

## SUMMARY

- ★ A research question is the fundamental question inherent in any research topic under investigation.
  - Qualitative research questions are typically open-ended, providing for a holistic view; quantitative research questions are more focused, usually on only a few variables.
  - Research questions should not be stated in a manner that assumes an answer before data have been collected.
  - Research questions should be based in the body of literature related to the topic.

- Research questions must be able to be answered by collecting available data.
  - Research questions must be ethical and feasible to answer.
- ★ Hypotheses are tentative but intelligent, informed predictions about the findings of a study.
- Three types of hypotheses are the null hypothesis, the nondirectional research hypothesis, and the directional research hypothesis.
  - The null hypothesis states that no effect, difference, or relationship will be found between variables.
  - The nondirectional research hypothesis states that an effect, a difference, or a relationship will be found but does not specify the direction of the effect, the difference, or the relationship.
  - The directional research hypothesis also states that an effect, a difference, or a relationship will be found and specifically indicates the direction of the effect, the difference, or the relationship.
- ★ A research design is the basic blueprint for conducting an action research study.
- ★ Qualitative research designs are less structured and more holistic in their approach to conducting a study than are quantitative designs.
- A case study focuses on the detailed examination of a single setting, a single subject, or a particular event.
  - In observational studies, the researcher may participate as an observer, an observer as participant, a participant as observer, or a full participant.
  - The constant comparative method is a qualitative research design for studies involving multiple data sources, where data analysis begins early in the study and is nearly completed by the end of data collection.
- ★ Quantitative research designs fall into four categories: descriptive designs, correlational designs, group comparisons, and single-subject designs.
- Descriptive designs include observational research and survey research and simply attempt to describe the current status of the phenomenon of interest.
  - Correlational designs investigate the extent to which a relationship exists between two or more variables.
  - Group comparison designs involve a manipulated independent variable and a dependent variable measured across all groups.
  - Group comparison designs include causal-comparative designs (which explore the cause of an effect after the fact), preexperimental designs (which typically involve one group simply being “compared” to itself), and quasiexperimental designs (which involve two groups being compared to each other on a common dependent variable).