

Research Methods (RSC 701)

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Lecture No.1



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Research Methods

First lecture

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Research Methods



Lecture Content

- **This Lecture will include the following points:**
- Research Ethics
- What is ethics in research?
- Why is research ethics important?
- Some theories of ethics.
- Research ethics when dealing with participants.
- How do ethical issues enter into your selection of a research problem?
- Ethical Issues in Data Analysis and Interpretation.

Research Ethics

Ethics is defined as a method, procedure, or perspective for deciding how to act and for analyzing complex problems and issues. For example, on an issue as complex as global warming, one might take an economic, environmental, or ethical perspective on the problem.

What is ethics in research?

The word **ethics** comes from a Greek word '**ethos**' (**character**). **Ethics** is a systematic study of value concepts, 'good', 'bad', 'right', 'wrong' and the general principles that justify applying these concepts. It is not considering the poor hapless participant at the expense of science and society. It is to learn how to make research work" for all concerned .

Why is research ethics important?

There are **several reasons** why it is important to adhere to **ethical norms in research**. First, some of these norms **promote the aims of research**, such as knowledge, truth, and avoidance of error. For example, prohibitions against fabricating, falsifying, or misrepresenting research data promote the truth and avoid error.

Why is research ethics important?

Second, since research often involves a great deal of cooperation and coordination among many different people in different disciplines and institutions, many of these ethical standards promote the **values that are essential to collaborative work**, such as trust, accountability, mutual respect, and fairness.

Why is research ethics important?

For example, many ethical norms in research, such as guidelines for authorship, copyright and patenting policies, data sharing policies, and confidentiality rules in peer review, are designed to protect intellectual property interests while encouraging collaboration. Most researchers want to receive credit for their contributions and do not want to have their ideas stolen or disclosed prematurely.



Why is research ethics important?

Third, many of the ethical norms help to ensure that researchers can be held accountable to the public. **Fourth**, ethical norms in research also help to build public support for research. People are more likely to fund research project if they can trust the quality and integrity of research.



Why is research ethics important?

Finally, many of the norms of research promote a variety of other important .

moral and social values, such as social responsibility, human rights ,animal welfare, compliance with the law, and health and safety. Ethical lapses in research can significantly harm human and animal subjects, students, and the public.



Some theories of ethics ::

Utilitarianism: founded on the ability to predict the consequences of an action; the choice that yields the greatest benefit to the most people is the choice that is ethically correct. One benefit of this ethical theory is that the utilitarian can compare similar predicted solutions and use a point system to determine which choice is more beneficial for more people. This point system provides a logical and rationale argument for each decision and allows a person to use it on a case-by-case context.



There are two types of Utilitarianism::

act utilitarianism and rule utilitarianism::

Act utilitarianism adheres exactly to the definition of utilitarianism. A person performs the acts that benefit the most people, regardless of personal feelings.



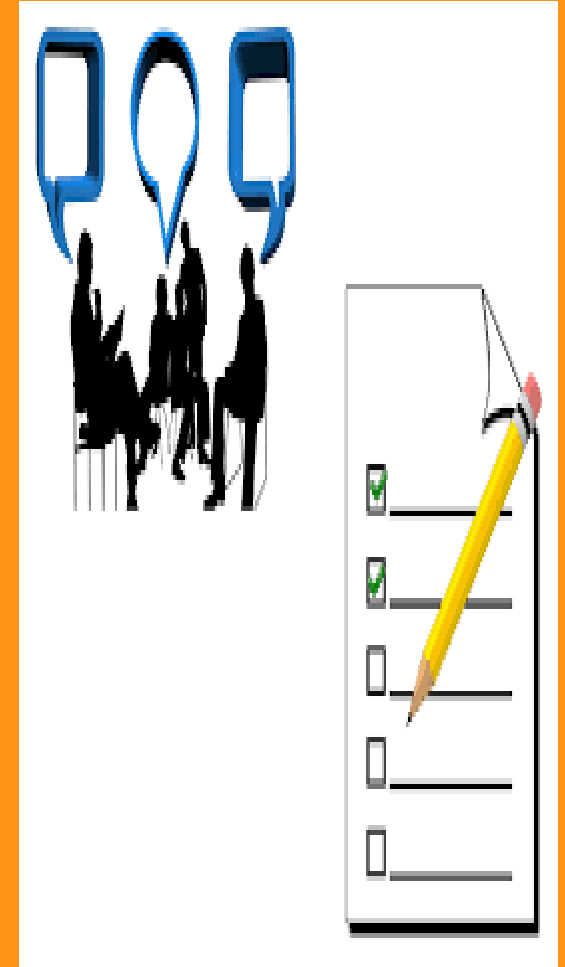
There are two types of Utilitarianism::

Rule utilitarianism takes into account the law and is concerned with fairness. A rule utilitarian seeks to benefit the most people but through the fairest and most just means available. Therefore, added benefits of rule utilitarianism are that it values justice and includes beneficence at the same time.



Deontology::

The deontological theory states that people should adhere to their obligations and duties when analyzing an ethical dilemma. A person who follows this theory will produce very consistent decisions since they will be based on the individual's set duties. Deontology provides a basis for special duties and obligations to specific people



Rights::

The rights set forth by a society are protected and given the highest priority. Rights are considered to be ethically correct and valid since population endorses them. Individuals may also bestow rights upon others if they have the ability and resources to do so .

The society has to determine what rights it wants to uphold and give to its citizens.



Rights:

In order for a society to determine what rights it wants to enact, it must decide what the society's goals and ethical priorities are. Therefore, in order for the rights theory to be useful, it must be used in conjunction with another ethical theory that will consistently explain the goals of the society.



virtue ethics

Judges a person by his character rather than by an action that may deviate from his normal behavior. It takes the person's morals, reputation and motivation into account when rating an unusual and irregular behavior that is considered unethical. Major flaw is that it does not take into consideration a person's change in moral character.



casuistry

compares a current ethical dilemma with examples of similar ethical dilemmas and their outcomes. This allows one to determine the severity of the situation and to create the best possible solution according to others' experiences.

Research ethics when dealing with participants::

Basic principles::

What are the fundamental research ethics principles? All research involving human beings should be conducted in accordance with three basic ethical principles, namely respect for persons, beneficence and justice. These three core principles, originally included in The Belmont Report which came out in 1979, form the universally accepted basis for research ethics.



Research ethics when dealing with participants

It is generally agreed that these principles, which in the abstract have equal moral force, guide the conscientious preparation of proposals for scientific studies. In varying circumstances, they may be expressed differently and given different moral weight, and their application may lead to different decisions or courses of action. Below the aforementioned three basic research ethics principles are briefly discussed one by one.

Beneficence::

refers to the ethical obligation to maximize benefits and to minimize harms. This principle gives rise to norms requiring that the risks of research be reasonable in the light of the expected benefits, that the research design be sound, and that the investigators be competent both to conduct the research and to safeguard the welfare of (“mental integrity”, psychological well-being) of the study participants.

Beneficence further proscribes the deliberate infliction of harm on persons; this aspect of beneficence is sometimes expressed as a separate principle, nonmaleficence (do no harm). Beneficence requires a commitment to minimizing the risks associated with research including psychological and social risks and maximizing the benefits that accrue to research participants. Researchers must articulate specific ways this will be achieved.

In the ethics of research involving human research participants the principle refers primarily to distributive justice, which requires the equitable distribution of both the burdens and the benefits of participation in research.



Justice requires a commitment to ensuring a fair distribution of the risks and benefits resulting from research. Those who take on the burden of research participation should share in the benefits of the knowledge gained. In other words, the people who are expected to benefit from the knowledge should be the ones who are asked to participate.



We evaluate the cost and benefits for most decisions in life, whether we are aware of it or not. This can be quite a dilemma in some research projects and/or experiments. The first thing to do before designing a study is to consider the potential cost and benefits of the research.



- In addition to the above-mentioned established principles, some bioethicists have suggested that a fourth principle, respect for communities, should be added. Respect for communities “confers on the researcher an obligation to respect the values and interests of the community in research and, wherever possible, to protect the community from harm.



Some scholars believe that this principle is, in fact, fundamental for research when community-wide knowledge, values, and relationships are critical to research success and may in turn be affected by the research process or its outcomes.



How do ethical issues enter into your selection of a research problem?

In writing an introduction to a study, the researcher identifies

A significant problem or issue to study and presents a rationale for its importance.

During the identification of the research problem, it is important to identify a problem that will benefit individuals being studied, one that will be meaningful for others besides the researcher. A core idea of action/participatory research is that the inquirer will not further marginalize or disempower the study participants.

How do ethical issues enter into your selection of a research problem?

To guard against this, proposal developers can conduct pilot projects to establish trust and respect with the participants so that inquirers can detect any marginalization before the proposal is developed and the study begun.

Ethical Issues in the Purpose and Questions

In developing the purpose statement or the central intent and questions for a study, proposal developers need to convey the purpose of the study that will be described to the participants.

- . Deception occurs when participants understand one purpose but the researcher has a different purpose in mind.

Ethical Issues in the Purpose and Questions

It is also important for researchers to specify the sponsorship of their study.

For example, in designing cover letters for survey research, sponsorship is an important element in establishing trust and credibility for a mailed survey instrument.

Ethical Issues in Data

As researchers anticipate data collection, they need to respect the participants and the sites for research.

Many ethical issues arise during this stage of the research.

An ethical issue arises when there is not reciprocity between the researcher and the participants.

Both the researcher and the participants should benefit from the research.

In some situations, power can easily be abused, and participants can be coerced into a project.

Involving individuals collaboratively in the research may provide reciprocity.

Highly collaborative studies, popular in qualitative research, may engage participants as coresearchers throughout the research process, such as the design, data collection and analysis, report writing, and dissemination of the findings

Ethical Issues in Data Analysis and Interpretation

When the researcher analyzes and interprets both quantitative and qualitative data, issues emerge that call for good ethical decisions.

In anticipating a research study, consider the following:

- How will the study protect the anonymity of individuals, roles, and incidents in the project?

Ethical Issues in Data Analysis and Interpretation

For example, in survey research, investigators disassociate names from responses during the coding and recording process. In qualitative research, inquirers use aliases or pseudonyms for individuals and places, to protect identities.

- Data, once analyzed, need to be kept for a reasonable period of time .

Ethical Issues in Writing and Disseminating the Research

The ethical issues do not stop with data collection and analysis; issues apply as well to the actual writing and dissemination of the final research report.

Other ethical issues in writing the research will involve the potential of falsifying ,or inventing findings to meet a researcher's or an audience's needs.

Ethical Issues in Writing and Disseminating the Research

These fraudulent practices are not accepted in professional research communities, and they constitute scientific misconduct.

In planning a study, it is important to anticipate the repercussions of conducting the research on certain audiences and not to misuse the results to the advantage of one group or another.

The researcher needs to provide those at the research site with a preliminary copy of any publications from the research



Finally, it is important to release the details of the research with the study design so that readers can determine for themselves the credibility of the study.

Detailed procedures for quantitative, qualitative, and mixed methods research will be emphasized in the chapters to follow.



Also, researchers should not engage in duplicate or redundant publication in which authors publish papers that present exactly the same data, discussions, and conclusions and do not offer new material. Some biomedical journals now require authors to declare whether they have published or are preparing to publish papers that are closely related to the manuscript that has been submitted .



Thank you