



HANDOUT #9

EM200 Methods of Research  
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CED Building

QUALITATIVE AND QUANTITATIVE MEASUREMENT

**EXPANSION BOX 1**

**Five Suggestions for Coming Up with a Measure**

1. *Remember the conceptual definition.* The underlying principle for any measure is to match it to the specific conceptual definition of the construct that will be used in the study.
2. *Keep an open mind.* Do not get locked into a single measure or type of measure. Be creative and constantly look for better measures. Avoid what Kaplan (1964:28) called the "law of the instrument," which means being locked into using one measurement instrument for all problems.
3. *Borrow from others.* Do not be afraid to borrow from other researchers, as long as credit is given. Good ideas for measures can be found in other studies or modified from other measures.
4. *Anticipate difficulties.* Logical and practical problems often arise when trying to measure variables of interest. Sometimes a problem can be anticipated and avoided with careful forethought and planning.
5. *Do not forget your units of analysis.* Your measure should fit with the units of analysis of the study and permit you to generalize to the universe of interest.



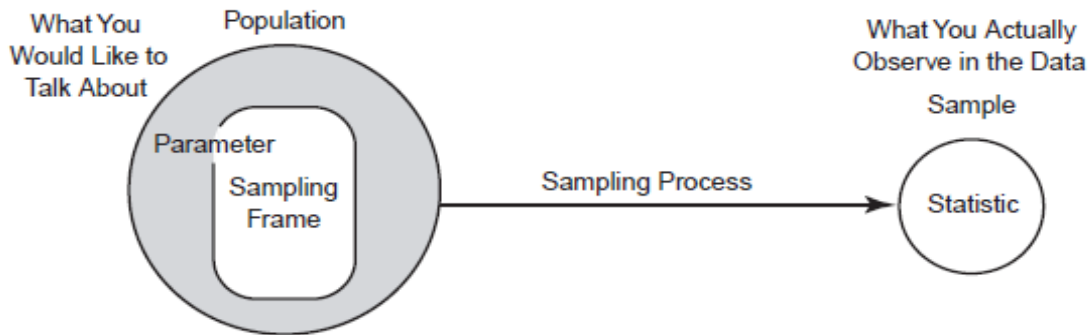
**FOUR LEVELS OF MEASUREMENTS**

**QUALITATIVE AND QUANTITATIVE MEASUREMENT**

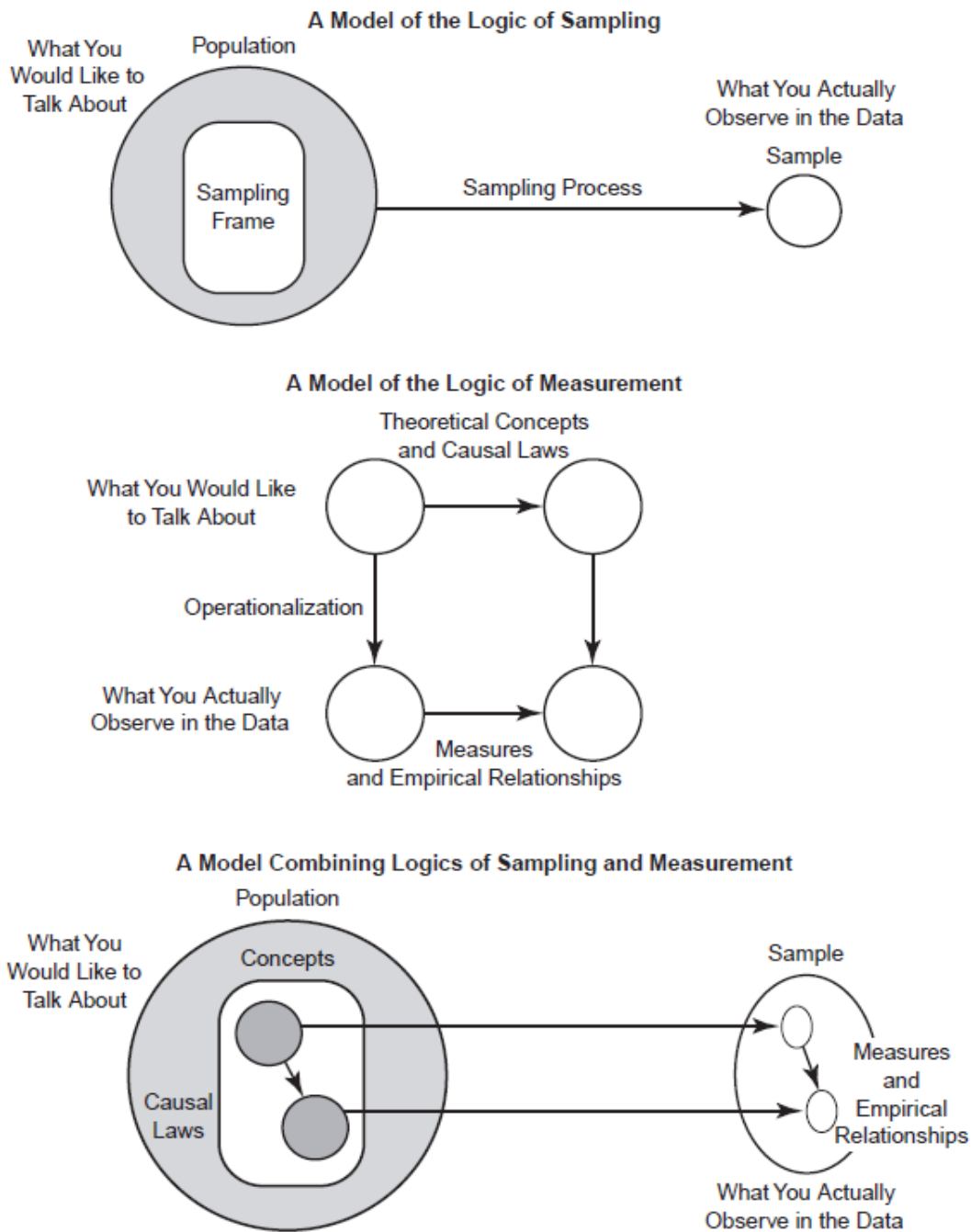
**TABLE 2** Characteristics of the Four Levels of Measurements

LEVEL	DIFFERENT CATEGORIES	RANKED	DISTANCE BETWEEN CATEGORIES MEASURED	TRUE ZERO
Nominal	Yes			
Ordinal	Yes	Yes		
Interval	Yes	Yes	Yes	
Ratio	Yes	Yes	Yes	Yes

**A MODEL OF THE LOGIC OF SAMPLING**



**FIGURE 2** A Model of the Logic of Sampling



**FIGURE 4** Model of the Logic of Sampling and of Measurement



QUALITATIVE AND QUANTITATIVE SAMPLING

**SUMMARY REVIEW BOX 1**

**Types of Samples**

**EIGHT TYPES OF NONPROBABILITY SAMPLES**

<i>Type of Sample</i>	<i>Principle</i>
Adaptive	Get a few cases using knowledge of likely locations of a hidden population, use random techniques or recruit, and then use a snowball sample to expand from a few cases.
Convenience	Get any cases in any manner that is convenient.
Deviant case	Get cases that substantially differ from the dominant pattern (a special type of purposive sample).
Purposive	Get all possible cases that fit particular criteria using various methods.
Quota	Using haphazard methods, get a preset number of cases in each of several predetermined categories that will reflect the diversity of the population.
Sequential	Get cases until there is no additional information or new characteristics (often used with other sampling methods).
Snowball	Get cases using referrals from one or a few cases, then referrals from those cases, and so forth.
Theoretical	Get cases that will help reveal features that are theoretically important about a particular setting/topic.

**FOUR TYPES OF PROBABILITY SAMPLES**

<i>Type of Sample</i>	<i>Technique</i>
Cluster	Create a sampling frame for large cluster units, draw a random sample of the cluster units, create a sampling frame for cases within each selected cluster unit, then draw a random sample of cases, and so forth.
Simple random	Create a sampling frame for all cases and then select cases using a purely random process (e.g., random-number table or computer program).
Stratified	Create a sampling frame for each of several categories of cases, draw a random sample from each category, and then combine the several samples.
Systematic	Create a sampling frame, calculate the sampling interval $1/k$ , choose a random starting place, and then take every $1/k$ case.



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**Source:**

Neuman, W. (2014). *Social Research Methods: Qualitative and Quantitative Approaches*, 7<sup>th</sup> Edition, UK: Pearson Education Limited. Retrieved from <https://www.pdfdrive.com/social-research-methods-qualitative-and-quantitative-approaches-e19744746.html>

**Required Readings:**

Chapter 7: Qualitative and Quantitative Measurement

Chapter 2: Qualitative and Quantitative Sampling