

## **Lecture Notes**

### **Chapter 3: The Use of Theory**

Part of reviewing the literature involves determining which theories should be used to explore the research questions. Theories can be used in quantitative, qualitative and mixed methods approaches. In the quantitative approach, researchers use theory to provide an explanation about the relationships among the variables of interest. In qualitative research the theory may be generated as the final outcome of the study or the theory may be used to provide a lens that shapes what is looked at in the study. In mixed methods research, researchers may test theories and generate them.

Chapter three begins with a focus on the role of theory in quantitative research. The chapter includes a definition of theory followed by the use of variables in a quantitative study and a discussion of the placement of theory. Chapter two continues with a discussion of theory in qualitative research. Examples are given in the chapter of alternative uses of theory for qualitative researchers. The chapter closes with a discussion of the use of theory in mixed methods research. Mixed methods researchers use theory as a framework which informs the many aspects of the study design. Two frameworks are explored: 1. The social science framework and 2. A transformative framework.

## **Quantitative Theory Use**

### **Variables in Quantitative Research**

- Variable- a characteristic or attribute of an individual or an organization that can be measured or observed and varies
- Distinguished by two characteristics
  - Temporal order – one variable precedes another in time
  - Measurement – Order
- Independent variables – cause, influence or affect outcomes
- Dependent variable – depend on the independent variables; outcomes
- Intervening (mediating) – Stand between the independent and dependent variables
- Moderating – independent variables that affect the direction and or strength of the relationship between IV and DV
- Control variables – independent variable that is measured because of its potential to influence the DV
- Confounding variable – Not measured but its influence on the DV cannot be easily detected

### **Definition of a Theory in Quantitative Research**

- An interrelated set of constructs formed into propositions or hypotheses that specify the relationships among variables
- Specifies how or why the variables are related
- Theories develop when researchers test predictions
- They vary in the breadth of coverage
  - Micro-level – provide information on small slices of time, space or numbers of people (interpersonal)
  - Meso-level – link micro and macro levels (Organizations, communities, social movements)
  - Macro-level – explain larger aggregates (social institutions, cultural systems)

### **Forms of Theories in Quantitative Research**

- Series of interconnected hypotheses
- Series of if-then statements explaining why independent variables may influence or cause dependent variables
- Visual models depicting how variables relate to each other

### **Placement of Quantitative Theories**

- Deductive approach – researcher tests or verifies a theory
  - Examines hypotheses or research questions
  - Defines and operationalizes variables derived from the theory
  - Measures or observes variables
- Placement
  - Introduction
    - Advantages: Familiar and conveys a deductive approach

- Disadvantages: Difficult for the reader to isolate theory from other components in the research process
- Literature Review
  - Advantages: Theories found in the literature so inclusion here is logical
  - Disadvantages: Difficult for the reader to see the theory in isolation from other topics being reviewed
- After the hypothesis or research questions as a rationale
  - Advantages: Helps to explain how and why variables are related.
  - Disadvantages: Writer may include theoretical rationale and leave out a discussion about the origin and rationale for the use of the theory
- In a separate section
  - Advantages: Clearly separates theory from other components
  - Disadvantages: Isolated from other components. The reader may not be able to connect it with other components of the research process.

### **Writing a Quantitative Theoretical Perspective**

- Look in the discipline based literature for a theory
- Examine prior studies that address the topic or a closely related one
- Ask the question that bridges the independent and dependent variables
- Script out the theory section so that it includes the theory to be used, the central hypotheses, past use and application of the theory and how it relates to the proposed study.

### **Qualitative Theory Use**

#### **Variation in Theory Use in Qualitative Research**

- Broad explanation for behaviors and attitudes
- Theoretical lens or perspective. For example:
  - Feminist perspectives
  - Racialized discourses
  - Critical theory
  - Queer theory
  - Disability inquiry
- Theory as the end point – inductive. Builds from data to broad themes
  - Researcher gathers detailed information from participants
  - Forms this information into categories or themes
  - Develop themes into broad patterns, theories or generalizations
- Some qualitative studies do not employ any specific theory

### **Mixed Methods Theory Use**

- May be deductive or inductive
- May take one of two forms
  - Social science framework
  - Transformative framework

### **Social Science Theory Use**

- Overarching framework for mixed methods research
- Theory drawn from theories found within social science research
- Uses procedures for quantitative theory use in a study

### **Transformative Paradigm Theory Use**

- Use of this method growing in mixed methods research
- Especially applicable to the study of community health issues and the study of marginalized people
- Strong focus on studying issues of discrimination and oppression and recognizing diversity among study participants
- Identifying a mixed methods approach as transformative can be done by:
  - Indicating in the opening passages that a transformative framework is being used
  - Mentioning the framework early in the study
  - Placing the framework within a theoretical body of literature
  - Involving the community of interest in the data collection process
  - Letting the research question take an advocacy stance in its orientation
  - Indicating a mixed methods approach in the design within the transformative framework
  - Talking about the researcher's experiences that shapes his/her understanding of the participants and issues
  - Ending the study by advocating for change