Analyzing Qualitative and Quantitative Data
Chapter Objectives

1. Analysis of qualitative and quantitative data
2. Explain the process of organizing and transcribing qualitative data
3. Describe the process of coding transcribed material
4. Explain the process of using descriptive statistics
5. Clarify the process of hypothesis testing using z-scores
Quantitative Analysis

- Basic analysis requires only counting and math
- Sophisticated analysis requires knowledge of statistics
- Numbers are used to describe consumers and behavior
Quantitative Analysis

- Can be used to disprove or prove hypothesis
- Analysis of quantitative data occurs after research has been completed
- Numbers are compared and contrasted for new meanings
Qualitative Analysis

- Coding for concepts
- Coding used to develop themes and categories
- Analysis of data occurs while research is still being conducted
• Methodology may be changed based on findings

• Data is repeatedly analyzed by researcher for new insights

• Recommendations based on analysis of data and skill of researcher
Organizing Qualitative Data

- Remove tape and label

- Remove material posted on walls
  - Label with question asked and date

- Collect cards and handouts
  - Label with question asked and date
Transcribing Tapes

- Transcribe as soon as possible

- Listen before transcribing

- Then type up summary
  - Word for word not necessary

- Type transcript in columns
  - First column for words
  - Second for comments
  - Third for coding
Coding Transcribed Material

- Review transcript for repeated comments on same idea or opinion
- Code each with a different color
- After completion review for connections
- Some codes will be combined
- Some separated into different codes
Qualitative Analysis Process

- Pre-analysis
  - Review data for validity, completeness and accuracy
  - Code open ended questions
  - Enter data into computer software program
Qualitative Analysis Process

- Analysis of responses using descriptive statistics
  - Frequency
  - Central tendency
  - Dispersion

- Analysis using inferential statistics
  - Statistical difference
  - Hypothesis testing
Descriptive Statistics

- **Frequency**
  - One way
  - Cross tabulation

- **Central tendency**
  - Mean
  - Medium
  - Mode
Descriptive Statistics

• Dispersion
  ○ Range
  ○ Variance
  ○ Standard deviation
Hypothesis Testing

- State hypothesis
- Conduct research
- Compare results with expected
- Decide necessary level of confidence
- Have computer calculate z-score
- State conclusion and recommendations