**Terms**

- **Theory**: Explanation about behavior or situation summarizing and describing findings from a **hypothesis** - testable prediction
- **Variable**: a phenomenon that changes across circumstances or varies among individuals, a characteristic that can take on different values
- **Population**: a group of people or animals of interests to a researcher from which a sample is drawn
- **Generalizability**: the applicability of a study’s findings to the entire population of interest
- **Test-retest reliability**: tendency of a test to yield relatively similar scores for the same individual over time
- **Measure**: a concrete way of assessing a variable
- **Validity**: refers to the measure’s ability to assess the variable it is supposed to assess

- **Descriptive research**: attempts to describe phenomenon rather than manipulating variables and demonstrating cause and effect

- **Case Study**: in-depth observation of one subject or a small group of subjects

- **Naturalistic Observation**: in-depth observation of a phenomenon in a natural setting

- **Independent Variable**: The variable an experimenter manipulates

- **Dependent Variable**: the variable that is being measured or tested in an experiment

- **Control Group**: Participants in an experiment who receives a relatively neutral condition to serve as a comparison group
Important People

- **Gordon Bower**: As a researcher, he is known for his contributions to cognitive psychology in such areas as animal learning, how mood affects memory and recall, language comprehension and behavior modification.

- **Jane Goodall**: Well Known for her naturalistic observation of apes in the wilds of Africa
  - Spent years in the wild and zoos observing the way groups of apes or monkeys behave

- **Frans de Waal**: Known for drawing parallels between primate and human behavior
  - His research led him to conclude that for humans, as for animal species, “making peace is as natural as making war.”

- **Stanley Milgram**: was a social psychologist best-remembered for his now infamous obedience experiments. His research demonstrated how far people are willing to go to obey authority.
Characteristics of Good Psychological Research

- Good psychological research is characterized by a theoretical framework, standardized procedures, generalizability, and objective measurement.
- A theory is a systematic way of organizing and explaining observations that includes a set of propositions about the relations among various phenomena. A hypothesis is a tentative belief or educated guess.
- A sample is a subgroup of a population that is likely to be the representative of the population as a whole.

Descriptive Research

- Descriptive research demonstrate cause and effect because it describes phenomena as it already exists instead of manipulating variables.
- A case study is an in-depth observation of one person or a small group of people.
- Survey research involves asking a large sample of questions, often about attitudes or behaviors, using questionnaires or interviews.
Experimental Research

- Experiments ask whether systematic variation in one variable produces variation in another variable.
  - **Independent variable** (IV): Is manipulated by the experimenter
  - **Dependent variable** (DV): Is the response of the subjects.

- Operationalizing means turning an abstract concept into a concrete variable defined by some set of actions, or operations.

- Bias: Variation associated with subject expectancies or experimenter expectancies.

- Placebo treatments help to estimate magnitude of expectancies on the part of subjects. Treatment group effect must be larger than control placebo effect.

- Double-blind studies help to minimize expectancy effects from subjects and experimenters.
  - a. In a double-blind study, the subject and the experimenter do not know what treatment the subject has been given.
Correlational Research:
● The aim of the correlational approach is to determine the degree to which 2 or more variables are related.
  ○ Can determine mathematical association between data from experiments, case studies, or surveys.
  ○ Calculate the correlation coefficient (r) between two variables: x and y.
● Coefficient values range from -1 through 0 through +1.
● Negative correlations: High values of one variable are associated with low values of the other variable.
● Correlational studies DO NOT establish causality.