

# **Research Analysis Design**

Quantitative vs. Qualitative

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# Qualitative vs. Quantitative

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## 1. Purpose

### Qualitative

Discovery Role

Study Cases, Culture,  
Lived Experiences

Explain or Gain Insight  
through Narrative Data

### Quantitative

Confirmatory Role

Study Populations &  
Samples

Study Behavior &  
Observable Phenomena

Explain or Predict  
through Numerical Data

Sources: Gall, Borg & Gall, Education Research: An Introduction, Boston: Allyn and Bacon, P. 30.

Gay, L.R. Educational Research: Competencies for Analysis and Application, Merrill/Prentice Hall, PP 214-215.

# Qualitative vs. Quantitative

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## *Approach to Inquiry*

### Qualitative

Inductive, Holistic  
Value-Laden, Subjective  
Interest in Process &  
Product  
Interest in Participants  
Perspectives

### Quantitative

Deductive, Focused  
Value-Free, Objective  
Detached from  
Participants

# Qualitative vs. Quantitative

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## 3. Hypothesis

### Qualitative

Tentative

Evolving

Based on Particular Situations

### Quantitative

Specific

Testable

Stated Prior to Study

# Qualitative s. Quantitative

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## 4. *Research Setting*

Qualitative

Naturalistic as possible

Quantitative

Controlled to Degree Possible

# Qualitative vs. Quantitative

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## 5. Sampling

### Qualitative

Purposive

Selective

Small Sample for  
in-depth  
understanding

### Quantitative

Random

Select Large Representative  
Sample in order to generalize

# Qualitative vs. Quantitative

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## 6. *Measurement*

Qualitative

Non-Standard

On-Going

Small Narrative

Quantitative

Standardized

At the End

Numerical

# Qualitative vs. Quantitative

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## *7. Design and Methodology*

### Qualitative

Flexible  
Involves Non-Intervention  
Minimal Disturbance  
Specified in General Terms  
in Advance

### Quantitative

Structured  
Involves Intervention  
Manipulation, Control  
Specified in Detail in  
Advance



# Qualitative vs. Quantitative

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## 8. *Data Collection*

### Qualitative

Participant  
Observation

Informal,  
Unstructured  
Interviews

Taking of Extensive  
Detailed Notes

Document  
Collection; Archival  
Data

### Quantitative

Nonparticipant

Semistructured Formal Interviews

Administration of Tests,  
Instruments, Surveys,  
Questionnaires

# Qualitative vs. Quantitative

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## *9. Data Analysis*

### Qualitative

Essentially  
Ongoing  
Involves  
Information  
Synthesis

### Quantitative

Performed at End  
Involves Statistics, Graphics,  
Measurement Tools

# Qualitative vs. Quantitative

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## *10. Data Interpretation*

### Qualitative

Conclusions  
Tentative and  
Ongoing

Generalizations  
Speculative

### Quantitative

Conclusions and Generalizations  
Formulated with a Degree of  
Certainty at the End

# Qualitative vs. Quantitative

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## *11. Reporting*

### Qualitative

Raw Data  
are Words  
  
Interpretive  
reports

### Quantitative

Raw Data are  
Numbers  
  
Impersonal  
Objective Reports