

Evaluation of Research Risk

Aziz Burkhanov
Assistant Professor
NU GSPP

Why to evaluate research risks?

- To protect individuals from harm associated with participation in research
- Risks are not limited only to biomedical or clinical research
- Social and behavioral science research risks may be more ambiguous and less predictable (including individual reactions to certain events or questions)

Various kinds of risks:

- **Social**
- **Psychological**
- **Economic**
- **Legal**
- **Physical harm**
- **Group harm (when group is the focus of study)**

Risks categories:

- **Invasion of privacy**
- **Breach of confidentiality**
- **Study procedures**

Invasion of privacy

- **personal information is accessed or collected without the subjects' knowledge or consent**
- **Subject's participation in a study is revealed despite assurances that this would not happen**

Breach of confidentiality

- Information obtained by researchers may negatively affect subjects if disclosed outside the research setting
- Unauthorized release of data which could have a negative impact on the subjects' psychological, social, or economic status.

Breach of confidentiality

Examples:

- accidental disclosure of a subject's health issues,
- sexual orientation,
- illegal migrant status

Study procedures

- In some cases, simply taking part in research can put subjects at risk (subjects engaged in irregular/illegal activities)
- Focus groups: disclosure by the subjects themselves
- Trauma/abuse: asking subjects questions about trauma or abuse may pose risks of re-traumatization.

Assessing risks: Probability and Magnitude

- **Probability of harm** – the likelihood that a specific harm may occur. Not all possible harms are equally probable.
- **Magnitude (severity) of harm** – in case it occurs.

The interaction between these two elements is a crucial factor in determining the level of risk of harm in a study.

Assessing risks: Situation and time

- Risks of harm in research participation are specific to time, situation, and culture
- What may be a socially sensitive issue or topic at one time or place may not be so at another time or place

Assessing risks: Subject population

Risks of harm will differ according to the subject population.

Example:

Study of the smoking behavior will have different focus for adults (health hazard) and minors (questions of legality/morality)

Minimizing and managing risks

- Potential subjects should be given enough information to make a decision whether they are willing to accept risks and participate in the research.
- If research questions will be of a sensitive nature, subjects need to be forewarned.

Minimizing and managing risks

- **Subjects need to know what steps will be taken to protect confidential information**
- **Any potential limits to protection of identifiable personal information should be explained (in focus groups, for example)**
- **When a possible disclosure of subject responses is the primary source of potential harm, collecting data anonymously may provide the best protection**

Minimizing and managing risks

If collection of identifiers is necessary, there are ways to decrease risks of unauthorized access:

- **Remove all direct identifiers as soon as possible.**
- **Substitute codes for identifiers.**
- **Maintain code lists and data files in separate secure locations.**

Minimizing and managing risks

- Use accepted methods to protect against indirect identification, such as aggregate reporting or pseudonyms.
- Encrypt transmitted and stored data.
- Access and store data on computers without Internet connections.
- Apply for a waiver of the consent form to IREC (if consent form is the only document linking subjects to the study)