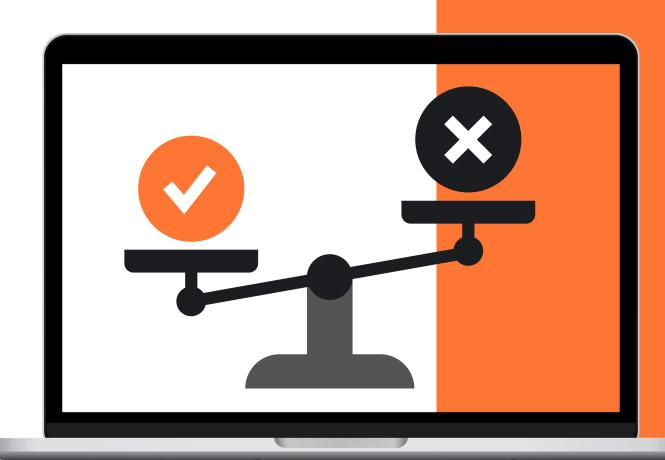


RESEARCH ETHICS AND PLAGIARISM





5.1 Meaning

The dictionary meaning of 'Ethics' is – moral principles that govern a person's behavior. It can be understood as a normative code of conduct that governs the behavior of an individual or a society as a whole.

Similarly, Research Ethics refers to the code of conduct that the researcher must follow while working on a project. It comprises of principles and standards that guide the researcher's behavior throughout the process of research.

Ethics helps in upholding the standard and values of the things which we consider important. These ethics are much broader in scope than law; although laws are largely based on ethics and morals of the society; ethics tends to go beyond the scope of formal laws of the land and therefore are more informal than law.

5.2 Approaches to Research Ethics

There are three major approaches to research ethics:

| Deontological | Ethical Skepticism | Utilitarianism |
|--|---|--|
| The word deontology derives from the Greek words for duty (deon) and science (or study) of (logos). This refers to the use of a universal code for making ethical decisions. | According to this approach, Ethical decisions are not universal but relative. It says that ethical decisions are a reflection of one's own culture and time. This is based on the theory of relativism. | As per this theory, the decision of the researcher in any research should be based on the comparison of costs and benefits that may arise from the work. If the expected benefits surpass the expected cost, ethics and work must be considered ethical. |



5.3 Various Principles in Research Ethics

There are 7 basic principles of research ethics i.e. Honesty, Integrity, Loyalty, Accountability, Objectivity, Fairness and Respect.

| Honesty | Information provided by the researcher in any research work must be honest and truthful. It is unethical for a researcher to mislead or deceive by way of misrepresentation, omission or any partial truth. |
|----------------|---|
| Integrity | A Researcher shows integrity and courage by their passion to seek answers and truth regarding any issue. At the same time, they must not compromise on principles and ethics for convenience or by being dishonest. |
| Loyalty | Researcher should demonstrate this trait and must never disclose any confidential information learned during the process of research, for any personal advantage. |
| Accountability | Researchers must always acknowledge personal accountability for the ethical quality of their decisions during the research. |
| Objectivity | Objective of any research should never be adverse to society or humanity. It should be fair, clear and moral. |
| Fairness | The data used in the research must be true and fair. It implies that the collected data must be free from any bias and must give equal treatment to all individuals and must promote diversity where appropriate. |
| Respect | The research work must promote and demonstrate respect for others, autonomy, privacy and rights of everyone who have contributed to the work. |

5.4 Ethical Issues in Research

There are two major parties in the research process i.e. Researcher and Participants. Researcher is the one who performs research; he can also be understood as a principal investigator. Research Participants are the persons who voluntarily participate as the subject of the experiment/research after giving their informed consent.

5.4.1 Issues Related to Participants

- Collecting Information: If the participants are under pressure or the request for information creates anxiety for the participants, it shall give rise to ethical issues and therefore, it is upon the researcher to improve the conditions and ensure the participants avoid such issues.
- Seeking Consent: Informed consent of the participants is very important in any research. If the research does not provide all the information to the participants that are essential for making informed/rational decision, it shall be unethical practice.
- **Providing incentives:** Providing incentives to the participants is not unethical per se, but the researcher should not use such incentives to gain consent or collect data, such an act would make the research unethical.
- Seeking sensitive information: It is not unethical to collect sensitive information about any person for research; however, if the research does not explain to the participants the nature of information collected and the possible risk/harm associated, it may amount to unethical practice.
- Confidentiality: Sharing the sensitive or confidential information collected from the participants, for any purpose other than the research for which it is collected shall be unethical.









5.4.2 Issues Related to Researcher

- Avoiding Bias: Maintaining the objectivity of research is one of the essentials of the research, thus is important for the research to avoid any form of bias in the research process, otherwise the research would be considered to be unethical.
- Deprivation/Provision of Treatment: This becomes more important in cases of medical research. It is ethical to provide the selected population sample with medicines/treatments which have yet not proven to be effective. In such cases, it is vital that the population gives informed consent and researcher must take every step to minimize the risks involved to avoid any ethical dilemmas during the research process.
- Using Appropriate Research Methodology: The researcher should in all cases avoid any methodology which is biased in any step of the research i.e. sampling, method, and procedure. Bias at any stage would make the work unethical and possibly unreliable.
- Incorrect Reporting: It would be unethical if the researcher, to further his interests, makes any form of incorrect reporting through his research work.

5.5 Methods to Make Research Ethical

| Informed Consent | This involves the knowledge that the participation of any person in the research is voluntary and the same can be withdrawn at any time during the study. | |
|--------------------------|--|--|
| Screening | This refers to the process of selecting those individuals for the research who show a high tolerance for potential risks rather than selecting anyone available for the study. | |
| Pilot Study | In cases where the potential risks involved or the harms to any person associated with the work are uncertain, the researcher must as a precautionary measure undertake a pilot study to ascertain the risks and effects associated with the work. | |
| Outside Review | A researcher can request for review of his research proposal as a precaution to avoid any risks both ethical and procedural. | |
| Rules and Regulations | Objective of any research should never be adverse to society or humanity. It should be fair, clear and moral. | |

5.6 Plagiarism

Plagiarism is one of the most serious violations of research ethics and is considered to be a serious breach of professional conduct having both ethical and legal consequences.

Plagiarism refers to the act of presenting the work of someone else as yours. It includes using someone else's ideas, thoughts, theories, words etc, and presenting it as yours. It is also known as 'literary theft'. It is a general misconception that the concept of plagiarism encompasses mere copying and borrowing of work; the scope of plagiarism is that of a very serious offence and is often termed as theft and fraud and is accompanied by penalties and sanctions.

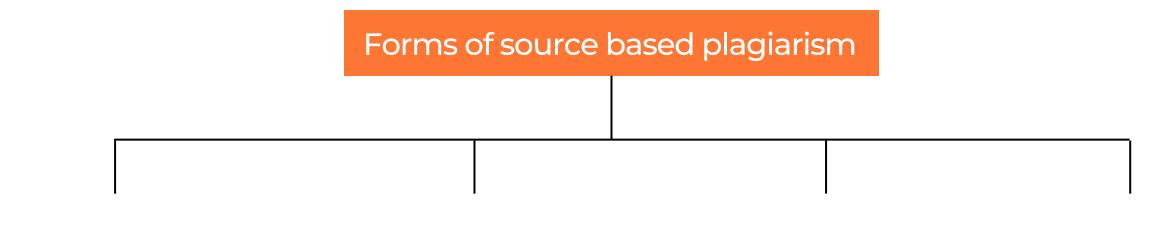
Examples of Plagiarism:

- Presenting someone else's work as your own
- Copying words or ideas of someone else, without permission or due credit
- Providing incorrect information while citing the source of information
- Paraphrasing the words but copying the structure without giving credit

5.6.1 Types of Plagiarism

There are various types of plagiarism, based on how content has been used by the researcher in his work. Some of the common types are:

- Complete Plagiarism: Copying someone's work and presenting it as your own is known as Complete Plagiarism. It is the most serious form of plagiarism.
- Source Based Plagiarism: When the source cited is either incorrect or non-existent, it is known as Source-based Plagiarism. There are many forms of source based plagiarism:



Misleading Citation

When the researcher cites a wrong citation or a citation that doesn't exist

Data Fabrication

When the researcher creates false data and research and cites it in his work

Misdirecting Citation

When the researcher fails to cite the source's source and doesn't give a complete citation

Data Falsification

When the researcher intentionally changes or omits data to get a favorable result



- Direct Plagiarism: It refers to directly copying someone's work, word to word. It is similar to complete plagiarism, except that direct plagiarism refers to only a section of work, unlike complete plagiarism where whole of the work is copied.
- Self/Auto Plagiarism: It refers to reuse of a major part of one's own work without proper attribution. Even if researcher uses his own previous work, it has to be properly cited in the research to avoid plagiarism.
- Paraphrasing Plagiarism: When researcher only makes minor changes instead of interpreting the work of someone else. Although paraphrasing is accepted in research work, but mere minor changes in sentences without any interpretation of own can be termed as plagiarism.
- Mosaic Plagiarism: This form of plagiarism is difficult to detect because in this case, the researcher interlays the work of someone else within its own work. It can be understood as 'patchwork' where someone else's text and phrases are used in between research.
- Accidental Plagiarism: This is an unintentional form of plagiarism wherein the researcher is unaware that he is copying or paraphrasing someone else's work. This happens due to negligence and mistake on the part of researcher.
- Inaccurate Authorship: This happens in two ways, either when someone contributes to the work and is not given due credit, or when someone makes no contribution to the work and is still given credit for it. In other words, improper assignment of credit, both exclusion and inclusion as an author, amounts to inaccurate authorship and is recognized as plagiarism.

5.6.2 How to Avoid Plagiarism

There are multiple techniques and writing styles adopted by researchers and academicians to avoid plagiarism in their work. It is necessary to understand that although it is important to provide original content and ideas through your work, it is also important to maintain the credibility and consistency of your work but using the work of others by giving them credit wherever due.







- There are few basic techniques which are commonly used while conducting research, to avoid plagiarism
 - 1. Direct Quotes: This form of copying is allowed in research. In this technique, the researcher uses the sentence from the source in the exact same form as it is presented. This is done when the language of the sentence in the source is particularly vivid or expressive, or such exact words are necessary for technical accuracy.

However, if the researcher directly quotes from the source, he must mention the name of source in the introductory phrase, use quotation marks to highlight the same, and cite the source appropriately. If the researcher fails to comply with the same, it shall amount to plagiarism

2. Paraphrasing: This technique consists of interpretation of the source's content while maintaining the original meaning of the content, instead of just directly quoting or copying the content. It is considered a good and accepted practice in research.

Few strategies which can be adopted for paraphrasing are:

- Using synonyms for words which are not generic
- Changing the structure of the sentence
- Active voice to Passive Voice
- Changing clauses to phrases and vice-versa
- Changing parts of speech
- **3. Summaries:** It refers to short recaps of the content which is to be adopted in the research. It can range from one sentence to one paragraph, depending on the length of the content to be adopted. Summarizing the findings of the previous works or other content is a good practice which helps in avoiding plagiarism.

It is necessary to note that researcher should duly cite the source from which content has been summarized and used in the research.

5.6.3 Legal Consequences of Plagiarism

In addition to ethical consequences, plagiarism also has severe legal consequences in India. Section 57 of Copyright Act, 1957 grants exclusive rights to the author and offers protection against any unauthorized use of his work, including plagiarism. Section 63 of the Act makes the infringement of copyright a criminal offence punishable with 6 months of imprisonment and it may even extended up to 3 years with fine.