Summary of Ethics and Deontology Content

Master II

Module: Ethics and Deontology (2022 – 2023) **Teacher: KHELEF Embarka**

Introduction to Ethics

I- Reading Comprehension: Read the text Carefully then respond to the questions.

Ethics, also called moral **philosophy**, is the discipline concerned with what is morally good and bad and morally right and wrong. The term is also applied to any system or theory of moral **values** or principles. The terms *ethics* and *morality* are closely related. It is now common to refer to ethical judgments or to ethical principles where it once would have been more accurate to speak of moral judgments or moral principles. …

Ethics deals with such questions such as; how should we live? Shall we aim at happiness or at knowledge, **virtue**, or the creation of beautiful objects? If we choose happiness, will it be our own or the happiness of all? And what of the more particular questions that face us: is it right to be dishonest in a good cause? Can we justify living in **opulence** while elsewhere in the world people are starving? Is going to war justified in cases where it is likely that innocent people will be killed? Is it wrong to clone a human being or to destroy human embryos in medical research? What are our obligations, if any, to the generations of humans who will come after us and to the nonhuman animals with whom we share the planet? Its subject consists of the fundamental issues of practical decision making, and its major concerns include the nature of ultimate value and the standards by which human actions can be judged right or wrong.

Although ethics has always been viewed as a branch of philosophy, its all-embracing practical nature links it with many other areas of study, including anthropology, biology, economics, history, politics, sociology, and theology. Yet, ethics remains distinct from such disciplines because it is not a matter of factual knowledge in the way that the sciences and other branches of inquiry are. Rather, it has to do with determining the nature of **normative theories** and applying these sets of principles to practical moral problems. …

Adapted from: https://www.britannica.com/topic/deontological-ethics

Task One: Questions for Reflections:

1- What is the main theme of the text?
2- What is the objective of the author?
3- What strategies does he adopt to reach this objective?
4- Give the main idea of each paragraph?
5- From the questions ethics raises, does it concern presently living humans only? Justify your answer.
6- Explain the underlined bold typed parts.
7- Give a title to the text.

Task Two: Fill in each gap with one word so that the text makes sense.

Traditionally, a more important link …… 1…….. religion and ethics was that religious teachings were thought to provide a reason for doing what is right. In its crudest form, the reason was that those …… 2…….. obey the moral law will be rewarded by an eternity of bliss while everyone …… 3…….. roasts in hell. In more sophisticated versions, the motivation provided by religion was more inspirational and less blatantly self-interested. Whether in its crude ……4…….. its sophisticated version, or something in between, religion …… 5…….. provide an answer to one of the great …… 6…….. of ethics: "Why should I be moral?". However, the answer provided by religion is not the only one available.

Task Three: Reorder the following Ideas to discover another aspect of Ethics

a- usually held in common by a group, about how people should live.
b- Traditionally, *ethics* referred to the philosophical study of morality,
c- the latter being a more or less systematic set of beliefs,
d- Later the term was applied to particular (and narrower) moral codes or value systems.
e- *Ethics* and *morality* are now used almost interchangeably in many contexts,
f- *Ethics* also referred to particular philosophical theories of morality.
g- but the name of the philosophical study remains *ethi*cs.

Task Four: In one paragraph, write a short summary of the passage.

Task Five: Further Reading: Read the following passage and write down the main ideas discussed.

… Perhaps fewer of us are sensitive to what we might call the moral or ethical environment. This is the surrounding climate of ideas about how to live. It determines what we find acceptable or unacceptable, admirable or contemptible. It determines our conception of when things are going well and when they are going badly. It determines our conception of what is due to us, and what is due from us, as we relate to others. It shapes our emotional responses, determining what is a cause of pride or shame, or anger or gratitude, or what can be forgiven and what cannot. It gives us our standards – our standards of behaviour. In the eyes of some thinkers, most famously perhaps G. W. F. Hegel (1770–1831), it shapes our very identities. Our consciousness of ourselves is largely or even essentially a consciousness of how we stand for other people. We need stories of our own value in the eyes of each other, the eyes of the world. Of course, attempts to increase that value can be badly overdone…

Simon Blackburn (2001) P 20

Task Five: FURTHER RESEARCH

What are the main approaches to/ theories of ethics?

Defining Terms

Deontological Ethics: (Deon = duty and logos = science) refers to the notion that some acts are morally obligatory regardless of their consequences for human welfare. Descriptive of such ethics are such expressions as “Duty for duty's sake,” “Virtue is its own reward,”

Teleological Ethics, however, is concerned with outcomes.

Consequentialism is considered one of the most important normative theories. It judges a person's behavior based on the outcomes of that action (Duignan, B. and West, Henry R, 2021). According to consequentialists, the correct moral behavior is an action that produces a benefit. In short, the idea of consequentialism is represented by the well-known saying "The ends justify the means". There are several consequentialist theories, but the two main theories considered here are Utilitarianism and Ethical Egoism.

Utilitarianism is one of the consequentialist theories that judge the morality of an action according to the amount of pleasure and happiness that results from it, which means that the right moral action is the action that helps avoid pain and brings as much pleasure as possible to the largest number of people or, what is known as “the great happiness principle”. (Mill,1863).

Ethical Egoism, on the other hand, directly contradicts Utilitarianism on whose benefit the judgment of an action is established, moving from the maximum number of people with Utilitarianism, to maximum self-benefits. The concept was first introduced by Henry Sidgwick, an English philosopher, in his “The methods of Ethics”. It believes that personal interest drives all of our moral standers, and puts individual personal interest above any other considerations even if it contradicts with the interest of others or society as a whole. However, this does not mean that Ethical Egoism equals selfishness. If one only sought after what is beneficial to them solely, without giving any regards to others, they would result in them being an outcast in society.

Ethical relativism is the belief that nothing is objectively right or wrong and that the definition of right and wrong depends on the prevailing view of a particular individual, culture, or historical period. **Ethical relativism** is the doctrine that there are no absolute truths in ethics and that what is morally right or wrong varies from person to person or from society to society" (Rachels,Britannica,n.d). Supports of ethical relativism theory believe that ethics and morals depend on the norms of the society and its culture. They assume that there are no universal standards or principles that can be applied. It is based on subjective and personal opinions to decide whether an action is right or wrong.

Ethical universalism, on the other hand, is the theory that all norms and principles of ethics are applied the same for all people despite their differences and cultural background. **It** believes that ethics in general, is absolute and based on a set of principles for all people to follow in their daily life.

Ethical Dilemmas

Introduction:

1- **What is a dilemma?**
A difficult situation where one has to choose between two or more conflicting options neither of which is acceptable.

2- **What is a moral Dilemma?**
A moral dilemma involves human action. It is a situation where moral agents, people involved are forced to choose between two or more conflicting actions neither of which resolves the situation a morally acceptable manner.

3- **Conditions for a dilemma to be called so:**
   a- The agent is obliged to make a decision about which course of action is best.
   b- There must be different courses of action to choose from.
   c- No matter what course of action is taken, some moral principles are compromised.

4- **Types of moral dilemmas:**
   a- Epistemic and Ontological dilemmas: Epistemic dilemmas refer to those situations where the agent hardly knows which one takes precedence over the other or does not know which option is moral. The agent needs more knowledge about the situation.
   An ontological dilemma: the agent has to choose between two or more conflicting requirements, but neither of them overrides the other(s). the agent does not know which option is stronger than the other. S/He then cannot choose.
   b- Self-imposed dilemmas vs. World-imposed dilemmas
   Self-imposed dilemmas are caused by the moral agent's wrong doings while the world-imposed dilemmas are imposed by outside world events which place the agent in a situation of moral conflict.
   c- Obligation vs. Prohibition dilemmas
   A situation where the person is faced with more than one feasible action and all are obligatory. Whereas in a prohibition Dilemma, all feasible actions are forbidden.
   d- Single agent dilemma vs. Multi-personal Dilemmas
   A single agent dilemma involves one person. The person ought all things considered to do 'A'; and ought all things considered to do 'B', but s/he cannot do both. Multi-person dilemmas involve more than one person. One ought to do 'A' and the other ought to do 'B', and although each on can do what he ought to do, it is not possible for both to do their corresponding duties. This dilemma requires more than choosing; it also entails that people involved reached a general consensus.

5- **Solving an Ethical Dilemma:**
One characteristic and challenge of dilemmas is that they do not offer any obvious solution which would comply with ethics and norms. Philosophers throughout history faced such dilemmas and thought and worked hard to solve them. principles were put forward to find a solution when caught in a difficult choice

a- **Talk it Out** – The best way to determine whether a dilemma exists is to discuss it with other people. Since two heads are better than one as the proverb says, a collective analysis of the situation can shed light on whether a dilemma really exists and the moral implications of each available option. This would help refute the paradox.

b- **Understand Duties & Obligations** – A great way to approach any ethical dilemmas is from the standpoint of understanding the agent's duties in the situation. In a business context, a fiduciary duty to the organizations legally obligates the agent to act in the best interests of shareholders. Contractual obligations can also play a role in determining how to resolve an ethical dilemma.

c- **Value theory approach helps to maximize the Good and minimize the Bad**: When a problem has no perfect solution, the best approach is to analyze the outcomes of each potential action and choose the action with the greatest positive impact and least negative impact.

References:

1- What is an Ethical Dilemma?

https://corporatefinanceinstitute.com/resources/knowledge/other/ethical-dilemma/

2- What is an ethical dilemma? https://www.ganintegrity.com/compliance-glossary/ethical-dilemma/

3- https://examples.yourdictionary.com/ethical-dilemma-examples.html

What is a Code of Conduct?

A code of conduct is a legal document setting out rules and guidelines concerning the ethical principles and standards of behaviour expected of a professional person or company. The businessmen design a code of conduct for the employees to follow in order to achieve a high standard of production. From the moment they join the company, employees should comply to the code of conduct set out by the employer. It aims at reducing the rate of problems at work.

The effectiveness of any code of conduct relies on a set of priorities. First. it has to reflect the spirit of the business it represents. Secondly, it should include easy and clear language. The employees shouldn't find ambiguity nor polysemy in the instructions. Thirdly, it should be inclusive; it involves all areas concerning the daily lives of employees and answers any questions that they may ask. Moreover, it has to be at everybody's reach.

A company's code of conduct should reflect its duty, philosophy, values and principles. The code clarifies the values the organization wishes to promote in leaders and employees and, in doing so, defines desired behaviour. As a result, written codes of conduct or ethics serve as criteria through which individual and organizational performance can be measured. It also includes employees' everyday concern such as work relationship, behaviour, tardiness, absenteeism, leave as well as work conflicts.

A code of conduct is an essential guide and reference for managers and employees to implement decisions made by leaders. A code encourages discussions of ethics among employees empowering them to handle ethical dilemmas they encounter in everyday work.

References;

https://www.seppic.com/en/about-us/corporate-social-responsibility/ethics-code-conduct

Policy and Procedures, CA-001, VP , Corporate Affairs & General Counsel, June 25 2013

TD 4 : The University Code of Ethics / Conduct

Introduction

In order to maintain its vision, mission, objectives and core values in accordance with the highest ethical, academic and professional standards, the University has to develop a code of ethics which sets a roadmap for its academic and professional staff and students.

Definition:

The University code of ethics is a guide of principles intended to assist staff and students to identify and resolve ethical issues that might arise during their employment or in the course of their studies. It is designed to guide them in their dealings with colleagues, students, the University and local, national and international communities.

The University carries out its training and research missions in a socio-economic and institutional environment which makes it necessary to reaffirm principles and to renew the operating rules that can guarantee both its pedagogical and scientific credibility and its legitimacy. In this context, it is mandatory to any University to establish an ethical and professional conduct charter stemming from universal standards as well as values specific to its society.

Principles of the University Code of Ethics:

This ethical charter should be based on four main principles.

1- **The ethical foundations** that can be summarized in seven main bases: academic freedom, responsibility and competence, integrity and honesty, mutual respect, demand for scientific truth, objectivity and critical thinking, equity, and respect of academic candor.

2- **The deontological rules** as second principle of the ethical charter which cover rights and duties of the teacher researcher, the administrative, technical staff, and service agent and the student.

3- **Faults and sanctions (educational, administrative or criminal sanctions);** any violation of ethical conduct principles brings the whole institution into discredit, and may result in a disciplinary action; therefore, rigorous respect of these principles is a shared interest and obligation.

4- **Commitments specific to staff or student:** the ethical charter sets out the standards of behaviour essential to the life and operation of the University across all its activities. It is applied to all personnel at the University in order to raise awareness in the ethics of seeking knowledge.

Aims of the Ethical Policy:

The ethics policy aims mainly

a- to provide members of the University with clear understanding of the ethical values and principles when dealing with others inside and outside the University in order to resolve any ethical issues by acquainting them with their rights, responsibilities, and University duties.

b- enhances the level of the academic and administrative performance in higher education institution, and assists the development and prosperity of the University surrounding community.

c- to set out the principles applicable to all researches and projects conducted by or in the name of the University

Who is intended by the Code?

All personnel; administratives, employees and agents, teachers, students …

Conclusion:

The University code of ethics sets forth the basic ethical standards for student, teachers, and all other personnel at the University. The principles included in this ethical code govern interactions at the University and promote an environment of respect that is important for its success. Ethical conduct means acting consistently in a way that upholds ethical values. The code of ethics aims to build and maintain high professional and ethical standards among members of the University community, strengthen loyalty, ensure the transparency and social responsibility of the University ‘activities, encourages the freedom of research, teaching, and learning, and promotes a positive public image of the University as well.

Research Ethics and Integrity

Introduction

Moral development occurs throughout life. Rules for distinguishing between right and wrong are learnt at home, at school, in religious institutions and other social settings. Ethics cropped up in all areas of human activity. Ms Sridar states that "Ethics deals with a range of moral and immoral choices, research challenges us to define individual principle; academic researchers are less tempted to sacrifice principle for gain than commercial researchers." (qtd in Maulana, 2015)

Institutions adopted specific codes, rules, policies relating to research ethics. These norms of conduct distinguish between acceptable and unacceptable behaviour. Research ethics promotes the aims of scientific research: knowledge, truth, and error avoidance since these standards of moral conduct form a gauge for personal integrity and a basis of trust and cooperation in relationships with others. They help to avoid vague Confucius during research.

I- Moral Foundations of Research

Humans are inquisitive creatures who do not cease the pursuit of the truth (knowledge). Research in the different fields of life is conducted stemming from doing good for humans, animals, the planet,, future generations. This pursuit of the truth is also founded on our duty to respect individuals, our possible duty to animals and our obligation to society

II- Ethical Principles:

The National Centre for Guidance in Education (NCGE), on Research Code in Ethics puts four principles for enrolling in research:

- Respect for the tights and dignity of person: privacy, confidentiality, self-determination and autonomy;
- Competence ; to be qualified to undertake research, integrity: honesty, accuracy, openness.
- Responsibility: avoid doing harm.

When caught in a dilemma, researchers are provided with a set of tools which help them think in such difficult situations. These principles include;

- Minimizing harm;
- Respecting autonomy;
- Protecting privacy
- Treating people equitably;
- Offering reciprocity.

To be ethical; the writer first clearly identifies another source's ideas and words (citing), and then directs a reader to all original sources (referencing). [**Refer to: Research Methodology, Conference Paper Modules for more details about research design, research tools, data collection/ analysis, APA and MLA Styles of documenting research…]**

III- Why are these principles Important?

According to Elsa G. Nadler, "Serious misbehavior in research is important for many reasons, not least because it damages the reputation and undermines public support for science." (Cited in Jadhav 2015). Principles of ethics are important for:

- Promoting the aims of research;
- Prohibition against falsification, or misrepresentation of research data,
- Promote the truth and avoid errors;
- Help build public support,
- Ethical standards promote the values that are essential to collaborative work: trust, accountability, mutual respect, and fairness.

Most researchers forge to come out with a discovery, an invention or any new finding and they want to feel recognition and receive credit for their effort and contributions. They surely do not want to have their ideas and rights stolen/ disclosed prematurely.

IV- Important Terms:

a- Intellectual Property: Intangible creation protected by law. The term "intellectual property" began to be used in the 19th century, though it was not until the late 20th century that intellectual property became commonplace in the majority of the world's legal systems.

b- **Trade Mark**: (also written **trade mark** or **trade-mark** is a type of intellectual property consisting of a recognizable sign, design, or expression which identifies products or services of a particular source from those of others.

c- Trade Secret: Intellectual work or product belonging to a business, not in public domain. Trade secrets are a type of intellectual property that comprise formulas, practices, processes, designs, instruments, patterns, or compilations of information that have inherent economic value because they are not generally known or readily ascertainable by others, and which the owner takes reasonable measures to keep secret.[1] In some jurisdictions, such secrets are referred to as confidential information.

d- **Copyright,:** Statutory grant protecting intellectual property from copying by others for 28 years. Copyright is a type of intellectual property that protects **original works of authorship** as soon as an author **fixes** the work in a **tangible form of expression**. In copyright law, there are a lot of different types of works, including paintings, photographs, illustrations, musical compositions, sound

recordings, computer programs, books, poems, blog posts, movies, architectural works, plays, and so much more!

e- **Patent :** It is document granting owner exclusive monopoly of an invention. It is a type of intellectual property that gives its owner the legal right to exclude others from making, using, or selling an invention for a limited period of years in exchange for publishing an enabling public disclosure of the invention. In most countries, patent rights fall under private law and the patent holder must sue someone infringing the patent in order to enforce their rights. In some industries patents are an essential form of competitive advantage; in others they are irrelevant.

V- To whom does a Researcher Owe the truth?

1- To the public for providing funding support;
2- To individual research participants, out of respect for their autonomy,
3- Colleagues and collaborators (previous and following) whose research may be based on our research work,
4- Research institutions/ university (our employers) for employment, resources, and because their reputation can be affected by what we do.

We owe all these the truth, the whole truth, and nothing but the truth. (**Read the document on my Google Classroom account for more clarification).**

VI- Qualities of Ethical Researchers:

Research integrity is an aspect of moral character and experience. It is an active an adherence to the ethical principles and professional standards essential for the responsible practice of research. Researchers should have the following qualities:

1- **Legality:** Researchers must know the laws and the institutional governmental policies organizing the field and must obey them**.**
2- **Animal Care/ Humanity:** In the domain where they have to deal with and experiment with on animals, researchers have to show proper respect and care for animals and environment. They should avoid conducting unnecessary or poorly designed animal experiments.
3- **Non discrimination:** Discrimination against colleagues or students and informants should be avoided. They ought to be fair to everyone regardless of race, sex, ethnicity; or other factors that are not related to their scientific competence and integrity.
4- **Confidentiality:** Researchers must keep secrets and protect confidential communications, such as papers or grant submitted for publication. They should beware not to reveal personal records, trade or military secrets and patient records.
5- **Openness:** Researchers should be open to criticism and new ideas. They have to share data, results; ideas, tools; resources …

6- **Responsible Publication/ Collegiality:** After research comes publication. The aim of publication should be advancing research, not one's own career. Wasteful and duplicative publications are to be avoided. **Collegiality** has to do with companionship and cooperation between colleagues who share responsibility. A researcher has to be professional, cooperative and respectful in a manner consistent with being a productive member of the department, college, university etc

7- **Respect for Colleagues:** One has to respect colleagues and treat them fairly. Researchers should disclose conflict of interests.

8- **Social Responsibility:** One of eh major purposes of research is promoting good and minimizing harm**.** Researchers have to strive to promote social good and present and mitigate social harms through research, public education and advocacy.

9- **Responsible Mentoring/ Mutual Responsibilities:** Researchers should adhere to mutual responsibilities of mentors and trainees. They have to help to educate, mentor, and advise students, promote their welfare and allow them to make their own decision so that they become autonomous.

10- **Objectivity :** Researchers should avoid improper bias and let facts speak for themselves. They need to strive to be objective when designing experiments, when analyzing and interpreting data**,** while peer reviewing and taking personal decisions, when granting writing expert testimony, and in any other aspect of research where objectivity is expected or required.

Conclusion

In pursuing knowledge and seeking the truth, integrity is a basic requirement for researchers. They need to be responsible and honest so as to convey information truthfully. Researchers should make efficient wise use of resources and avoid waste, adopt legal methods and tools, cooperate with colleagues respectfully, and then report their findings precisely and objectively without errors.

References:

1- Jadhav, V. P. (2015) *Research Ethics, Research Integrity and Chemical Laboratory Safety.* https://fr.slideshare.net/VijayJadhavDeshmukh/ethics-by-vijay

2- Maulana, A. (2015) *Research Ethics and Scientififc Integrity* . https://fr.slideshare.net/1arifmaulana/research-ethic-and-scientific-integrity

3- https://en.wikipedia.org/

4- Ellison; C. (2010) *McGraw-Hill's Concise Guide to Writing Research Papers*. McGraw-Hill's

Bias in Research

Introduction

Every research needs to be designed, conducted and reported in a transparent way, honestly and without any deviation from the truth. Research which is not compliant with those basic principles is misleading. It leads to distorted impressions, to false conclusions, wrong decisions and financial losses. One of the dominant reasons for poorly valid research is bias which can alter research findings due to researchers' skewing of the research process towards specific outcomes.

I- What is Bias?

"Bias is any trend or deviation from the truth in data collection, data analysis, interpretation and publication which can cause false conclusions. Bias can occur either intentionally or unintentionally." It is when the researcher intervenes and influences the systematic course of investigation to reach specific outcomes. This can be by creating biased surveys and following unfair biased sampling. It is true that confounding effect cannot be totally avoided, but bias is immoral if intended.

II- Types of Bias

Bias can occur in all research steps, design, conduct and analysis and reporting.

a- **Bias in Research Design**: This happens when the survey, the questions, and the research methods are selected according to the researcher preferences rather than what works best. For instance when questions emphasize the aspects the researchers is interested in and neglect all the other options because they do not lead us to the results we want. Bias may also occur while selecting participants. The researcher may exclude some part of the population; either because they do not serve the researcher's expected results of through survey administration like sharing it online while part of the participnants cannot have access to the internet.

b- **Bias in Data Collection**: A population consists of all the individuals with a characteristic of interest. It is impossible to study the whole population due to the limited time and money. A representative sample is selected. What is learnt is generalized. if the sample is not representative of the population, conclusions will not be generalizable; the study will lack external validity.

- To avoid selection bias and ensure that a sample is representative, sampling should be random : every subject has equal probability to be included in the study.
- Sampling bias can also occur if sample is too small to represent the target population;
- A research question needs to be considered with much attention and all efforts should be made to ensure that a sample is as closely matched to the population, as possible.

c- **Bias in Data Analysis:** It is when the researcher provides a false presentation of what is obtainable in research environment by analyzing data in a way which gives preference to the conclusions in favor of the research hypothesis. There are various opportunities by which bias can be introduced during data analysis, such as by **fabricating**, **abusing** or **manipulating the data.** This can manifest in:

1- Data Fabrication: reporting non-existing data from experiments which were never done.

2- Eliminating data which do not support your hypothesis (outliers, or even whole subgroups) and focusing on data samples that confirm hid/her thought expectations or personal experience, or favor the research hypothesis.;

3- Using inappropriate statistical tests to test your data; or performing multiple testing,

4- Testing multiple endpoints and performing secondary or subgroup analyses, which were not part of the original plan in order "to find" statistically significant difference regardless to hypothesis.

5- Procedural bias takes place when participants are not given enough time to complete surveys. So they provide half thoughts and incomplete information which will automatically be a false representation of their thought and thus lead to wrong conclusions.

It is said that, "If you torture the data enough, they will confess to anything" Ronald Coase, in Simundic. But what the data confess is biased, invalid and illogical, and useless; data that cannot be generalized to the entire population.

d- Bias in Data Interpretation

By interpreting the results, one needs to make sure that proper statistical tests were used, that results were presented correctly and that data are interpreted only if there was a statistical significance of the observed relationship. Some researchers tend to believe so much in their original hypotheses that they tend to neglect the original findings and interpret them in favor of their beliefs. This can be seen in:

a- Discussing observed differences and associations even if they are not statistically significant (the often used expression is "borderline significance");

b- Discussing differences which are statistically significant but are not clinically meaningful;

c- Drawing conclusions about the causality, even if the study was not designed as an experiment;

d- Drawing conclusions about the values outside the range of observed data (extrapolation);

e- Overgeneralization of the study conclusions to the entire general population, even if a study was confined to the population subset;

Even if this is done as an honest error or due to the negligence, it is still considered a serious misconduct.

e- **Publication Bias:** After designing and conducting research, it is time to share its results with the community by publishing and being open to criticism**.** Still, publication criteria that some journals

require researchers to fulfill, may lead to bias as the latter sometimes feel obliged to ignore some information or methods that do not comply with the publisher's guidelines.

- Unfortunately, scientific journals are much more likely to accept for publication a study which reports some positive than a study with negative findings. Such behavior creates false impression in the literature and may cause long-term consequences to the entire scientific community.
- Ideally, a study should have equal opportunity to be published regardless of the nature of its findings, if designed in a proper way, with valid scientific assumptions, well conducted experiments and adequate data analysis, presentation and conclusions.

f- **Funding Bias:** It is absolutely acceptable to receive funding from a company to perform a research, as long as the study is run independently and not being influenced in any way by the sponsoring company and as long as the funding source is declared as a potential conflict of interest to the journal editors, reviewers and readers.

The concept of bias is the lack of internal validity or incorrect assessment of the association between an exposure and an effect in the target population. In contrast, external validity conveys the meaning of generalization of the results observed in one population to others. There is not external validity without internal validity, but the presence of the second does not guarantee the first. Bias should be distinguished from random error or lack of precision. Sometimes, the term bias is also used to refer to the mechanism that produces lack of internal validity.

III- How to avoid Bias in research

Because of its negative effects, researchers should undertake all possible actions to reduce deviation from the truth. This may include:

1. Gathering data from multiple sources: Be sure to collect data samples from the different groups in your research population.
2. Verifying your data: Before going ahead with the data analysis, try to check in with other data sources, and confirm if you are on the right track.
3. If possible, asking research participants to help you review your findings: Ask the people who provided the data whether your interpretations seem to be representative of their beliefs.
4. Checking for alternative explanations: Try to identify and account for alternative reasons why you may have collected data samples the way you did.
5. Asking other members of your team to review your results: Ask others to review your conclusions. This will help you see things that you missed or identify gaps in your argument that need to be addressed.

When reporting their research, authors should confess and declare the known limitations of their work. It is also the responsibility of editors and reviewers to detect any potential bias. If such bias exists, it is up to the editor to decide whether the bias has an important effect on the study conclusions. In this case, such articles need to be rejected for publication, because its conclusions are not valid.

Conclusion

Skewing the entire research process or part of it to serve personal intentions, preferences and benefits is unethical. Bias in research can cause distorted results and wrong conclusions. These are misleading and if following researchers build on them, the deviation from the truth will lead to more dangerous decisions and financial losses. It is the responsibility of all involved stakeholders in the scientific research- publishers, researchers, research institutions, supervisors, fund provider and editors- to ensure that only valid and unbiased research conducted in a highly professional and competent manner is published.

References

Miguel Delgado-Rodr´ıguez, Javier Llorca. (2004) Bias. J Epidemiol Community Health 2004;58:635–641. doi: 10.1136/jech.2003.008466

Research Bias: Definition, Types and examples. https://www.formpl.us/blog/research-bias

Further Reading: Research Ethics Principles

Introduction

Research ethics may be referred to as doing what is morally and legally right in research. They are actually norms for conduct that distinguish between right and wrong, and acceptable and unacceptable behaviour.

Ethics are central to the research process. Researchers need to take care of various ethical issues at different levels of this process. The reality is there can be ethical concerns at every step of the research process (Bickman& Rog, 2009).

- They must ensure that their research is conducted with honesty, objectivity and integrity
- They must respect people, their cultures, values, religions, economic status and so on.
- Researchers have an obligation to take care of the confidentiality and personal information or identity of the participants as per her choice.
- Researchers should avoid experiments which may pose a threat to both the participants and the researchers themselves.
- Apart from the participant's, the researcher has also an obligation towards society, her colleagues or other researchers and funders of the project.

General Ethics

1. Informed consent is the prime responsibility of the researcher. A standard procedure in professional codes of ethics is ‘informed consent’ (Resnik 1998: 133). Seek consent for the participation from people. In the case of children and few other exceptional cases, the informed consent of participants, as well as their guardians must be obtained.

2. The researcher must reveal all the risks associated with the research to the participants. She should highlight all the negative and positive aspects of the research during the consent process. Aim, objectives and nature of the

research, duration of the study, sponsors and other important information must be revealed to the participants.

3. The knowledge gap between the researcher and the participants must be considered.

4. The privacy, anonymity and confidentiality of the participants and data must be given due consideration (Jensen, 2002). As professional guidelines and some form of a cultural consensus are still being negotiated, research projects need to consider carefully issues of anonymity, confidentiality, and ‘informed consent.’

5. Participants must be given an option of rejecting data-gathering devices like camcorders, audio recorders etc.

6. To make them convenient and easily understandable, the questionnaire and other forms of rating scales must be designed in the native language of the participants.

7. Participants' safety is the prime concern. They should not be exposed to risks greater than they encounter in their normal lifestyle.

8. In case, it's the responsibility of the researcher to protect participants from the risks arising from their research.

9. The researcher should protect and promote the rights and interests of the participants.

10. The researcher must take care of their own safety.

11. She must take care of cultural, religious, economic, psychological, spiritual, physiological, biological, political, social and other issues of the participants.

12. Researchers are expected to consider ethical implications of their research.

13. To uphold the ethical standards in the research process, the researcher must accept and respect the principles of integrity, honesty, objectivity and openness.

General Ethical Principles

1. As some topics are controversial in their nature, so it becomes the prime duty of the researcher to check whether the topic to be studied has innate ethical ramifications. Thus, before finalising the topic, the ethical implications of the topic must be given a thought.

2. Ethics play a paramount role in the studies involving direct human contacts. So, the effects of the research on subjects must be given due consideration. Harmful research should be avoided.

3. Researchers conducting studies involving human subjects should clearly describe and justify the research protocol in the research design.

4. Authorship: Each author must be credited in the manuscript. In the same way, all the persons listed as authors in the article should have contributed significantly to both the research and writing.

5. Data management: The data must be collected in a way that doesn't harm or injure anyone. In order to address and sort out all the issues of conflict, a clear and ethically sound plan for data management must be carried out. Besides that, the ethical and truthful collection of reliable data, ownership and responsibility of collected data, and retaining data and sharing access to collected data with colleagues and the public are the three most important ethical issues must be taken care of in data management process. Data manipulation must be avoided.

6. Avoid plagiarism: Researchers must properly cite the original source. She has to act responsibly and take care of copyrights, intellectual property, patents and other forms of rights. Self-plagiarism - copying one's own work, must be avoided at any cost.

7. Unlike duplication, breaking up or segmenting or slicing a large study into various different papers is called "salami publication" or "salami slicing". This is unethical as the study is based on same hypothesis, method and population. Don't slice the study and publish more than one paper based on the same findings.

8. Avoid any fabrication, falsification and misrepresentation of data or result. Don't indulge in the manipulation of images or videos or other forms of illustrated work. The researcher should report the data honestly. Research misconduct is a sin.

9. The author should retain the raw data as they may be asked for the data at the time of editorial review.

10. The researcher should also unveil her personal or financial interests and must avoid bias.

11. The researchers shouldn't launch personal attacks against any individual, culture, religion etc.

12. They should uphold the moral values of the society.

13. Act sincerely and don't break promises. Avoid discrimination on the basis of demography or on any other condition.

14. Carelessness and negligence must be avoided. The researcher should be critical of her own work and must keep a record of things. Be open to criticism.

15. The researcher must maintain the confidentiality of records and other sensitive information.

16. The research must contribute to the body of knowledge. Duplication must be avoided.

17. The researcher must abide by the rules and regulations of the land.

18. Both humans and animals must be handled carefully.

19. Both negative, as well as positive findings, revealed during the course of research should be reported.

20. Ensure transparency and accountability in all the research activities.

21. Besides researcher and editor, sponsor, publisher and reviewer of the research also have ethical obligations to the publication and dissemination of the findings of the study.

22. People who anyhow helped the researcher in conducting the research must be properly acknowledged.

23. Most of the young researchers send the same manuscript to different reviewers or publications at the same time. It's unethical. Avoid such practices.

24. Resubmitting an already published research paper or article with minor changes or under a different title to a journal violates, “international copyright laws, ethical conduct, and cost-effective use of resources.”

25. The final report must clearly declare the sponsor of the study, institutional affiliations and conflicts of interest.

26. The findings of the research must be disseminated in an easily understandable report.

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