# Writing Sample 1

## February 2020

## 1 Introduction

During the process of conducting and publishing academic research, there are many factors that must be taken into consideration. One of these factors is known as research ethics, which are the moral principles that researchers must follow. There are numerous forms of misconduct that can occur when conducting research, such as plagiarism, false results, obfuscating certain data, or duplicating or fragmenting publications. Another ethical concern is that of conflicts of interest, which deals with opposing incentives by different parties, which are often financially motivated, concerning academic research. Finally, there are also ethical concerns that must be taken into consideration while reviewing and publishing research.

## 2 Plagiarism

According to The Office of Research Integrity, Research Misconduct is defined as the "fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results" [1]. In other words, misconduct can happen for a number of reasons and it can have a significant effect on research.

Plagiarism occurs when authors take credit for the ideas and words used by a different author in a publication. A prime example of this would be copying direct text from a different publication, attempting to use it in a new publication, and passing it off as original work without reference. This can be especially prevalent and difficult between peers who may both have ownership of some written sample. However, plagiarism can also take form in several ways, such as improper paraphrasing or self paraphrasing.

Improper paraphrasing occurs when an author attempts to reference an existing publication but does so without properly paraphrasing it. In order to avoid plagiarising, an author must make it extremely clear that they are referencing an existing text and must paraphrase the text with their own, original contributions.

Self paraphrasing deals with the problem of an author reusing their own work later on. Technically, an author is not permitted to reuse any of their

previous publications. This can even have copyright violation implications, because although an author may have written one of their previous publications, another entity likely owns the publication, such as a journal. In this case, the journal owns the publication and it would be considered plagiarism if the author were to reuse this material.

## 3 Results and Publication

Another example of research misconduct is known as negative, or false results. These occur when a researcher presents the wrong results in their findings. When these inaccuracies are present in published research, this has a very harmful effect on the academic community. Therefore, results are often scrutinized for accuracy and tested to be sure they can be recreated.

Obfuscation of Data occurs when an author purposefully leaves out some of the data from a source that they are using in their research that would be considered relevant to the point they are making. This can have a detrimental effect on the research as the readers will rarely examine the data sources themselves and will base their conclusions on the data that the research presents to them. Therefore, the reader can become misinformed about a topic if the author intentionally obfuscates some amount of data.

Finally, another time of research misconduct deals with publishing research in multiple pieces in order to increase the total number of publications, and it is known as fragmentary publication. While this may have a positive effect for the researcher's immediate career image, this works against the interests of the academic community because it spreads out pieces of information that are related to each other. Sometimes, researchers will also submit the same publication in multiple locations to increase its visibility. This is known as duplicative publishing and it can mislead readers later on who may believe that the studies were separate or independent.

#### 4 Conflicts of Interest

According to Investopedia, "a Conflict of Interest occurs when an entity or individual becomes unreliable because of a clash between personal (or self-serving) interests and professional duties or responsibilities" [3]. The most common instance of this deals with financial incentives and how they can affect important actors' behavior. For example, if a researcher will receive financial benefits if their studies are successful, they may be incentivized to falsify the results. In order to minimize conflicts of interest, researchers should disclose their interests to keep themselves honest, manage and minimize conflicts, and comply with regulations.

## 5 Review

The Office of Research Integrity also states that "academic integrity depends on peer review" and that "effective peer review depends on academic integrity" [2]. In order for a paper to be successful, it requires the help of peer reviewers that are qualified in the subject of the paper to check it over for credibility, and they must do so with utmost integrity. Without these reviewers, it would not be possible to determine the credibility of a publication. One of the most common tasks of reviewers is to suggest the existence of mistaken or misleading information in the paper and to assist the author in fixing these issues. The author can do this through the use of three different documents: An Errata (a letter detailing minor errors sent to the entity that published the paper), a Correction (a letter to the publishing entity that explains the errors as a correction to the publication), or a Retraction (a letter to the publishing entity that asks to have the paper retracted, if the errors are so severe).

## 6 Conclusion

There are many different ethical challenges that researchers face when publishing research. These challenges can include research misconduct, conflicts of interest, or even peer review standards. However, it is very important that researchers overcome these challenges when conducting and publishing research. These ethical practices ensure that research can have the greatest overall effect on the academic and scientific communities.

## References

- [1] Definition of research misconduct.
- [2] Publication peer review.
- [3] Troy Segal. Identifying conflict of interest, Jan 2020.