

# Hergenhahn's An Introduction to the History of Psychology

Eighth Edition

EIGHTH EDITION

HERGENHAHN'S  
An Introduction to the  
History of Psychology



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## Chapter 11

### American Psychology and Functionalism

# Learning Objectives (1 of 2)

After reading and discussing Chapter 11, students should:

- Be familiar with the history of philosophy in the United States up to functionalism.
- Understand the basic tenets of functional psychology.
- Be acquainted with the works, philosophy, and psychology of William James.
- Be familiar with the work of Hugo Münsterberg and his contributions to applied psychology.

# Learning Objectives (2 of 2)

- Be familiar with the experiences of Mary Whiton Calkins and her work in psychology.
- Be acquainted with G. Stanley Hall's contributions to the development of psychology.
- Be familiar with the work and contributions of Francis Sumner and Kenneth Clark.
- Be familiar with psychology at Clark University.
- Have a knowledge of functionalism and the functionalists at the University of Chicago.
- Be acquainted with functionalism and the functionalists at Columbia University.

# Early U.S. Psychology (1 of 3)

- Stage one: moral and mental philosophy
  - Psychology included topics such as ethics, divinity, and philosophy. To learn psychology was to learn the accepted theology of the day.
  - “American Enlightenment” began in 1714
    - Samuel Johnson, influenced by Locke’s *An Essay Concerning Human Understanding*, wrote a book which contained some topics which were psychological in nature—child psychology, the nature of consciousness, the nature of knowledge, introspection, and perception.

# Early U.S. Psychology (2 of 3)

- Stage two: intellectual philosophy
  - Psychology became a separate discipline
  - Became primarily influenced by the Scottish common sense views.
- Stage three: the U.S. Renaissance
  - Psychology becomes an empirical science.
  - Late 1880s
    - Publishing of John Dewey's textbook, the first issue of the *American Journal of Psychology*
    - James's *Principles of Psychology* (1890)

# Early U.S. Psychology (3 of 3)

- Psychology began emphasizing individual differences, adaptation to the environment, and practicality.
- Stage four: functionalism
  - Science, emphasis on the individual, and evolutionary theory combined into the school of functionalism.

# Characteristics of Functional Psychology

## (1 of 3)

- Never a well-defined school
  - Did not have one recognized leader or an agreed-on methodology.
  - Common themes, however, ran through the work of those calling themselves functionalists.
- Opposed the elementarism of structuralism
- Focus was to understand the function of the mind
  - Focus was not upon a description of its contents.
  - The function was to aid the organism in adapting to its environment

# Characteristics of Functional Psychology

## (2 of 3)

- A practical science
  - Desired to be a practical science
  - Apply findings to the improvement of the human condition
- Research on many participants
  - Participants included animals, children, and abnormal humans
  - Urged the use of any methodology that was useful
- Concerned for the “why” of mental processes
  - This led directly to an interest in motivation



# Characteristics of Functional Psychology

## (3 of 3)

- Accepted both mental processes and behavior
  - Were accepted as legitimate interests for psychology
- More ideographic than nomothetic
  - More interested in differences than similarities
- Directly or indirectly influenced by William James

# William James (1 of 5)

- William James
  - Pragmatism
    - The belief that if an idea works, it is valid
  - Radical empiricism
    - All consistently reported aspects of human experience are worthy of study
  - Opposed Wundt's approach to psychology
  - James's highly influential *Principles of Psychology* appeared in two volumes, 28 chapters, and a total of 1,393 pages.

# William James (2 of 5)

- Stream of consciousness is:
  - Personal to the individual
  - Continuous; cannot be divided up for analysis
  - Always changing
  - Selective; some events are selected for further consideration while others are not
  - Functional; purpose is to aid the individual in adapting to the environment.
- Habits (instincts) are formed as an activity is repeated.
  - He had a neurophysiological explanation of habit formation.

# William James (3 of 5)

- Three components of self (empirical self)
  - Material self
    - Body, family, and all things owned
  - Social self
    - Self known by others; many social selves
  - Spiritual self
    - State of consciousness, one's own subjective reality
- The self as a knower is the awareness of one's empirical self. James was one of the first to examine self-esteem.

# William James (4 of 5)

- James-Lange theory of emotion
  - Event (stimulus) causes a bodily reaction/behavior, which is then experienced as an emotion.
- Science must assume determinism, including psychology, but for certain approaches to the study of humans, the assumption of free will might be fruitful.
- Ideo-motor theory of behavior
  - An idea of an action precedes and causes that action.
  - In most cases, ideas and actions flow immediately and automatically producing habitual or reflexive behavior.

# William James (5 of 5)

- For voluntary behavior, however, ideas of various behavioral possibilities are retained from previous experiences
  - Their recollection and a selection (by mental effort) of a behavior is a prerequisite to voluntary behavior.
- Pragmatism is the cornerstone of functionalism.
  - Behaviors, thoughts, or beliefs must be judged by their consequences.
  - If it works for the individual than it is appropriate.
  - Truth must be judged by its effectiveness in the situation.
    - What works is true for that circumstance.

# Hugo Münsterberg (1 of 3)

- Hugo Münsterberg
  - Disagreed with James on many points regarding behavior and consciousness
    - Stated that behavior causes ideas rather than ideas cause behavior as James had stated.
  - He was one of if not the first applied psychologists.
    - Clinical psychology
    - Reciprocal antagonism
    - Forensic psychology
    - Industrial psychology

# Hugo Münsterberg (2 of 3)

- Mary Whiton Calkins
  - Attended seminars with James and worked with Münsterberg in research, but could not be enrolled in Harvard (women were not admitted at this time).
  - She took (unofficially) the Ph.D. examination but could not receive her degree.
    - She was offered a degree from Radcliffe College (undergraduate women's college affiliated with Harvard) but refused.



# Hugo Münsterberg (3 of 3)

- Developed a paired-associate technique to study the influence of frequency, recency, and vividness on memory.
- Developed self-psychology, which was her major contribution to psychology.

# Granville Stanley Hall (1 of 6)

- Granville Stanley Hall.
  - Organized the first psychology laboratory in the United States
  - Founded the first psychology journal, *American Journal of Psychology*
  - Helped organize and was first president of the American Psychological Association.
  - President of Clark University.
  - Recapitulation theory states that the development of an individual through their lifetime mirrors the evolution of the species.

# Granville Stanley Hall (2 of 6)

- Ideas on developmental psychology were greatly influenced by this theory.
  - His work in this area did much to stimulate educational psychology and start the child development movement in the United States.
- Hall had several ideas about adolescence including ideas about sexual behavior, religious conversion, and sex-segregated schools.
  - He also believed that adolescence was a good time to study human instinctual makeup.

# Granville Stanley Hall (3 of 6)

- Hall also focused on the study developmental psychology and the end of the life.
- *Adolescence: Its Psychology and Its Relations to Physiology, Anthropology, Sociology, Sex, Crime, Religion, and Education.*

# Granville Stanley Hall (4 of 6)

- Francis Sumner
  - Hall's last graduate student and first African American to receive a Ph.D. in psychology.
  - Argued for segregated higher education; however, evidence indicates that his public statements did not match his private beliefs and activities.
    - This was a pragmatic way to obtain funding for African American higher education.
  - Developed the psychology department at Howard University into a major center for training African American psychologists.

# Granville Stanley Hall (5 of 6)

- Kenneth Bancroft Clark
  - Trained with Sumner
  - Both he and his wife (Mamie Phipps Clark) obtained their Ph.D.s from Columbia University.
  - They did pioneer work on the developmental effects of prejudice, discrimination, and segregation on children.
  - Extremely instrumental in the efforts to desegregate the school systems.

# Granville Stanley Hall (6 of 6)

- Hall's Legacy at Clark University
  - In 1908, Hall invited prominent European psychologists to Clark for its 20th anniversary.
  - Hall invited Wundt, Freud, and Jung, but Wundt had a prior engagement.
  - Freud remarked that this visit did much to further the acceptance of his theory around the world.

# Functionalism at Chicago (1 of 3)

- John Dewey
  - Wrote “*The Reflex Arc Concept in Psychology*”
    - Many think this marks the formal beginning of functionalism.
    - Proposed that the three elements of the reflex (sensory processes, brain processes, motor response) must be viewed as a coordinated system directed toward a goal, this goal is usually related to the survival of the organism.
  - Influential in creating what came to be called “progressive” education, which stated that education should be student-oriented and not subject-oriented and students should learn by doing
  - Also involved in liberal causes



# Functionalism at Chicago (2 of 3)

- James Angell
  - Presented the three major points of functionalism
    - Functional psychology is interested in mental operations, not conscious elements.
    - Mental processes mediate between the needs of the organism and the environment. Mental functions help the organism survive.
    - Mind and body cannot be separated, they act as a unit in an organism's struggle for survival.

# Functionalism at Chicago (3 of 3)

- Harvey Carr
  - Because learning is a major tool used in adjusting to the environment, it was a major concern of functionalism.
  - Carr proposed the adaptive act, which has three components.
    - A motive that acts as a stimulus for behavior (such as hunger or thirst).
    - An environmental setting or the situation the organism is in.
    - A response that satisfies the motive.

# Functionalism at Columbia (1 of 6)

- James Cattell
  - Proposed that psychology should be applying its methods in all human activity because that is what humans do.
  - Through his many editorships and ownerships of journals (including *Psychological Review*), he advanced the discipline of psychology and particularly functional psychology.

# Functionalism at Columbia (2 of 6)

- Robert Sessions Woodworth
  - Interested in what and why of people's behavior, particularly motivation.
  - He called his brand of psychology dynamic psychology
  - He formulated the symbols S-O-R to include the organism and particularly the organism's motivation.
  - His text, *Experimental Psychology*, remained the standard text in experimental psychology for two decades.

# Functionalism at Columbia (3 of 6)

- Animal research before Thorndike
  - George Romanes studied animal intelligence, but was guilty of anthropomorphizing (attributing human thought processes to nonhuman animals).
  - Conwy Morgan sought to correct Romanes' problems by applying Morgan's canon: "in no case may we interpret an action as the outcome of the exercise of a higher psychical faculty, if it can be interpreted as the outcome of the exercise of one which stands lower in the psychological scale."

# Functionalism at Columbia (4 of 6)

- He wanted to avoid the belief that nonhuman cognitive processes are the same as those of humans
  - This is called anthropocentrism.
- Margaret Floy Washburn published several books and articles on animal psychology.
- In her book, *The Animal Mind*, Washburn inferred consciousness in animals at all phylogenetic levels.

# Functionalism at Columbia (5 of 6)

- Edward Lee Thorndike
  - Used the apparatus called a puzzle box to study trial-and-error learning using cats.
  - He made the following conclusions:
    - Learning is incremental
    - Learning occurs automatically without being mediated by thinking
    - Same principles of learning apply to all mammals.
  - Developed psychology's first major learning theory, which basically combined associationism and hedonism.

# Functionalism at Columbia (6 of 6)

- Mainly consisted of the law of exercise and the law of effect.
  - The law of effect states the following:
    - If an association is followed by a “satisfying state of affairs” it will be strengthened, if it is followed by an “annoying state of affairs” it will be weakened.
  - The law of exercise states that the more often an association is practiced the stronger it becomes.
- Thorndike went on to abandon the law of exercise and discarded the second part of the law of effect.
- Identical elements theory of transfer states that the extent to which information learned in one situation will transfer to another situation is determined by the similarity between the two situations.



# Beyond Functionalism

- James Mark Baldwin
  - Co-founded *the Psychological Review* with Cattell.
  - He was also the first editor of APA's other flagship journal, *Psychological Bulletin*.