

Wilhelm Wundt (1832-1920)

What made him the founder of psychology?

- In 1879, at the University of Leipzig, Wundt established the first official laboratory for psychological research. It marked psychology as an independent field of study.

What goal did he announce in his book *Principles of Physiological Psychology*?

- In the goal of psychology, he puts forward three goals: to analyze the components of consciousness, to find out how these components are related to each other, and to determine their functions from a physiological point of view. Wundt believed that human experiences, consisting of bodily sensations and memories, interacted through connections in the brain to produce emotions, the latent subjective results of the senses. He called the process of emotional formation psychological integration.

Gedankenmesser

- He called this Gedankenmesser a thought meter, or mental meter, and he measured the mental process of perceiving two stimuli together.

What two important things happened during the Leipzig years?

What two parts did psychology get divided into?

- Psychology can be divided into two main areas. Research designed to increase our knowledge base. The practice of using our knowledge to solve problems in the real world

What did Wundt believe that psychology should be the study of?

- Wundt saw psychology as the scientific study of conscious experience, and he believed that the goal of psychology was to determine the components of consciousness and how those components combine to create our conscious experience.

Voluntarism

- Voluntarism (psychology) and willpower is a doctrine that organizes the contents of the mind into higher-order mental processes. Voluntarism, a libertarian ideology, is based on voluntarism, no coercive power or coercion by any individual, state or community, and based on agreements.

Mediate and immediate experience

- Mediated experience - related to physical science, it is an experience mediated by a specific measuring device. Immediate experience -Psychologists must immediately focus on their experience, because it is unfair to interpret.

Introspection according to Wundt

- According to Wilhelm Wundt, introspection is looking at oneself and exploring one's own thoughts and emotions. The word "introspection" literally means "to look into". It involves what a person thinks and feels about themselves, and it is essentially a reflective process.

Wundt's three goals of psychology

1. Analyze the conscious process into its basic elements
2. Find out how these elements are combined and organized
3. Determine the laws of connection that regulate the arrangement of elements.

Two elements of psychology

1. Sensation arises from the stimulation of the sense organs.
2. Feelings are created when feelings combine to create more complex things.

Doctrine of apperception – the law of psychic resultants. -Apperception creates a unified conscious experience from its parts. The process of organizing mental elements is creative synthesis (also known as the law of mental results), and by creating or combining elements, new properties are created. Wundt believed it to be an active process, the mind acting on the elements. He did not see association as passively as the empiricists and associationists.

Wundt's legacy - Making psychology a modern science, many of his students opened laboratories

Hermann Ebbinghaus (1850-1909)

The first to investigate **_learning_** and **__memory_** experimentally.

What did Ebbinghaus learn about nonsense syllables?

- He counted how many times the nonsense syllables had to be repeated to recall the list perfectly once.

Forgetting curve - The longer the list, the longer the learning time

(remember the forgetting curve, fast, then plateaus)

Sentence completion exercise (still used in psychology today) - According to psychologist Hermann Ebbinghaus, who pioneered sentence completion exercises designed to study the abilities of school children.

Franz Brentano (1838-1917)

Contrast with Wundt

- - While Wundt's psychology was experimental, Brentano's was empirical. Questions Wundt's view that mental processes involve content or elements.

What did Brentano argue should be the proper subject matter of psychology?

- He believed that the basic method of psychology should be systematic observation rather than experiment.

In what two ways did Brentano believe you could study mental acts?

- 1. Memory (remembering mental processes occurring in a certain mental state)

- 2. Imagination (imagining a mental state and observing accompanying mental processes)

Carl Stumpf (1848-1936)

Stumpf was a major rival of Wundt's – what did he argue should be the primary date of psychology?

- Major rivals. Two of Stumpf's students developed Gestalt psych, the opposite of Wundt's psych. In their article, they had a big fight over the tone of whose introspection was more convincing.

What is phenomenology according to Stumpf?

- Stumpf's method of introspection
- examines experience as it occurs and does not attempt to reduce experience to simple components.
- By reducing experience to elements, it is believed to be artificial

Oswald Kulpe (1862-1915)

How did Kulpe define psychology?

- He defined psychology as the study of human experience and described the results of experimental psychology.

What was Kulpe's systematic experimental introspection?

- Subjects' retrospective reports of their cognitive processes after completing the experimental task were used. (They were then tested on how they performed the task).
- -More subjective, the subject played a more active role.

What did Kulpe mean by imageless thought?

- Kulpe saw them as imageless thoughts without any sensory or imaginative component.

History of Psychology - Chapter 5 Review

Edward Bradford Titchener (1867-1927) and Structuralism

Although he claimed to represent Wundt's ideas and theories in America, he did not actually do this - how exactly did he change Wundt's theories?

- Wundt's experimental psychology was introduced to America by Titchener
- Although Titchener claimed to represent Wundt's ideas, in fact he radically modified them
- The label "structuralism" can only be applied to Titchener's work

What did Titchener view the central task of psychology to be?

- the analysis of conscious experience

1901-1905: During these years he wrote "**Experimental Psychology: A Manual of Laboratory Practice**". Why is this noteworthy? - One of the most important books in the history of psychology

- Stimulated the growth of psychology laboratory work in the United States
- Influenced a generation of experimental psychologist

Titchener's view of women

- Titchener's rule: no women
- Willingness to engage in active discussion and dialogue in a "smoke-filled room".
- Women 'too clean to smoke'
- Christine Ladd-Franklin declined a request to present her research
- Ladd actively opposed Titchener's rule

What did he believe the subject matter of psychology should be?

- Confounding the mental process being studied with the stimulus or object being observed" Consciousness: The sum of our experiences at a given time. Mind: the sum total of our lifetime experiences

What was meant by stimulus error?

- Confound the mental process being studied with the stimulus or object being observed

For Titchener what was meant by introspection?

- describing the elements of awareness rather than reporting the observed stimuli by their familiar names

Titchener's three essential problems of psychology

1. Reducing conscious processes to their simplest components
2. Determine which laws relate to which elements
3. Match the elements with their physiological conditions. It has the same purpose as natural science

Titchener's three elementary states of consciousness

1. senses: "... basic elements of perception that occur in the sounds, sights, smells, and other experiences produced by physical objects in our environment."
2. Image: "...elements of thought... not present at the moment", i.e. "memories of past experiences".
3. Emotional state: "emotional elements"

Titchener presented a list of what he believed to be 44,500 elements of sensation – all of which he believed could be categorized according to four characteristics basic to all sensations.

1. Quality: the characteristic that distinguishes each element from another, such as "cold", "red".
2. Energy: strength, weakness, loudness, sharp feeling
3. Duration: the path of time-sensing
4. Clarity: the role of attention in conscious processing

Criticisms of Structuralism

- Attacked for a century or more. Kant: Because the variable of observation is introduced into the content of conscious experience, any attempt at introspection necessarily changes the conscious experience under investigation. Comte: If the mind was capable of observing its own activities, it would have to divide itself into two parts - one that observes and the other that is observed. Maudsley: Inside observers must be highly trained so that their observations are unbiased.
- One direct criticism: Titchener's approach is more precisely defined but not well defined
- A second direct criticism: the exact task of the trained observer is unclear/unclear. Unreliability within and between subjects. A special introspective language was never created
- A third direct criticism: looking inward is looking back

Contributions of Structuralism

- The subject matter (conscious experience) is clearly defined
- Research methods: good science
- Introspection is still a useful method
- Implications for cognitive psychology
- A strong base from which others can rebel

