

## CHAPTER 6 INDEXES, SCALES, AND TYPOLOGIES

### II. Indexes versus Scales

### III. Index Construction

- A. Item selection—the first step in the process of constructing an index is determining which items will be used.
  1. Face validity—when selecting an item, it must pass the test of face validity.
  2. Unidimensionality—it is important that the items in the index represent only one dimension of the concept.
  3. General or specific—the researcher must decide if the concept is to be measured broadly or narrowly. The items chosen should reflect this decision.
  4. Variance—it is important that the items selected reflect the range of possible outcomes with respect to the concept of interest
- B. Examination of empirical relationships—sociologists examine how the items selected to create an index relate to one another empirically (Please skip this part).
  1. Bivariate relationships—assesses the relationship between two items in the index. Generally, the items should be strongly related to one another, although perfect overlap indicates that the items are not adding any new information.
  2. Multivariate relationships among items—this takes into consideration three or more items from the index. Sociologists can use an item to differentiate the group being

studied, and then examine relationships among items for the different subgroups.

- C. Index scoring—refers to the process of combining the items in the index into a single score.
- D. Handling missing data—oftentimes, at least some of the cases studied do not provide information for some of the items in the index, thus resulting in missing data. Sociologists have a variety of strategies in dealing with missing data, such as using information given on other items to estimate a specific response.
- E. Index validation—the process of assessing the validity of a given index.
  - 1. Item analysis—refers to how well the constructed index predicts individual items used to compose the index.
  - 2. External validation—refers to the process of assessing the validity of an index by examining how well it predicts other, theoretically related variables.
  - 3. Bad index versus bad validators—in instances when external validation indicates a problem with the index, the researcher must decide if the index is indeed not capturing the concept in question, or the validation items are not tapping into the variable. This requires a serious assessment of the items and measures used to assess external validation
- F. The status of women: an illustration of index construction—describes how the United Nations constructed an index to assess the status of the women around the world. The items included both indicators of women's political representation and their economic standing.

IV. The status of women: An illustration of index construction—provides examples of index construction using the Gender-related Development Index (GDI) and the Gender Empowerment Measure (GEM).

## V. Scale Construction

A. Bogardus social distance scale—this scale allows researchers to determine how intimate

a relationship the respondent is willing to forge with a particular group of people.

B. Thurstone scales—uses judges to assess the utility of items used to capture a particular concept.

C. Likert scaling—asks the respondent to agree or disagree with particular statements on a topic of interest. Useful for capturing the range of attitudes towards a particular social phenomenon.

D. Semantic differential—the researcher creates opposite positions on a particular item and

asks the respondent which position they prefer and how strong that preference is. E. Guttman scaling—uses responses on extreme items to create a scale on a particular

concept of interest.

## VI. Typologies

### I. Introduction

## CHAPTER 7 THE LOGIC OF SAMPLING

### II. A Brief History of Sampling