

Ch. 1 The Science of Psychology

Psychology

Scientific study of behavior and mental processes.

Behavior - outward or overt actions and reactions.

Mental processes - internal, covert activity of our minds.

Psychology is a science

- Prevent possible biases from leading to faulty observations
- Precise and careful measurement

Psychology's 4 Goals

1. Description

Observe behavior + note all about it: **What** is happening? Where? To whom? Under what circumstances? Goal is to provide the observation

2. Explanation

Next, find out **why** is it happening? Form theories (general explanation of a set of observations or facts). Goal is to build theories bolstered by scientific evidence. **NEEDS TO BE TESTED** to prove theory as fact or not

3. Prediction

What will happen in the future? Based on prior research in similar situations

4. Control

How can situation be changed/behavior modified to produce desired outcome?

We will not always try to meet or use all 4 goals; depends on what you are studying/observing. A Personality Theorist might only use 1 and 3.

History of Psychology

The methods of achieving the previous goals have changed over the years.

Here's a brief look at Psychological pioneers and their beliefs...

Structuralism

- Structuralism - focused on **structure** or basic elements **of the mind**.
- **Wilhelm Wundt** considered the “Father of Psychology”
 - Had 1st Psychology Lab; Wundt was the first to bring **objectivity** (fact based) **and measurement** to the study of Psychology
 - Developed **objective introspection (OI)** – process of objectively examining and measuring one’s thoughts and mental activities (holding rock)
- **Edward Titchener**
 - Wundt’s student; brought structuralism to America
 - Felt every experience could be broken down in its basic elements and felt OI could be used on thoughts as well as physical sensations (think about things blue)

Structuralism

Reaction time is one of the oldest behavioral measures in the history of Psychology- used in first Psychological laboratories (Wundt had first one).

Reaction time is the interval between the **stimulus** (thing or event that evokes a reaction or rouses activity in someone/something) **presentation** and the **response**.

Functionalism

- Functionalism - William James, studying (not analyzing) the importance of consciousness in everyday life- how the mind allows people to function: adapt, live, work, and play

No longer a major perspective but it has
Influenced the modern fields of:

- Educational psychology
- Evolutionary psychology
- Industrial/organizational psychology

William James



Rick James



Dave Chappelle as Rick James



William James and Rick James at a Party circa 1970



Gestalt Psychology

Started with **Max Wertheimer**, who studied sensation and perception.

- “The whole is greater than the sum of its parts”
- Believed you could not break down perceiving and sensing into smaller elements- you can’t understand a melody broken down into individual notes- only in relation to one another can it be understood as a whole
- We naturally seek out patterns (“wholes”) in the sensory information available to us
- Gestalt ideas are now part of the study of cognitive psychology, a field focusing not only on perception but also on learning, memory, thought processes, and problem solving.

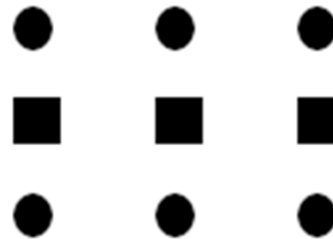
Gestalt Psychology

Proximity



(We organize nearby objects together. Thus, you should see columns because the dots in columns are closer than the dots in rows.)

Similarity



(We organize together objects that are similar in shape. Thus, you should see rows instead of columns.)

Good Continuation



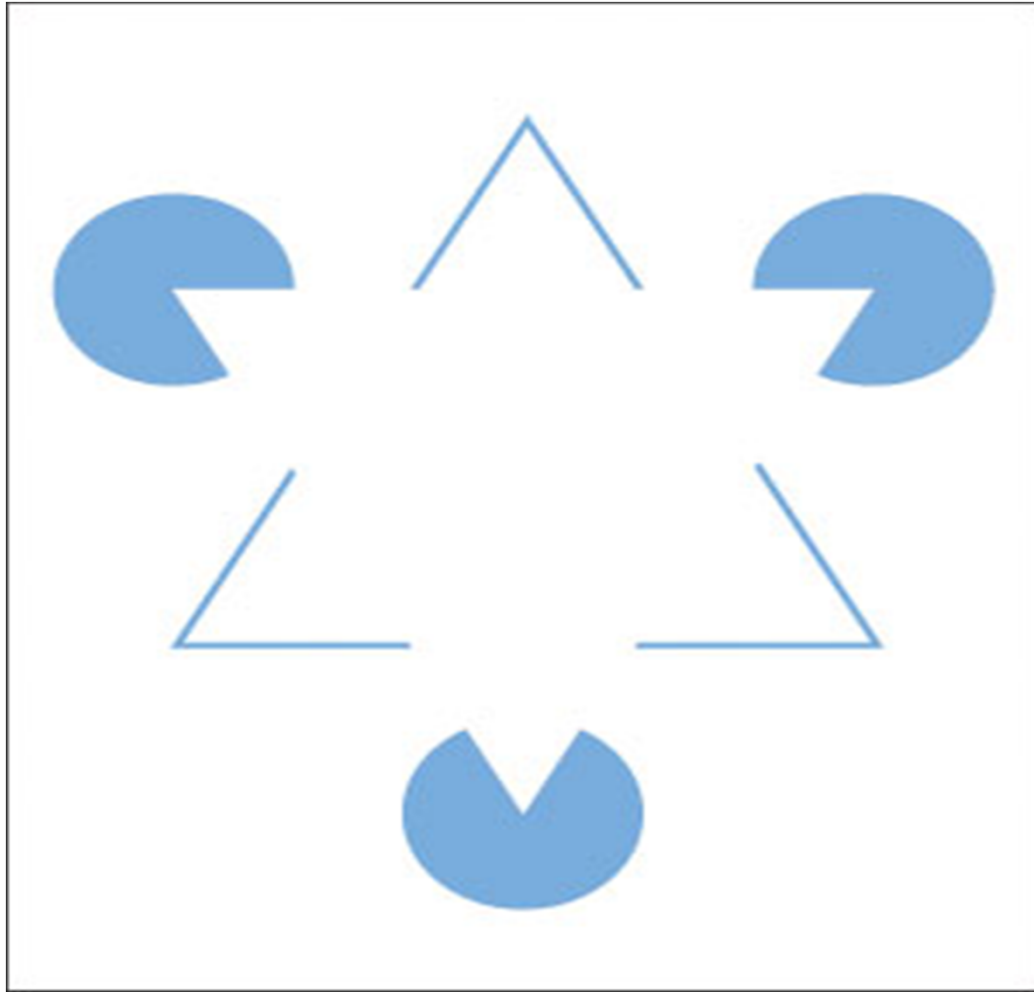
(We organize lines to minimize abrupt changes. Thus, you should see the curved line as one, with a straight diagonal line cutting through it.)

Closure



(We organize lines to create whole figures when possible. Thus, you should organize this figure as a square in spite of the gap.)

Gestalt Psychology



Gestalt Psychology



Psychoanalysis

- The theory and therapy based on the work of Neurologist **Sigmund Freud**.
- Some of Freud's patients suffered from nervous disorders with no found physical cause, so he believed the cause was mental.
 - **All Behavior stems from unconscious motivation**
 - **Doesn't focus on understanding consciousness: Freud proposed that there is an *unconscious* (unaware) mind into which we push, or *repress*, all of our threatening urges and desires.**
 - **He believed that these repressed urges, in trying to surface, created nervous disorders.**

Freud stressed the importance of early childhood experiences (believed personality was formed by age 6).

Behaviorism

- Behaviorism - The science of behavior that focuses on observable behavior only. Still a major perspective today, influenced Cognitive psychology
 - Behavior must be directly seen and measured (scientific inquiry); this challenged both Functionalism and Psychoanalysis

Proposed by John B. Watson

- Based much from work of Ivan Pavlov who demonstrated that a reflex could be **conditioned (learned)**- salivating dog: stimulus-response relationship
- **Watson** believed that phobias were **learned**, whereas **Freud** believed that Phobias were a symptom of a repressed conflict
 - Watson attempts to prove this theory (learned phobias) Case of “Little Albert” (video clip <https://www.youtube.com/watch?v=KxKfpKQzow8>—taught to fear a white rat...and consequently most other things white and furry...Little Albert was a mess during Easter

Behaviorism: Poor Albert



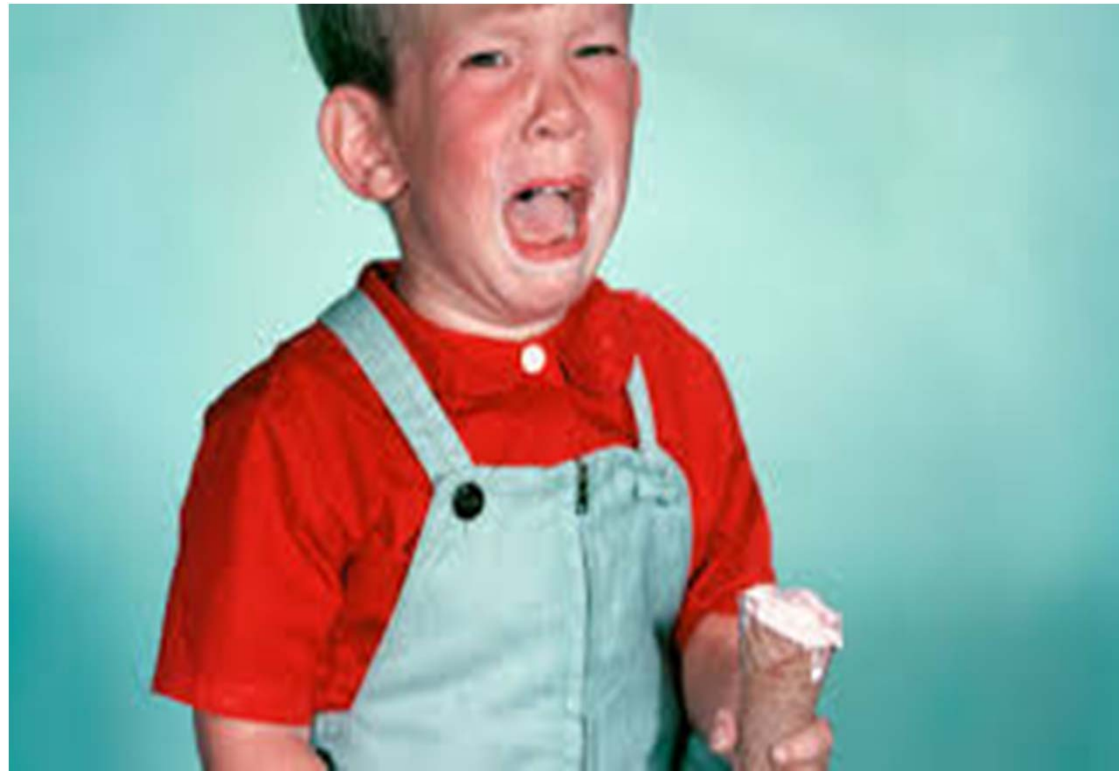
Behaviorism: Poor Albert

...and lets not even mention Christmas Specials...



Behaviorism: Poor Albert

...yeah, even Vanilla ice cream was ruined...



Behaviorism: Poor Albert

...as was Vanilla Ice...but he probably did that to himself...



7 Modern Perspectives

1. Psychodynamic Perspective

Modern version of psychoanalysis- still has a focus on the unconscious mind and its influence over conscious behavior AND childhood experiences **but...more focused on the development of a sense of self and the discovery of motivations behind a person's behavior other than sexual motivations.**

2. Behavioral Perspective

B. F. Skinner developed ***operant conditioning*** of voluntary behavior: learned behavioral responses followed by pleasurable or unpleasant consequences are strengthened or reinforced:

(Child crying, rewarded by getting Mom's attention, will learn to voluntarily cry again to get Mom's attention/what it wants)

- Behaviorism became a major force in the twentieth century.
- Skinner introduced the concept of reinforcement to behaviorism.

Modern Perspectives

3. Humanistic Perspective

Humanists held the view that people have free will, the freedom to choose their own destiny and can direct their own lives.

Focus on what makes us human such as our appreciation of beauty
Owes far more to the field of philosophy rather than the scientific fields of medicine and physiology

Early founders were Abraham Maslow and Carl Rogers

Each emphasized the human potential, the ability of each person to become the best person he or she could be

Believed that studying animals in a lab (as Behaviorists did) or people with nervous disorders (psychoanalysts) could not lead to a better understanding human potential or Self-actualization - achieving one's full potential or actual self.

Modern Perspectives

4. Cognitive Perspective

Focuses on memory, the process of thought-how people think, storage + usage of information, intelligence, perception, problem solving, and learning.

Includes the field of Cognitive Neuroscience: the study of the physical workings of the brain and nervous system when engaged in cognitive processes such as memory, thought, storage + usage of information, perception, problem solving, and learning using brain imaging (PET's, MRI's fMRI's)

Modern Perspectives

5. Sociocultural Perspective

Combines social psychology (study of groups, social roles, rules of social action) and cultural psychology (cultural norms, values, and expectations) to equate to the relationship between social behavior and culture.

How are people's behaviors or thoughts influenced by whether they are alone, with friends, with strangers, in a crowd, or part of a group?

What about by social norms, fads, class differences, and/or ethnic identity?

The Bystander Effect

Diffusion of Responsibility

Modern Perspectives

6. Biopsychological Perspective

The study of the biological basis of behavior and mental processes: attributes human and animal behaviors to biological events occurring in the body, such as genetic influences, hormones, heredity, brain chemicals, and the activity of the nervous system.

7. Evolutionary Perspective

Focuses on the biological bases of universal mental characteristics that all humans share:

Why do people lie?

Why are most people afraid or fearful of snakes?

Why do people like music?

- Behavior is seen as having an adaptive or survival value: we don't eat bitter things because early humans who did eat bitter plants died and those that spit them out survived and passed that gene on to their kids and we evolved over time to be a population that generally avoids bitter foods

Professions and Areas of Specialization in Psychology

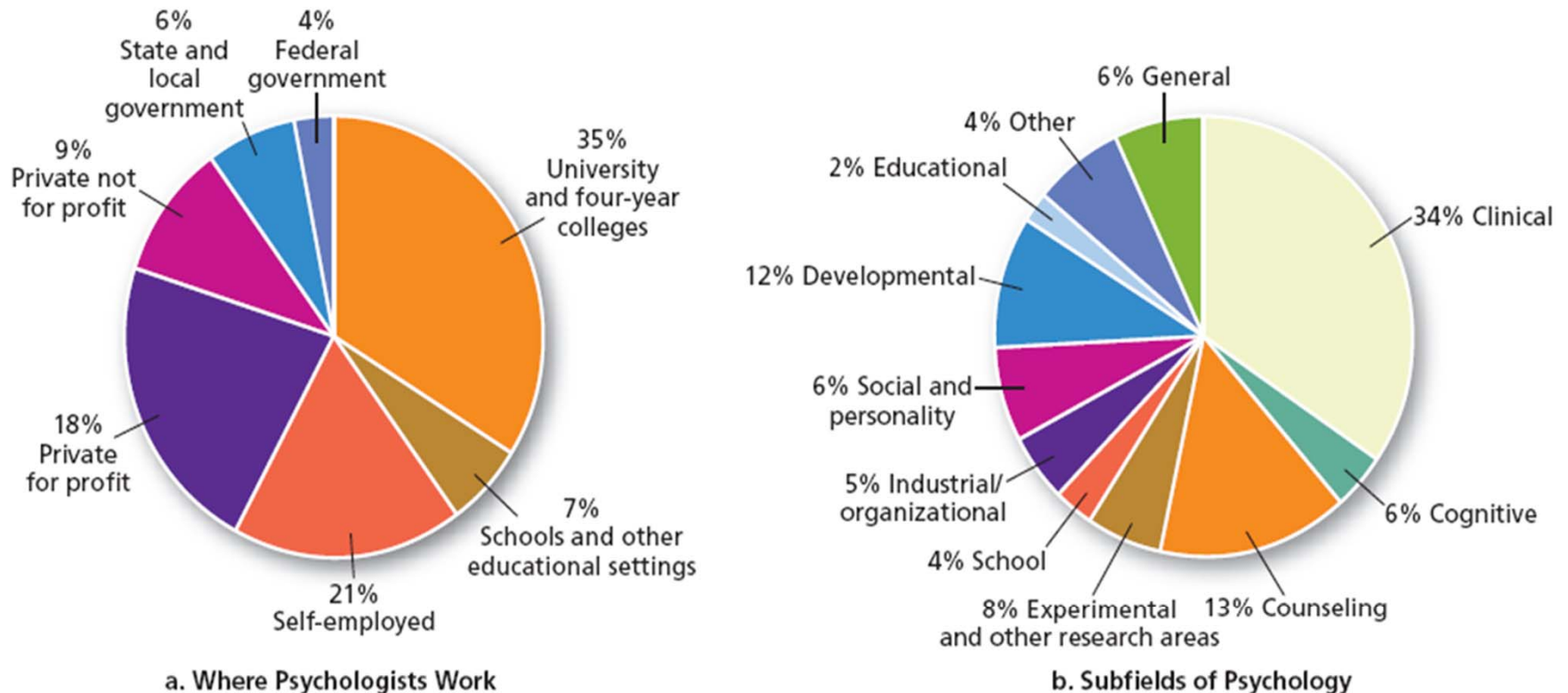


Figure 1.2 Work Settings and Subfields of Psychology

(a) There are many different work settings for psychologists. Although not obvious from the chart, many psychologists work in more than one setting. For example, a clinical psychologist may work in a hospital setting as well as teach at a university or college. (Tsapogas et al., 2006) (b) This pie chart shows the specialty areas of psychologists who recently received their doctorates. (Hoffer et al., 2007)

Note: Due to rounding, percentages may not total to 100 percent.

Psychological Professionals

Psychiatrist:

Medical degree/medical doctor, specializes in diagnosis and treatment of psychological disorders, can prescribe medication, provide therapy and counseling

Psychologist:

No medical training but has a doctorate degree. Undergoes intense academic training. Must be licensed (by state) to practice. Typically cannot prescribe medication, but can go through specialized training to do so in some states

Psychoanalyst:

Usually either a psychiatrist (M.D.) or psychologist (Ph.D, Psy.D, Ed.D). Has special training in the *unconscious* (unaware) mind. Like the term therapist, psychoanalyst is not protected by federal or state law and anyone- trained or not, can use the label. Cannot prescribe medication.

Psychiatric Social Worker:

Trained in the area of social work(SW) and usually has a Masters degree in SW (M.S.W.), and often has a professional license. Focuses more on the environmental conditions that can have an impact on mental disorders such as poverty, overcrowding, stress, substance abuse. Cannot prescribe medication.

Psychology Chapter 1 Part 1

- End of Ch. 1 Part 1 slides