SBER 101

Overview of Social, Behavioral, and Educational Research

The SBER Subcommittee

of The Regulatory Foundations, Ethics, and Law Program

2014
Presentation Outline

• Components of Social, Behavioral, and Educational Research (SBER)
• What is SBER?
  • Definitions
  • Researchers
  • Disciplines
• Common SBER methodologies
• Resources

http://catalyst.harvard.edu/programs/regulatory/sber.html
Components of SBE Research

- Focused on human behaviors, attitudes, and beliefs as well as the actions of individuals and groups
  - Ranging from families, communities, demographic cohorts, and cultural groups to institutions, regions, and nations

- Designed to further our understanding of fundamental mechanisms and patterns of behavioral and social functioning

- Meant to predict or influence health outcomes, risks, or protective factors

- Concerned with the impact of illness or risk for illness on behavioral or social functioning

http://catalyst.harvard.edu/programs/regulatory/sbe.html
Why is SBER Important?

- Research in the social and behavioral sciences has broad implications.
- SBER promotes health and well-being by addressing social problems at individual and community levels.
- Contributions from economics, sociology, geography, political science and other disciplines provides scientific knowledge and expertise of relevance to communities, health care providers, and policy makers.
- Knowledge gained informs the development of prevention and intervention programs and facilitates strategies in policy and practice.

Adapted from Scioloi, NSF slides
What is SBER?

SBE research looks at the relationships and interactions between and among individuals and groups.

What does SBER stand for?

- **Social**: systemic patterns of social relationships, behavior, structure, and change
- **Behavioral**: human cognition, language, social behavior, and culture
- **Educational**: focused on learning
- **Research**

The “E” can also be:

- **Economic**: focused on business, finance, and the economy
- **Environmental**: Both natural and human created environmental issues such as climate, noise, environmental hazards, residential and other built environments and their effects on behavioral and social functioning (NIH Definition)

*Adapted from Winslow, NSF slides*
The NIH Definition

Research on behavioral and social processes involves the study of human or animal functioning at the level of the individual, small group, institution, organization, community, or population

- **Individual Level**: behavioral factors such as cognition, memory, language, perception, personality, emotion, motivation, and others

- **Group/System Level**: social variables such as the structure and dynamics of:
  - small groups (e.g. couples, families, work groups, etc.)
  - institutions and organizations (e.g. schools, religious organizations, etc.)
  - communities (defined by geography or common interest)
  - larger demographic, political, economic, and cultural systems

- **Behavioral and Social Processes**: the interactions within and between these two levels (e.g., the influence of sociocultural factors on cognitive processes or emotional responses)

- **Environmental Factors**: (e.g., climate, noise, environmental hazards, residential and other built environments) and their effects on behavioral and social functioning

NIH Website: [http://obssr.od.nih.gov/about_obssr/BSSR_CC/BSSR_definition/definition.aspx#bfr](http://obssr.od.nih.gov/about_obssr/BSSR_CC/BSSR_definition/definition.aspx#bfr)
What do SBE Researchers do?

SBE researchers study behavior on the basis of systemic, rational, demonstrable cause-effect relationships.

SBE researchers:
- tackle a broad range of questions, and
- use a variety of methodologies to increase knowledge and understanding of:
  - Human behavior
  - Attitudes
  - Beliefs
  - Interactions
  - Social and economic systems
  - Organizations and institutions
The Scientific Methods of SBE Researchers

• Must be *both* valid and reliable
  - **Valid**: the research measures what its supposed to
  - **Reliable**: the research yields reasonably consistent results

• Findings can be repeated and the data collection is objective
3 Core Disciplines in Behavioral Sciences

1. **Psychology** – the behavior of the **individual** (personality, learning, etc.)

2. **Sociology** – behavior in **groups**; focuses on:
   - How and why groups develop
   - The mores and folkways that govern them
     - Mores – formal, written rules or laws
     - Folkways – informal, accepted ways of doing things

3. **Anthropology** – learned behavior within a **culture** (culture knowledge, beliefs, values, customs, etc.)
Additional SBER Disciplines

**Disciplines**

- Archaeology
- Linguistics
- Economics
- Political Science

**Interdisciplinary Fields**

- Cognitive Neuroscience
- Developmental & Learning Sciences
- Documenting Endangered Languages
- Perception, Action & Cognition
- Human Origins
- Geography & Regional Science
- Decision, Risk & Management Sciences
- Science of Science & Innovation Policy
- Innovation & Organizational Sciences
- Methodology, Measurement & Statistics
- Science, Technology, & Society
- Law & Social Sciences

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SBER Methodologies

- **Experimental Design**
  - Designed to answer questions about cause and effect
  - Permits the researcher to control or manipulate conditions

- **Ethnography**
  - Study of human behavior in the natural settings in which people live
  - Based on fieldwork; the researcher is immersed in the ongoing everyday activities of the designated community for the purpose of describing the social context, relationships, and processes relevant to the topic under consideration

- **Natural Observation**
  - Analyze a situation without getting involved (researcher stays out of the way)
  - Commonly referred to as Field Study
  - Most of the time the participants don’t know they are being watched

- **Participant Observation**
  - Researcher joins an existing group (e.g., joins the military, joins a cult, etc.)

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SBER Methodologies

• **Interviews**
  — Face-to-face situations with interviewer and interviewee
  — Obtain a first-hand appreciation

• **Surveys**
  — Systematic and standardized approach to collect data
  — In-person, computer, mail, telephone

• **Focus Groups**
  — In-depth discussion in which a small number of people (usually 8-12) from the target population discuss topics that are of importance for a particular study or project
  — Can be used
    • for idea generation
    • in conjunction with a quantitative method
    • as a primary data-collection method
Conclusion

• SBER seeks to improve our understanding of human behavior, attitudes, beliefs, interactions, social and economic systems, organizations, and institutions

• SBER encompasses a range of:
  - **Research Populations**: families, communities, demographic cohorts, cultural groups, institutions, regions, nations, etc.
  - **Methodologies**: interviews, surveys, focus groups, observation, behavioral manipulations, etc.
  - **Disciplines** psychology, sociology, anthropology, economics, political science, etc.

• Knowledge gained from SBE research informs the development of prevention and intervention programs and facilitates strategies in policy and practice
Resources

• National Science Foundation: http://www.nsf.gov/bfa/dias/policy/human.jsp

• American Anthropological Association: http://www.aaanet.org/cmtes/ethics/IRB.cfm

• National Institutes of Health (NIH) Office of Behavioral and Social Sciences Research: http://obssr.od.nih.gov/about_obssr/about.aspx
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