

INTRODUCTION TO PSYCHOLOGY

Fall 2007

- I can describe the range of topics that are covered in an intro to psychology course.
- I can cite the goals and basis of psychology.

WHY STUDY PSYCH?

- GAIN INSIGHT INTO BEHAVIOR
- ACQUIRE PRACTICAL INFORMATION
- PRACTICAL APPLICATIONS TO ENRICH YOUR LIFE



WHAT IS PSYCHOLOGY?



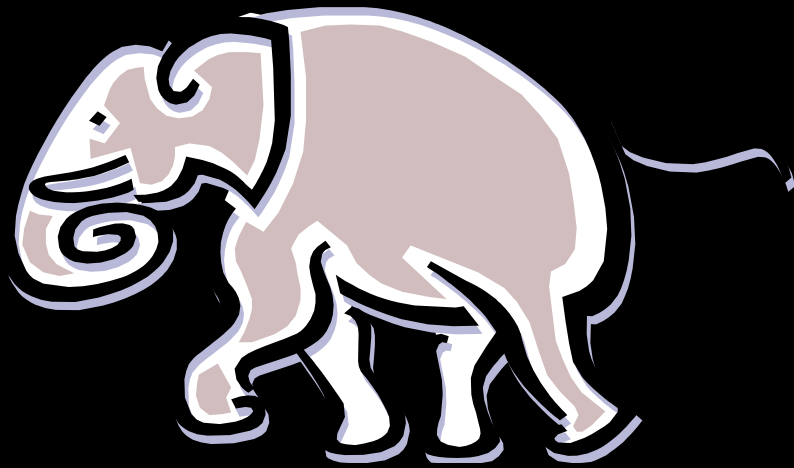
- SCIENTIFIC STUDY OF BEHAVIOR AND MENTAL PROCESSES.
- BOTH HUMAN AND ANIMAL

WHAT IS PSYCHOLOGY?

- INCLUDES WHAT WE THINK, FEEL, AND DO.
- SOME PSYCHOLOGISTS EVEN THINK IT INCLUDES THINGS WE CANNOT SEE, OBSERVE OR MEASURE!



WHAT IS PSYCHOLOGY?



- SYSTEMATIC STUDY TO REDUCE FALSE CONCLUSIONS
- EXAMPLE:
ELEPHANT AND THE THREE BLIND MEN

GOALS OF PSYCHOLOGY

- DESCRIBE
- EXPLAIN
- PREDICT AND
- INFLUENCE
BEHAVIOR



DESCRIBE

- GATHER INFORMATION AND IDENTIFY THE BEHAVIOR BEING STUDIED
- DO "TEST YOUR INTUITIONS" ON PAGE 10 IN THE TEXTBOOK.

EXPLANATION

- **NOT** A STATEMENT OF THE FACTS.
- EXPLAIN WHY
- USE HYPOTHESES, OR THEORIES.
- BASED ON DATA THAT HAS BEEN COLLECTED

PREDICTION

- USING ACCUMULATED KNOWLEDGE TO GUESS WHAT ORGANISMS WILL THINK, FEEL OR DO.
- BY LOOKING AT PAST BEHAVIORS, SCIENTISTS CAN PREDICT FUTURE BEHAVIORS.

INFLUENCE

- TWO TYPES OF WAYS SCIENTISTS TRY TO INFLUENCE BEHAVIOR
 - RESEARCH, OR **BASIC SCIENCE**
 - SOLVING IMMEDIATE PROBLEMS, OR **APPLIED SCIENCE**

THE DIFFERENCE IS BASIC SCIENCE MAY NOT TRY TO CORRECT SOMETHING THAT THEY FIND WRONG OR LACKING IN A STUDY. APPLIED SCIENCE WILL TRY TO COME UP WITH A SOLUTION.

- I can explain important trends in the history of psychology.
- I can identify various approaches to the study of psychology.
- I can explain the work of a psychologist.
- I can summarize the careers and specialized fields in psychology.

THE BASIS OF PSYCHOLOGY

- FACTS BASED ON DATA
- USE THE SCIENTIFIC METHOD
- NOT ALL QUESTIONS CAN BE ANSWERED



ORIGINS OF PSYCHOLOGY



- PHRENOLOGY
- DUALISM-
SEPARATE
MIND AND
BODY
- MODERN
SCIENCE

HISTORICAL APPROACHES

- STRUCTURALISM – WILHELM WUNDT
 - STUDIES THE BASIC ELEMENTS THAT MAKE UP CONSCIOUS MENTAL EXPERIENCES
 - USES INTROSPECTION
 - IMPORTANT B/C HE USED SYSTEMATIC APPROACH.

HISTORICAL APPROACHES

- FUNCTIONALISM – WILLIAM JAMES
(FATHER OF PSYCHOLOGY)
 - WROTE FIRST PSYCH TEXT
 - STUDY HOW ANIMALS AND PEOPLE ADAPT TO THEIR ENVIRONMENT

HISTORICAL APPROACHES

- INHERITABLE TRAITS – SIR FRANCIS GALTON
 - DOES HEREDITY INFLUENCE A PERSON'S CHARACTER & BEHAVIOR?
 - "GREATNESS RUNS IN FAMILIES"
 - RAISED QUESTION OF NATURE VS. NURTURE

HISTORICAL APPROACHES

- GESTALT – WERTHEIMER, KOHLER AND KOFFKA
 - DISAGREED WITH STRUCTURALISM AND BEHAVIORISM
 - A WHOLE IS THE SUM OF ITS PARTS
 - GESTALT MEANS “ WHOLE PATTERN” IN GERMAN

CONTEMPORARY APPROACHES

- PSYCHOANALYTIC – SIGMUND FREUD
 - UNCONSCIOUS MIND - CONSCIOUS THOUGHT IS THE “TIP OF THE ICEBERG”
 - PRIMITIVE BIOLOGICAL URGES
 - FREE ASSOCIATION - REVEALED
 - PSYCHOANALYST – INTERPRETED
 - DREAM ANALYSIS – MOST PRIMITIVE
 - USED CASE STUDIES

CONTEMPORARY APPROACHES

- BEHAVIORAL – IVAN PAVLOV
 - Pavlov's Dogs and salivation
 - Behavior is product of prior experiences, or conditioning
 - Stress *observable* behavior
 - Skinner introduced the concept of reinforcement
 - Negative and positive reinforcement

CONTEMPORARY APPROACHES

- Cognitive – Maslow, Rogers, and May
 - Reaction to behavioral psych.
 - Human nature is evolving and self directed
 - Humans are not controlled by environment or unconscious forces.
 - Environment is simply a background
 - Emphasizes how people are unique and have a strong self concept to develop fully

CONTEMPORARY APPROACHES

- Cognitive psychology – Piaget
 - How we process, store, and use information
 - How information influences our thinking, language, problem solving, and creativity
 - More than mental processes, it involves perception, memory, and expectation

CONTEMPORARY APPROACHES

- Biological – not a single standout person
 - How brain, nervous system, hormones, and genetics influence your behavior
 - Pet/Cat scans are used
 - Genetic factors control a wide range of behaviors
 - Autism and identical twins - 98%

CONTEMPORARY APPROACHES

- Sociocultural – not a single standout person
 - Influence of culture and ethnicity
 - Sneezing- what is said/done by sneezer, and others around him.
 - Impact of immigrants
 - Gender and socioeconomic status

PSYCHOLOGY AS A CAREER



- OBSERVE, ANALYZE, AND EVALUATE BEHAVIOR
- PSYCHIATRY: MEDICINE
- PSYCHOLOGIST: MANY DIFFERENT SUBFIELDS; CLINICAL, COUNCILING, ED, DEVELOPMENTAL, COMMUNITY

PSYCHOLOGY AS A CAREER

- APA: AMERICAN PSYCHOLOGICAL ASSOCIATION
- 53 DIVISIONS
- WORK TO ADVANCE THE SCIENCE AND PROFESSION



PSYCHOLOGICAL RESEARCH

- First decisions to make.
- Ask a specific question.
- Look for evidence
- Gather data
- Sample size?
 - Birthday lab



PSYCHOLOGICAL RESEARCH



- Naturalistic Observation
– Goodall
- Case Study –
Freud/Piaget
- Surveys
- Longitudinal Study –
years
- Cross-sectional study

PSYCHOLOGICAL RESEARCH

- Correlations and explanations
 - Negative: hours of practice increase, misses decrease
 - Positive: high IQ goes with high test scores



EXPERIMENTS



- Put person in control
- Control Group
- Hypothesis
- Variables
 - Dependent
 - Independent
- Experimental Group

ETHICS

- Methods of conduct
- '92 APA Standards
- Collection, Storage, and Use of data
- Applies to humans
- Fighting for animals



RESEARCH PROBLEMS



- Expectations create problems
 - Self-fulfilling prophecy
 - To avoid this: Single-blind experiment
 - Test subjects do not know if they have treatment or not.
 - Placebo

RESEARCH PROBLEMS

- Avoiding self-fulfilling prophecy
 - Double-blind experiment
 - Neither experimenter nor subjects know who has treatment
 - Milgram experiment



RESEARCH PROBLEMS



- Placebo effect
 - Change in behavior or illness because of a subjects belief that they are receiving treatment.
 - Drug companies

STATISTICS IN PSYCH

- Must collect and evaluate data
- Easy with numbers
- Statistics can lie!!
 - Johns Hopkins Univ. and married women



STATISTICS IN PSYCH

- Descriptive Statistics

- Listing and summarizing, graphs
- Frequency distrib.
 - How often occurs (mode)
- Normal curve
- Central tendency
 - Describes average distribution (median)

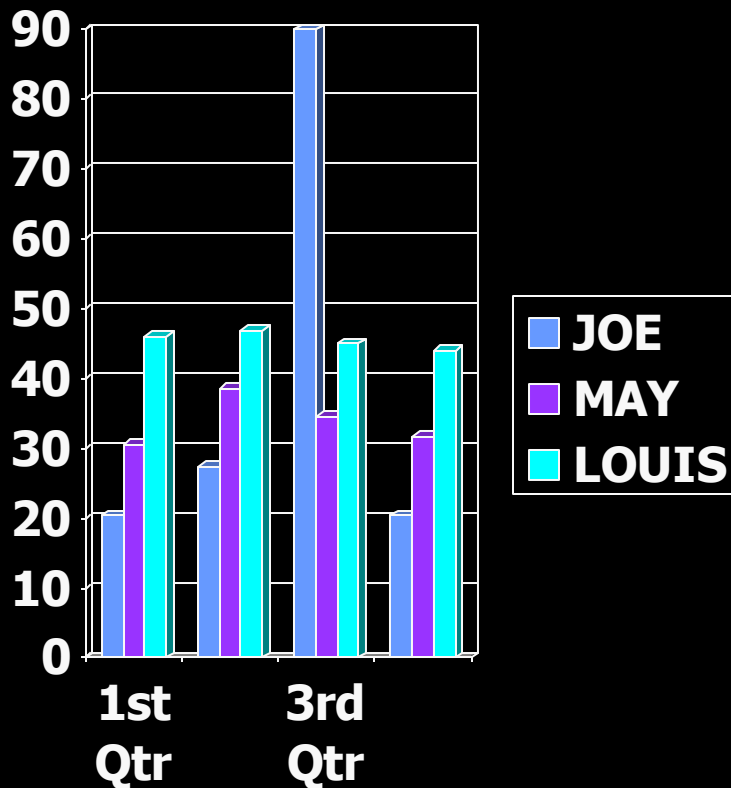
- Variance

- A measure of difference or spread (mean)
- Standard deviation

- Correlation coefficient

- Positive or negative

INFERENCEAL STATISTICS



- Used to make generalizations about populations
- Ask questions to evaluate results
 - Due to chance?
 - Affected by sample size- university women