



HANDOUT #10

EM200 Methods of Research
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 CED Building

QUALITATIVE AND QUANTITATIVE RESEARCH: CHARACTERISTICS

Characteristic	Quantitative Research	Qualitative Research
Type of data	Phenomena are described numerically	Phenomena are described in a narrative fashion
Analysis	Descriptive and inferential statistics	Identification of major themes
Scope of inquiry	Specific questions or hypotheses	Broad, thematic concerns
Primary advantage	Large sample, statistical validity, accurately reflects the population	Rich, in-depth, narrative description of sample
Primary disadvantage	Superficial understanding of participants' thoughts and feelings	Small sample, not generalizable to the population at large

FIGURE 1.2. *Quantitative versus Qualitative Research*



ELEMENTS OF A GOOD PROPOSAL

TABLE 1.1 Elements of a Good Proposal

Component	Possible Technique
Compelling reason why the study should be conducted	<p>Describe previous research and why it is incomplete. Explain why your study will fill in this gap in knowledge.</p> <p>Make it your goal to convince readers that yours is the next-best study.</p> <p>Present a sufficient literature review; this will depend on the study being proposed and the audience reading the proposal. The review should convince readers that the researcher is knowledgeable and that the study is needed to fill a gap in the existing literature.</p>
Specification of the methodology	<p>Identify the sample of participants you want to study.</p> <p>Describe the instruments or techniques you will use to observe these participants.</p> <p>Specify particular data analysis techniques that match the type of data you will obtain.</p>
Convincing argument for the reader that the outcomes of the study will be important	<p>Assume that the reader is skeptical—anticipate a “so what” question in response to your proposal.</p> <p>Tell pure researchers how your study will add to the body of knowledge.</p> <p>Tell applied researchers and practitioners why your findings will be important to those working in the field.</p> <p>Aim to get the reader as excited about the study as you are.</p>



TYPES OF DATA AND MEASUREMENT SCALE

TABLE 3.1 Types of Data

Measurement Scale	Definition	Logical Property	Example
Nominal/ Category	Discrete response alternatives	$A \neq B$	Did you vote in the last presidential election? (Yes, No)
Ordinal	Response alternatives increasing/decreasing in value (ordered responses)	$A > B > C$	What is your highest level of education? (Less than high school, high school graduate, some college, college graduate); in what place did a runner finish a race?
Interval	Response alternatives increasing/decreasing in equal increments	$A > B > C$ where the distance between A and B is the same as between B and C	Achievement test such as ACT
Ratio	Measure contains an absolute zero	If $A = 2B$, then B actually possesses half the quantity as A (and A contains two times the quantity as B)	Physical measurements; agricultural production measures

TABLE 3.2a Frequency Distribution of Nominal Data (One Variable)

2004 Election Results	Percentage
Voted for Bush	51%
Voted for Kerry	48%

TABLE 3.2b Cross-Tabulation of Nominal Data (Two Variables)

2004 Election Results by Demographic Group	White	African American	Latino	Asian
Voted for Bush	58%	11%	44%	44%
Voted for Kerry	41%	88%	53%	56%

Source: CNN exit poll.



Source:

Vanderstoep, S. & Johnston, D. (2009). *Research Methods for Everyday Life: Blending Qualitative and Quantitative Approaches*, USA: Jossey-Bass. Retrieved from <https://www.pdfdrive.com/research-methods-for-everyday-life-blending-qualitative-and-quantitative-approaches-research-methods-for-the-social-sciences-d161070302.html>

Required Readings:

Chapter 1: Understanding Research

Chapter 2: The Who, How and Why Research

Chapter 3: Quantitative Research: Measurement and Data Collection

Chapter 4: Quantitative Research: Descriptive and Correlational Designs

Chapter 5: Quantitative Research: Basic Experimental Designs