author who does not cite their other relevant writings in new papers. As such, the topic should not be addressed lightly.

### **2.1.4 Unintentional Plagiarism**

This category accounts for any act of plagiarism that falls in any of the other three categories that was not malicious or known. Summaries and analyses like this seek to spread education on the various forms of plagiarism such that researchers are careful when presenting information to the reader.

## **2.2 Conflicts of Interest**

In research, it is common to be working with a group of other people each with their own desired outcomes and interests. Sometimes, a clash will occur between researchers, a researcher and their responsibilities, or even between a researcher and their sponsors. The Resources for Research Ethics Foundation proposes the following five benchmarks to promote proper conflict of interest avoidance. [3]

1. Comply with Regulations
2. Avoid and Minimize
3. Disclose Interests
4. Manage Conflicts
5. Keep learning

All of the above are repeated across different ethics boards, particularly the point on Disclosing Interests. Paul L. Romain, a researcher in the field of research ethics, believes that a greater emphasis needs to be placed on the act of disclosing interests when researching. He goes as far as to state "...despite the usual attention to financial interests, non-financial interests and other secondary interests intrinsic to the research process are also understood to have the potential to influence professional judgment." [8] If one thing is evident, enough researchers place emphasis on this topic to justify understanding and avoiding conflicts of interest.

## **2.3 Results and Data Integrity**

For individuals in the STEM fields, data of some kind is used to support conclusions in a study. In presenting data, the researcher has an ethical obligation to maintain as much transparency as allowed. A clear understanding of processes conducted to gather and manipulate data prevent researchers from making claims they cannot back up. Results that do not follow from the data presented are not valid research. Likewise, future researchers seeking to test and validate results need a clear understanding of the processes taken in the past. The Resources for Research Ethics foundation notes the importance of proper data storage, data transfer, and data ownership as some additional important factors to keep in mind. [3]

## **2.4 Mistakes and Misconduct**

Everyone who conducts research is human, and as a result, they are inclined to make mistakes somewhere along the way. The problem in research is not whether an individual makes a mistake. The problem lies in what the researcher chooses to do following the discovery of a mistake.

According to Dr. Eric Rapos, there are three common tiers of mistakes, each with an appropriate ethical action that should be taken following their discovery. The first tier of mistake, Errata, refers to any small errors discovered after sending a paper out or publishing it in a journal. [7] These are often corrected by a brief email, a short piece of physical mail, or if self-published, an addendum on the document in question titled "Errata". The second tier of mistake, a Correction occurs when the mistakes are at a severity where the arguments made in the paper are at risk. [7] This mistake justifies a more serious email or a lengthier letter to the publisher in question. The highest tier

of mistake, a Retraction, occurs when misconduct is discovered by a researcher or when the bulk of the paper is invalid due to some circumstance. [7] The only appropriate response to a mistake of this caliber is to pull or retract the paper from the publication or conference immediately.

Errors are bound to happen, but the ethical researcher will do everything in their power to see that issues are dealt with properly. If modern research has anything to say on the topic, it is that publications are getting much better at spotting retractions than ever before. [1] Researchers must stay vigilant in their work to avoid misconduct at the potential cost of their work and their livelihood.

### 3 Conclusion

Research done unethically requires a lot of work, and research done ethically even more so. However, ethical research is required to continue to develop and build a foundation in a field of study that changes from day to day. When the alternatives are the loss of respect, livelihood, trust, and ability to work in academia, the researcher must choose the ethical path. This paper only serves as a summary of some of the much larger moral challenges facing researchers today as they conduct their work. With even a brief foundation in understanding ethical issues, the intentional researcher will have little trouble spotting issues in their work to come.

### References

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- [8] Paul L. Romain. Conflicts of interest in research: looking out for number one means keeping the primary interest front and center . 2015.