

## RESEARCH

Pseudo Psychologies (palmistry, phrenology, etc.)  
Barnum Effect and how it works

### **Scientific Method**

**Dialectic**

**Operational Definitions**

### **TYPES OF rx**

**Naturalistic Observation:** Observing a person or an animal in the environment in which they/it live(s)

Observer Effect:

Observer Bias:

Anthropomorphic Fallacy:

### **Case Study**

Intense look at one group or one person

### **Survey/Questionnaire**

Pencil/paper

Courtesy Bias

Response Bias

**Correlational Study:** Analysis of how variables relate.

Positive and Negative relationships

Correlation Coefficient: -1.00 to +1.00

**Experiment:** To identify cause-and-effect relationships we conduct experiments:

Independent Variable: (potential cause) Condition(s) altered by the experimenter

Dependent Variable: (result) of the experiment. Condition measured

Extraneous Variables: outside influences (confounding variables)

Experimental Group: gets the independent variable

Control Group: does NOT get the independent variable

Random Assignment

Representative Sample

Placebo Effect (Single and Double Blind)

Experimenter Effect

Self-fulfilling Prophecy

Confirmation Bias

**Statistics** - using mathematics to organize, summarize, and interpret numerical data

**Descriptive statistics:** organizing and summarizing data

Measures of central tendency = typical or average score in a distribution

Mean: arithmetic average of scores

Median: score falling in the exact center

Mode: most frequently occurring score

Variability = how much scores vary from each other and from the mean

Standard deviation = numerical depiction of variability (High variability in data set

= high standard deviation)

**Inferential statistics:** interpreting data and drawing conclusions

P value (probability)

Statistical Significance

### **Ethics**

Deception (informed consent and debriefing)

Low psychological or physical pain

Confidentiality

IRBs