Research Methods in Psychology

I. Empirical Process

A). Develop A Theory -

B). Generate a Hypothesis-

C). Conduct Research

D). Evaluation of Data

-Descriptive Statistics: central tendency and variation

-Correlation: strength of the relationship between 2 variables
-Inferential Statistics: are differences between groups real or co-incidence (due to chance)

II. Types of Studies

Variable:

A). Descriptive

1. Case Study:

Problems:

2. Observational Techniques
   - Naturalistic
   - Participant
   - Imaging
Problems:

- Reactivity

- Observer Bias and Experimenter Expectancy Effect

- Ethical Concerns

3. Surveys and other Self-report Measures:

Problems:

- Inaccurate Responses: Self-report Bias & Yea-Saying
- Sampling Problems

B). Correlational

4. Correlational Research:

Strength:

Positive Correlation:

Negative Correlation:

Zero Correlation:

Problems:
- Third variable problem

- Can't determine causality
C). Experimental

**5. EXPERIMENTAL METHOD: ONLY WAY TO DETERMINE CAUSE AND EFFECT**

Independent Variable:

Dependent Variable:

**EXAMPLE:**
- Hypothesis
- Independent Variable
- Dependent Variable
- Random Assignment
Problems:
- Confounding Variable

- Generalizability

6. Quasi-Experiment: Uses Pre-existing Groups

Used When Unethical Or Impossible to Randomly Assign