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**Ethical Considerations in the
Total Survey Error Context**

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Overview

- Legal and professional regulations and socio-political contexts can lead to differences in how ethical protocols are realized across countries.
- Differences in the implementation of ethical standards contributes to the sources of total survey error (TSE)
 - TSE describes statistical properties of survey estimates by incorporating a variety of error sources and is used in the survey design stage, in the data collection process, and evaluation and post survey adjustments (Groves & Lyberg, 2010)
 - The TSE framework is generally used to design and evaluate a single-country survey
- The framework has been extended to 3MC surveys and the impact of TSE on overall comparison error (Smith 2011)



Objectives

- What are the existing ethical standards and emerging ethical considerations in 3MC survey research?
- How can differences in implementation of ethical protocols in the 3MC context be understood in the framework of TSE and resultant comparison error?

Outline of Talk

- The TSE framework and comparison error
- Current understanding of ethics in the context of human subjects research in the scientific community
- Ethical responsibilities that researchers have vis-à-vis the scientific community, the general public, the government, and the legal realm
- Ethical considerations in the framework of the Belmont Report, considering both respondents as well as interviewers
- Criteria in informed consent protocols

The TSE Framework and Comparison Error

- Coverage error
 - Occurs in the study design phase when elements in the target population are not on the sampling frame and have a zero chance of being selected (Lepkowski, 2005).
- Sampling error
 - Occurs in the study design and data collection phases,, and results from a systematic failure to observe some sample elements with different characteristics on a target variable (Groves et al. 2009).
- Unit nonresponse error
 - Occurs in data collection, when an interview with a sampled respondent fails because of noncontact, non-cooperation, language barrier, health or other issue.
- Adjustment error
 - Occurs in the evaluation and post-survey adjustment phase to account for selection bias, coverage error, and unit nonresponse error. Oft-used data from official statistics are not always available or accurate
- Measurement error
 - Occurs when the true value differs from the value provided by respondent and can occur both within the response process as well as at the structural level (Groves et al., 2009).

Sources: Pennell et al., Forthcoming; Smith, 2011

Ethics in Human Subjects Research

The Survey Lifecycle

- The World Health Organization defines human subject research as:

- The system (i) are experimental interaction their environment investigatc medical or*

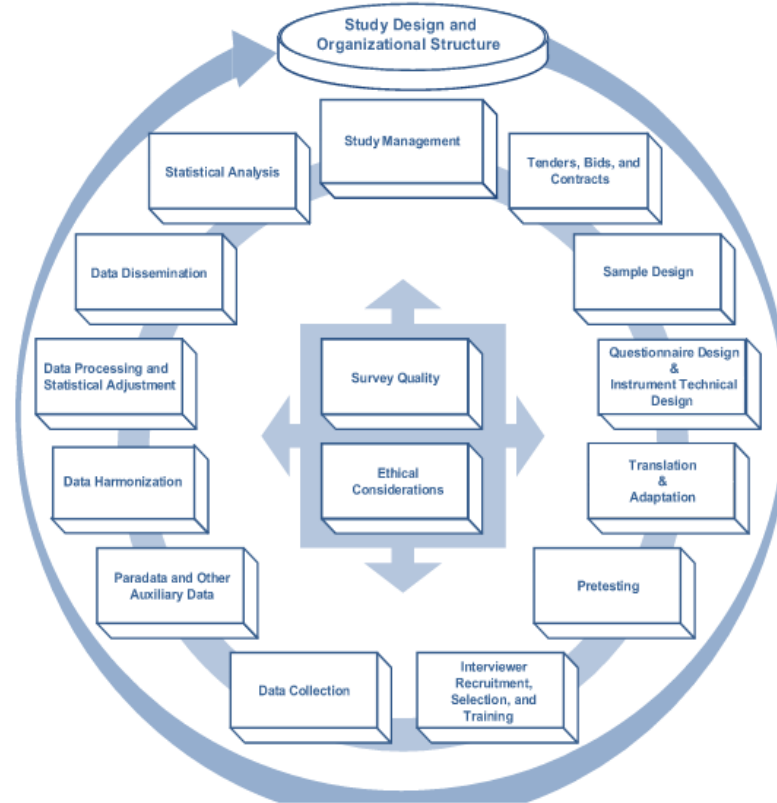
which human beings erivation, or other ough alteration of itifiable through ological material or tion, 2009).

- Declaration of I
- Basis for ir involved in

of human subjects

- The Belmont R
- Issued in 1 Human Su
 - Three key research ir and *justice* (United States, 1978)

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Ethical Responsibilities in the Scientific Community and the Legal Domain

- Professional organizations
 - AAPOR, WAPOR, ESOMAR, ISI
- Country-specific legislation
 - United States Research Act of 1974 (P.L. 93-348, July 12, 1974); Canadian Panel on Research Ethics, European Union regulations (European Commission, 2012)
- Example from the field: 3MC survey in the Middle East
 - Host university **and** federal sponsor required HS approval from the coordinating center
 - The federal sponsor required HS approval from study country governments.
 - Several study country survey firms had to request HS approval from governments, who censored the questionnaires
 - Significant administrative burden in meeting these differing requirements, disparity among the starting times of the production period
- Impact within the TSE framework.
 - Potential **nonresponse error** and **measurement error** was introduced because the surveys were not simultaneously conducted across all countries
 - Censorship of the questionnaire resulting from government regulation contributed to **measurement error**

The Belmont Report

- Three unifying principles in the Belmont Report:
 1. Respect for persons
 2. Beneficence
 3. Justice



The Belmont Report: Respect for Persons

Definition: The protection of the autonomy of all people, treating them with courtesy and respect and allowing for informed consent

- Researchers and interviewers must be truthful and not engage in fraudulent claims, especially about benefits to participation
- Disclosure of the topic/sponsor to the extent possible
- Courteous interviewer behavior while encouraging respondent participation
- Honest risk-benefit analysis
- Recognition of potential for increased respondent and interviewer burden
- Ability of respondents to provide voluntary and informed consent



The Belmont Report: Respect for Persons

Examples from the field

- Full disclosure of details can impact both nonresponse error and measurement error
 - In disclosing sponsorship in the 3MC survey in the Middle East, there was concern that respondents in some study countries would be reluctant to participate if they knew that the study was affiliated with a U.S. institution.
 - In some contexts, such as surveying in areas of armed conflict, Mneimneh et al. (2014) notes “Researchers need to give careful thought to how the study is introduced in any scripted material and how it is presented by interviewers... From a measurement perspective, affiliating the study with a political party or even an aid agency may influence respondents’ answers, affecting the validity of the data” (p. 142-143).
- Intentional or inadvertent dishonesty to respondents can impact both nonresponse error and measurement error
 - Pressure to comply with survey requests after tsunami in Sri Lanka, earthquake in Haiti, infrastructural promises in India (Sumathipala & Siribaddana, 2005; Andre & Lusk, 2011; Armer & Grimshaw, 1973)

The Belmont Report: Beneficence

Definition: The philosophy of “do no harm” while maximizing benefits for the research project and minimizing risks to the research subjects.

- Researchers have the obligation to keep respondent burden as low as possible (Bradburn, 1978; Converse & Presser, 1986; Dillman, Smyth, & Christian, 2009; Fowler, 1995).
- Determine whether asking respondents to provide information on specific topics could bring harm or political repercussions
- Consider whether the requested information may be seen as private, threatening or embarrassing by the population interviewed
- Consider interviewer safety and security, particularly in a challenging area such as a disaster or conflict zone.
- Protects the rights to privacy of study participants at all times.



The Belmont Report: Beneficence

Examples from the field

- Requesting information on specific topics could bring harm or political repercussions
 - A topic (e.g., criticism of the current govt) may bring harm to respondents in one country (e.g., Turkey), but not in another (e.g., Tunisia)
 - If the topic is censored in one country but not another, measurement error can occur
 - If the topic is not censored, fear of participation can lead to differences in nonresponse error
- Consider whether the requested information may be seen as embarrassing by the population interviewed
 - A topic may be embarrassing in one country but not another, necessitating differences in mode to meet respondent's need for comfort, resulting in measurement error



The Belmont Report: Justice

Definition: Ensuring reasonable, non-exploitative, and well-considered procedures are administered fairly — the fair distribution of costs and benefits to potential research participants — and equally.

- When designing the survey sample and defining the target population, do not exclude minority groups, native populations, or aboriginal peoples unless it is appropriate to do so.
- Monetary incentives may disproportionately encourage survey participation
- Decisions born out of logistical or budgetary constraints can be perceived as exclusionary to certain populations. Such decisions should be thoroughly explained to interviewers so as not to engender perceptions of unfairness.



The Belmont Report: Justice

Examples from the field

- Monetary incentives must be allocated evenly across the study population, but may disproportionately encourage the participation of people with low incomes compared to those with high incomes
 - Differences in participation can lead to nonresponse error.

Informed Consent

- Important component of the ethical principle *respect for persons* and is mechanized through the idea that all people deserve the right to exercise their autonomy and agency to make a choice to participate.
- Informed consent may be oral or written
- Informed consent includes specific criteria, although implementation may differ across country.
 - Brief description of the survey or examples of questions or topic areas that can be easily understood
 - Information conveyed in a format that is easy for respondents to understand,
 - A clear indication that participation is voluntary and that the information provided will be held confidential, unless there are special circumstances in which respondents have waived confidentiality.
 - Disclose use of any electronic or surveillance equipment (e.g., taping, recording, photographing)
 - A clear description of any benefits and risks associated with participation should be provided.
 - Refrain from using coercion through force or threats or excessive or disproportionate influence to recruit research participants
 - Train Interviewers to respect the rights of individuals to refuse to be interviewed, to refuse part of the interview, and to terminate an interview in progress.



Informed Consent: Examples from the field

- Whether consent is obtained in oral or written form depends on a number of factors and the decision can have differential impact on nonresponse error and measurement error
 - Use of written consent can lead to nonresponse error
- Obtaining informed consent and assent may be simple and straightforward in one location but require multiple steps in another
 - In Western cultures, simple parental consent may suffice when studying minors
 - In Mali, a medical research team that wanted to study children under 9 years of age who had been exposed to malaria first discussed the study with a group of village elders. Next, they convened focus group discussions with the heads of extended families. Then, they held similar discussions with mothers whose children might become part of the malaria study. Finally, they obtained the consent of the individual families involved (Dumbo, 2005).
 - Different approaches to obtaining consent and assent can impact nonresponse error and measurement error

Final Remarks

- Researchers are often constrained by ethical considerations in individual countries, and this may lead to the inability to attain strict comparability across study locales in a 3MC survey, and this can lead to differences in TSE across countries, and, ultimately, to comparison error.
- A thorough understanding of the ethical considerations and knowledge of the potential for error allows for adequate documentation and reflection about measurement and assessment of the error.
- It is important to recognize that researchers may confront tradeoffs between ethical principles and that there is no one ethical principle that overrides all others.
- We must acknowledge such tradeoffs and prioritize accordingly, ensuring that participating research teams follow widely accepted standards for ethical, professional, and scientific conduct from the design of the study through implementation, dissemination, and reporting.

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Thank you!
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