NEARVET

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Ethics in Applied Research in VET

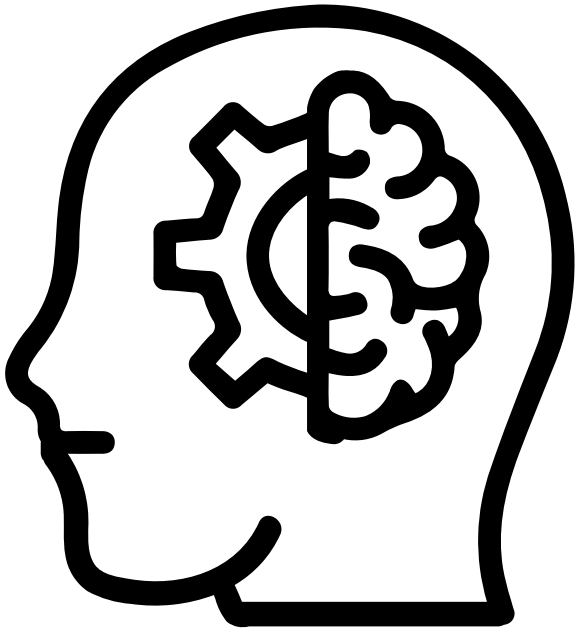
Introduction to Ethics in Research

When most people think of ethics or morals, they think of rules or guidelines for distinguishing between right and wrong, such as the Golden Rule, “Do unto others as you would have them do unto you” or the Hippocratic Oath that serves as a code of professional conduct, “First of all, do not harm”. Hence, the most common definition for ethics is: norms for conduct that distinguish between acceptable and unacceptable behavior.

In the context of research, ethics are crucial for guiding responsible and integrity-driven work. In this Module we will explore fundamental Research Ethics and how they apply in Applied Research in VET, emphasizing the importance of maintaining standards that respect human rights and ensure credible findings. We will examine ethics in Applied Research within VET assignments, illustrating how ethical guidelines are (or are not) practically implemented. By understanding and adhering to these standards, researchers can conduct their work responsibly.

Additionally, we will discuss how to apply and maintain ethical research methods, emphasizing the selection of behaviors that reflect integrity throughout the research process.

By the end of this session, the learner will be equipped to understand, describe, recognize and apply ethical standards in their research.



Historical Context and Definition

The term "ethics" comes from the Greek word "ethos" (ἦθος), which means one's character or disposition, similar to the Latin term "mores." Today, ethics involves evaluating behavior in terms of right and wrong based on specific principles or guidelines. In the research context, ethics focuses on providing guidelines for researchers, reviewing and evaluating research, and establishing enforcement mechanisms to ensure that research is conducted ethically. Interest in research ethics didn't become prominent until the 1960s, when the public became aware of unethical historical biomedical studies, such as the Tuskegee Syphilis Study.

The Tuskegee Study of Untreated Syphilis in the Negro Male:

The Tuskegee Study of Untreated Syphilis in the Negro Male was a 40-years study, conducted between 1932 – 1972 by the U.S Public Health Service (PHS) and the Centres for Disease Control and Prevention (CDC), involving 600 black men – 399 with syphilis, 201 not infected. As an incentive for participation in the study, the men were promised free medicine care.

Although they were provided with medical and mental healthcare that otherwise they would never had, the participants were deceived by the PHS. PHS never informed them about their syphilis diagnosis. Instead they were providing participants with disguised placebos, ineffective

Historical Context and Definition

methods and diagnostic procedures as treatment for “bad blood”. Participants’ informed consent was not collected. And although they were initially being told that the experiment would last for 6 months, it was extended to 40 years.

After treatment funding was lost, the treatment continued without informing the men that they would never be treated.

By 1947, penicillin (antibiotic) became the standard treatment for syphilis and widely available; but none of the infected men were offered the treatment.

The study continued until 1972, under numerous Public Health Service supervisors, when a leak to the press resulted in its termination. By then 28 patents had died directly from syphilis, 100 died from complications related to syphilis, 40 of the patients’ wives were infected with syphilis and 19 children were born with congenital syphilis.

In 1997, President Bill Clinton formally apologized on behalf of the U.S to victims of the experiments, calling it shameful and racist.

The men field a lawsuit that resulted in a $9 million settlement.

Ethics in Research milestones

The Belmont Report (1979)
The Belmont Report is a foundational document in the field of research ethics in the U.S. It was published in 1979 by the National Commission for the Protection of Human Subjects of Biomedical and Behavioural Research.

The report outlines ethical principles and guidelines for research involving human subjects and had had a significant impact on the conduct of research in various fields.

The fundamental principles identified in the Report are:

- **Respect for Persons:** This principle emphasizes the importance of recognizing the autonomy of individuals and protecting those with diminished autonomy. It includes the necessity for obtaining informed consent from research participants, ensuring that they are fully informed about the research and its potential risks and benefits.
- **Beneficence:** This principle requires that researchers maximize potential benefits and minimize potential harms to the participants. It involves assessing the risks and benefits of the research and ensuring that benefits justify any potential risks.
- **Justice:** This principle stresses the need for fairness in the distribution of benefits and burdens of research. It requires that the selection of research subjects be fair and equitable, ensuring that no group is unfairly burdened or excluded from the potential benefits of the research.

Ethics in Research milestones

The Nuremberg Code (1947)

- The Nuremberg Code was developed in response to the unethical medical experiments conducted during World War II. It outlines essential principles for conducting research with human subjects, including voluntary consent, the necessity of beneficial research and the requirement to avoid unnecessary suffering.

The Declaration of Helsinki (1964)

- Adopted by the World Medical Association, Declaration of Helsinki provides ethical guidelines for medical research involving human subjects. It emphasizes the principles of respect for persons, informed consent, and the need for a favorable risk-benefit ratio. The Declaration of Helsinki has undergone several revisions to address emerging ethical issues in research.

The Universal Declaration on Bioethics and Human Rights (2005)

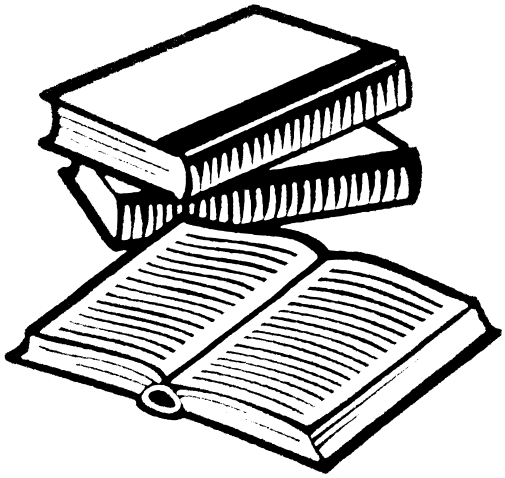
- Adopted by UNESCO in 2005, this declaration sets out principles for the ethical conduct of research in the context of human rights and bioethics. It emphasizes respect for human dignity, autonomy and the need to ensure that research benefits all humanity.

Ethical Considerations in Research: Why They Matter

The choice of research topics and the methods used to conduct research involve critical ethical considerations. These ethical principles protect the rights of research participants, enhance the validity of the research, and maintain scientific and academic integrity. Two perspectives are often taken to analyze whether actions related to research are ethical: the utilitarian perspective and the deontological approach.

According to the utilitarian perspective, actions are ethical if they are likely to bring about more benefits than harm, have positive consequences, and provide the greatest good for the greatest number of individuals. Utilitarians often conduct a cost/benefit analysis when faced with ethical dilemmas. On the other hand, the deontological approach emphasizes strict adherence to universal rules of moral behavior, regardless of the consequences of actions. Thus, research involving deception or withholding information is considered unethical, even if the benefits of such research outweigh the potential costs.

Research ethics are crucial for maintaining scientific integrity, upholding human rights and dignity, and fostering collaboration between science and society. These principles ensure that participation in studies is voluntary, informed, and safe for research subjects. Balancing the goal of important research objectives with ethical methods and procedures is essential, and it is always necessary to prevent any permanent or excessive harm to participants, whether intentional or accidental. Ignoring research ethics diminishes the credibility of the research, as others will find it difficult to trust the data if the methods are morally questionable.



While both Basic and Applied Research adhere to fundamental ethical principles, their application and prioritization can vary significantly. Basic Research emphasizes maintaining scientific standards and intellectual honesty. In contrast, Applied Research, particularly in the VET sector, focuses on practical outcomes, with special attention to consumer privacy, data security, and transparency. Understanding the nature of each type of research helps clarify these differences and ensures that ethical considerations are appropriately addressed.

Here, we outline the fundamental ethical principles of research with a focus on applied research in the VET sector. These principles must be integrated into the entire research process from start to finish.

RESPECT FOR PERSONS

Respect for persons involves recognizing the autonomy and dignity of individuals. It includes obtaining informed consent from participants, respecting their right to make decisions about their participation, and allowing them to withdraw from the study at any time.

JUSTICE

Research should be just as between different members or groups in society. A core principle of justice in research is equal treatment, which further expresses the principle of respect for individuals. Injustice occurs when a person is unfairly denied a benefit to which they are entitled or when a burden is imposed on them without good reason. Researchers must carefully consider the overall societal impact of their work, both in the selection of participants and in evaluating the resulting benefits and burdens.

For instance, the selection of research participants should be scrutinized to ensure that certain groups (e.g., specific racial minorities, one gender, or individuals confined to institutions) are not being systematically chosen merely because they are easily accessible, in a compromised position, or manipulable, rather than for reasons directly related to the research problem. Research funded by public money should provide advantages not only to those who can afford them, and such research should not disproportionately involve individuals from groups unlikely to benefit from its outcomes.

BENEFICENCE AND NON-MALEFICENCE

Based on the beneficence principle, researchers are obligated to maximize potential benefits and minimize any harm or risks to participants. This principle ensures that the well-being of participants is a priority and that the potential benefits of the research outweigh any risks. Non-Maleficence principle requires researchers to avoid causing harm to participants. Researchers should carefully design studies to prevent physical, psychological, or emotional harm and address any potential risks proactively.

INFORMED CONSENT

Informed consent requires that research staff and participants receive appropriate information about the research in a comprehensible manner and without any duress or inappropriate inducement. This information should include details about the research procedure, its purposes, risks, and anticipated benefits, as well as any alternative procedures (if therapy is involved).

Participants should be offered the opportunity to ask questions and withdraw from the research at any time. When a person is not receiving treatment and is participating purely as a volunteer, the standard of disclosure should be even higher. The extent and nature of the information provided should allow individuals, knowing that the procedure is neither necessary for their care nor fully understood, to decide whether they wish to participate in advancing knowledge. Even if some direct benefit to them is expected, participants should clearly understand the range of risks and the voluntary nature of their participation.

Comprehension means that the manner and context in which information is conveyed are as important as the information itself. For instance, presenting information too quickly or in a confusing format can hinder a participant's ability to make an informed choice. Since a participant's ability to understand depends on intelligence, rationality, maturity, and language, it is crucial to tailor the presentation of information to the participant’s capacities. Investigators are responsible for ensuring that the participant has comprehended the information.

Special provisions may be needed when comprehension is severely limited, such as in cases of immaturity or mental disability (e.g., infants, young children, or those with mental disabilities). Participants must have the opportunity to choose, to the extent they are able, whether or not to participate in research. This situation also requires obtaining permission from other parties to protect the participants from harm and to represent their best interests.

Voluntariness ensures that a participant makes their decision without duress or undue influence. Coercion occurs when an overt threat of harm is intentionally made by one person to another to gain compliance. Undue influence, by contrast, happens through offering an excessive, unwarranted, inappropriate, or improper reward or other enticement to gain compliance. Additionally, inducements that would ordinarily be acceptable can become undue influences if the participant is particularly vulnerable. Unjustifiable pressures usually arise when individuals in positions of authority or commanding influence, especially when possible sanctions are involved, urge a course of action on a participant.

CONFIDENTIALITY AND DATA PROTECTION

Individual research participants' and groups' preferences regarding anonymity should be respected, and participants' requirements concerning the confidentiality of information and personal data should be honored. When designing a research project, researchers must consider whether personal data will be collected, such as through interviews with participants. If it is, then obtaining informed consent must include ensuring the confidentiality of the participants. Participants can provide a range of consent types for the use of their data, from allowing quotes with or without attribution to ensuring full anonymity. Research-generated data must be securely stored and appropriately handled in accordance with relevant legislation and institutional policies.

INTELLECTUAL HONESTY AND RESEARCH INTEGRITY

Research should be designed, reviewed, and conducted to ensure that recognized standards of integrity are met, and that quality and transparency are assured. Unacceptable practices include fabricating false data or other

aspects of research, including documentation and participant consent; falsifying information through inappropriate manipulation or selection of data, imagery, or consents; plagiarizing by misappropriating or using others' ideas, intellectual property, or work (written or otherwise) without acknowledgment or permission; and misrepresenting data, such as suppressing relevant findings or data, or knowingly, recklessly, or through gross negligence, presenting a flawed interpretation of data, material interests, involvement, or qualifications. Additionally, improper handling of misconduct allegations, including failing to address possible infringements, attempting to cover up misconduct, or taking reprisals against whistle-blowers, is unacceptable.

CONFLICT OF INTEREST

The independence of research should be clear, and any conflicts of interest or biases must be explicitly stated. A conflict of interest arises when a researcher's duty to conduct research independently is, or appears to be, compromised by obligations to their institution or a funder. Such conflicts may occur if the researcher stands to gain personally, or if a family member or close associate stands to gain, either financially or otherwise, from the research. Additionally, conflicts may arise from commitments or obligations to other individuals or organizations that could potentially influence the independent conduct of the research. Even the appearance of a conflict of interest must be disclosed, even if no actual conflict exists, to ensure transparency and integrity.

Ethical Standards in Applied Research in VET

Below is a comparative analysis of how ethical standards, while consistent, are implemented differently in Academic Research and Applied Research in the VET sector.

Aspect	Basic Research	Applied Research (in VET)
Nature	Driven by curiosity and the quest of knowledge	Focuses on influencing real-world phenomena
Primary Goal	Understanding fundamental principles and theories	Identifying practical solutions to specific problems (developing a new business strategy for the launch of a new product)
Ethical Principles	Honesty in data collection and reporting, Integrity in maintaining scientific standards, respect for participants as subjects of study, transparency in methodology, objectivity in interpretation of results	Respect for participants' consent and privacy and data protection, avoidance of conflict of interest, integrity in pursuing beneficial outcomes, accountability for outcomes, honesty in presenting results and implications, transparency
Context of Ethical Application	Prioritization of KNOWLEDGE generation	Prioritization of PRACTICAL OUTCOMES and SOLUTIONS
Typical Ethical Concerns	Scientific integrity, intellectual honesty	Participant/Consumer privacy, data security, transparency, impact (societal or business), impact on stakeholders, application of findings
Ethical Concerns Nature	More theoretical and abstract	More immediate and tangible

After completing this module, learners are expected to understand ethical standards in VET research and recognize how to apply these standards to ensure that their research respects human rights. Learners should be able to describe ethics within the context of applied research in VET assignments, apply and maintain research methods that adhere to ethical considerations, and choose ethical behaviors when conducting research, including applied research.