Chapter 4 Rubin and Babbie -- Problem Formulation

Overview of the Research Process (see diagram Figure 4-1)

Phase 1. Problem formulation--select the topic and developing the research question
Phase 2. Designing the study--examine alternative designs and select one
Phase 3. Data collection--implement the design; obtain data for processing and analysis
Phase 4. Data processing--organize the data obtained in preparation for analysis
Phase 5. Data analysis--manipulate the processed data to answer the research question
Phase 6. Interpreting the findings--determine what the results of the study mean
Phase 7. Writing the research report--include introduction, methods, results, discussion

The Research Proposal (see Plan Masters Research Handbook and Moss chapter for more complete information)

Problem or objective--what topic will you study? how is it significant?
Literature review--what have others written about your topic?
Subjects for study--from whom will you collect information?
Measurement--how will you define and measure the key variables in your study?
Data collection methods--what steps will you follow in actually collecting data?
Analysis--what statistical tests will you use? how will you analyze qualitative data?
Schedule--when will you do what?
Budget--how much will the various components of the research cost?
(Ethical issues should also be addressed)

Problem Identification

Select topics that meet community needs or address practical problems.
Social work research can overlap with research from other disciplines.
The research topic should be 1) important (so what?), 2) relevant to priorities of policy and practice, 3) specific about the question to be answered, 4) subject to systematic observation.
The research question should 1) have more than one possible answer, 2) be narrow and specific, and 3) posed in a way that can be answered by observable evidence
**Problem Identification** (continued)

The emerging research study should be feasible in terms of time, money, and obtaining cooperation from relevant members of the community.

The literature review should be ongoing to assist in selecting and clarifying the topic and in assisting in defining key concepts and other aspects of the research study.

Including others (especially information users and decision makers) can be helpful in problem formulation.

**Purposes of Research**—many studies will have elements of all four purposes

- **Exploration**—research conducted to provide a beginning familiarity of a topic
- **Description**—careful and deliberate observations aimed at providing accurate and precise descriptions of situations and events
- **Explanation**—focuses on why something occurs; tests predictions (hypotheses)
- **Evaluation**—can include elements of exploration, description, and exploration, with the purpose of evaluating social policies, programs, and interventions

**The Time Dimension**

- **Cross-sectional studies**—a study based on observations representing a single point in time
- **Longitudinal studies**—a study design involving collection of data at different points in time
  - **Trend studies**—monitor a given characteristic of some population over time
  - **Cohort studies**—some specific group is studied over time (may be different individuals)
  - **Panel studies**—data are collected from the same sample (panel) at different points in time

**Units of Analysis**—the whom or what being studied

- **Individuals**—most typical; describe and explain groups based on observations of individual
- **Groups**—studying social system larger than individual (e.g. gangs, families, communities)
- **Social artifacts**—products of social beings or their behavior (e.g. books, buildings, jokes)
- **The ecological fallacy**—make assertions about individuals based on larger unit findings
- **Reductionism**—overly strict limitation on the kinds of concepts and variables to be considered as causes in explaining a wide range of human behavior.