Human Memory

I. Memory Demonstration

A.   *Variables affecting acquisition*

    1. Order of presentation

    2. Familiarity

    3. Uniqueness

B.   *Demonstrating Incidental learning*

II. Memory Model, e.g., Atkinson & Shiffren

A.   *Input; stimulus*

B.   *Sensory Memory*

C. *Short -term memory---control processes*

    1. Rehearsal

    2. Coding

    3. Retrieval

D. *Response output*

E.   *Long -term memory*

F.   *Comparison of systems*

    1. Duration

    2. Capacity

G. *Clinicl Evidence--Henry M.*

III. **Examples of Memory Classification**

    A.   *Episodic*

    B.   *Semantic*

IV. **Improving your Memory**

    A.   *Organization of Material*

    B.   *Mnemonics*

    C. Meaningful Material---use examples

HISTORY AND SCIENTIFIC METHOD

I. ORIGINS

    A.   *PHILOSOPHY*

    B.   *PHYSICS*

    C.   *PHYSIOLOGY*

II. EARLY SCHOOLS

    A.   *Structuralism 1879 Wilhelm Wundt*

    B.   *Functionalism early 1900's William James*

    C.   *Behaviorism early 1900's James B. Watson*

    D.   *Gestalt psychology early 1900's K. Koffka*

    E.   *Psychodynamic Psychology early 1900's Sigmund Freud*

III. Emphasis on scientific approach

    A.   *Science proceeds typically as*

        1.   Testable Hypothesis

        2.   Collect data

        3.   Analyze and interpret and support or fail to support hypothesis

        4.   Supported hypothesis leads to theory

        5.   Tested and supported theory leads to law

        6.   Psych. Has very few laws

    B.   *Examples methods—Experiment and Correlation*

    C.   *Experiment –examine causal relationships*

        1.   Experimental Group & Control Group

2. Independent and Dependent Variables

3. Objectivity—use of operational definitions

4. Eliminating Confound Variables

    a)   Examples of Confound Variables

        (1)   Subject's expectation—placebo

        (2)   Experimenter bias

    b)   Double blind design

D.   Correlation- determine if 2 or more events are systematical related—not necessarily a causal relationship

1. What does it tell us?—look for mathematical relationship

2. What do the numbers mean?

    a)   Range between +1 and -1

        (1)   Absolute value reflects degree or strength of relationship

        (2)   Sign reveals of relationship

E.   Ethical issues -- institutional review boards

1. Nonhuman & Human Subjects

2. Benefits out way risks

3. Minimize discomfort

4. Human and debriefing.

IV.   Variety of methods and tools with emphasis on a scientific approach