

Wilhelm Wundt (1832-1920)

What made him the founder of psychology?

Wilhelm Wundt is considered the founder of psychology as a formal academic discipline for several reasons: started the first lab; he edited the first psychology journal; and began experimental psychology as a science, where he researched sensation, perception, attention, feeling, etc.

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

Wundt announced that his goal was to promote psychology as its own independent science.

Gedankenmesser

The Gedankenmesser is a modified pendulum created by Wundt that was able to present both audio and visual stimuli. The word Gedankenmesser means “thought meter” and was used to test if a subject was able to perceive two stimuli at once.

What two important things happened during the Leipzig years?

Wundt established a lab, the first psychology lab, at the University of Leipzig. Due to the lab and Wundt’s reputation growing, many students came to Leipzig to work for him, who soon became pioneers and leaders in the field. His students then went on to build even more labs around the world.

What two parts did psychology get divided into?

Psychology is divided into two parts: experimental and social.

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

Wundt believed that psychology should be the study of the consciousness and its elements. He wanted to study consciousness by methods of analysis and reduction.

Voluntarism

Voluntarism is the ability of the mind being able to organize mental contents into higher-level thought processes. I’m pretty sure it means the mind has the ability to build complex, higher level thoughts and thought processes from smaller mental contents.

Mediate and immediate experience

A mediate experience is an experience that provides information about something other than the elements of that experience. It is a conscious awareness and interpretation of either an event or a stimulus.

An immediate experience is an experience that is unbiased by interpretation. It’s from a personal, direct experience that is unbiased without anyone’s interpretation.

Introspection according to Wundt

Wundt described introspection as the way for them to observe the conscious experience.

Introspection is a thorough self examination of your mind, and your thoughts and feelings.

Wundt’s three goals of psychology

1. Analyze the processes the conscious mind does into their basic elements

2. Discover how these elements are synthesized or organized.
3. Determine the laws of connection governing the organization of these elements.

Two elements of psychology

1. Sensations: they are aroused when a sense organ is stimulated and then impulses are sent from the sense organ to the brain.
2. Feelings: According to Wundt's tridimensional theory of feelings, feelings are based on pleasure/displeasure, tension/relaxation, and excitement/depression

Doctrine of apperception – the law of psychic resultants, which is the process of organizing mental elements into a sum creative synthesis, creates new properties from the building them up.

Wundt's legacy

Wundt made it so that psychology was a new branch of science. He created the first experimental psychology lab ever built, which was an inspiration for other psychology students to create labs and study psychology in the future. His work set the foundation of psychology being viewed as a modern science.

Hermann Ebbinghaus (1850-1909)

The first to investigate learning and memory experimentally.

What did Ebbinghaus learn about nonsense syllables?

Ebbinghaus used nonsense syllables to test memory. He used them because most words have an association with them, thus making them easier to memorize. Nonsense syllables were used because they were not associated with anything else. It was used as a control variable for previous learning.

Forgetting curve

Using nonsense syllables, Ebbinghaus conducted an experiment to test how well subjects can remember nonsense syllables over a certain period of time. The results showed that the subjects were less capable of reciting them as time went on. This shows that memories weaken over time, specifically, that memory weakens significantly after the first few hours.

Sentence completion exercise (still used in psychology today)

Sentence completion exercises were developed by Ebbinghaus, and they were the first test of higher mental processes. In their modern form, which are slightly modified, they are used to test cognitive ability. They consist of the subject getting "stems", which are the beginning of a sentence. The subject is told to create a sentence from that that is meaningful to them.

Franz Brentano (1838-1917)

Contrast with Wundt

Brentano was a former priest and a professor of psychology. His studies in psychology were focused on empirical evidence, while Wundt's was based on experimental studies. Wundt was focused on making psychology a science through experimental design, but Brentano wanted observation to be the way we study psychology.

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

Unlike Wundt, who believed that the focus of psychology should be on the conscious experience, Brentano believed that the focus of psychology should be on mental activity.

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

There are two ways to study mental acts, according to Brentano: through memory and imagination.

Carl Stumpf (1848-1936)

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

Stumpf argued that the primary data for psychology should be phenomena.

What is phenomenology according to Stumpf?

Phenomenology is an introspective method developed by Stumpf that didn't try to break down experience into its smallest elements, rather, it examined experience as it occurred naturally, without bias.

Oswald Kulpe (1862-1915)

How did Kulpe define psychology?

In addition to how Wundt defined psychology, Ebbinghaus started studying memory, which contradicts Wundt's theory that higher learning processes couldn't be analyzed. He theorized that thought, also a form of higher learning, could also be analyzed.

What was Kulpe's systematic experimental introspection?

Systematic experimental introspection are retrospective reports of a subject after they have finished completing a complex task. This contrasts Wundt's methodology, as he thoroughly rejected the use of retrospective reports, as he preferred the use of conscious introspective reports as they were doing a task.

What did Kulpe mean by imageless thought?

An imageless thought is a thought that does not invoke any imagery or sensation. This was discovered as a result of Kulpe's research on the introspection of thought processes.

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?

Titchener's theories were different from Wundt's, despite wanting to present Wundt's theories in the United States. His approach was structuralism. While Wundt wanted the focus to be on structures and organization of conscious elements, Titchener was more focused on the elements themselves and their mechanical linking through apperception.

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

Titchener believed that the task of psychology should be to analyze the conscious experience, break it down into its simplest, elementary parts, and determine how it's formed.

1901-1905: During these years he wrote the four volume *Experimental psychology: a Manual of Laboratory Practice*, why is this noteworthy?

These books helped stimulate the growth of psychology labs in the United States and influenced a generation of psychology students.

Titchener's view of women

He believed women would interrupt his meetings, so he did not want them to attend, and did not want them there despite the fact many wanted to attend. However, he did want women in the field of psychology and actually favored women being hired as faculty, even advocating them. More than a third of his 56 doctoral graduates were women. He did have some blunders with women in the field though. Sometimes he advocated his former students to continue in the field of psychology, but in the case of one of his first female doctoral graduates, specifically Margaret Flow Washburn, he supposedly "did not know what to do with [her]."

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

Titchener believed that the subject matter of psychology should be the conscious experience because it is subjective of the person experiencing it.

What was meant by stimulus error?

A stimulus error is an error due to confusion between the mental processes and the stimulus that is being studied.

For Titchener what was meant by introspection?

Titchener trained observers to describe the elements of their conscious states, not by them reporting the stimulus in a familiar name, because people learned how to describe experience in terms of a stimulus.

Titchener's three essential problems of psychology

1. Reduce conscious processes to their basic, elementary components.
2. Determine laws by which these elements of consciousness were associated.
3. Connect the elements with their physiological conditions.

Titchener's three elementary states of consciousness

1. Sensations
2. Images

3. Affective states.

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 of the characteristic.
2. Intensity: the relative strength of a sensation.
3. Duration: the course of a sensation over time.
4. Clearness: the role of attention in conscious experience; experience that we focus on is clearer than experience we don't.

Criticisms of Structuralism

One criticism is that structuralist methodology tried to analyze conscious processes into elements, making it feel artificial and sterile compared to how conscious processes are not naturally found as a unified whole or sum.

Another criticism of is how the structuralist definition of psychology left out aspects and specialties of psychology that actively did not support structuralism. Titchener himself did not include animal psychology as actual psychology, nor did he include child psychology. The structuralist view of psychology was too narrow.

There were also many arguments about the method of introspection itself. Even before introspection was being used by Wundt and Titchner, introspection had its criticisms. Immanuel Kant claimed that introspecting your own behavior was introducing another variable into the mix, specifically the fact that you are observing your own natural behavior. Auguste Comte said it was impossible for the mind to be observing itself and being observed at the same time. Henry Maudsley claimed there was observational bias because the observers had to be trained into giving definitions that Titchener found acceptable. One criticism was that Titchener had trouble defining introspection. Another problem was Titchener's and Wundt's introspection methodology needed its own language and they never developed a uniform language to use together. There was also the aspect of the unconscious mind that was proposed by Sigmund Freud. In his theory, we are unaware of the unconscious as a part of our mental functioning. This would make introspection pointless because we aren't able to examine the unconscious through introspection.

Contributions of Structuralism

Structuralism did help psychology grow as an academic field, despite its criticisms. While introspection itself was criticized in its initial uses, the act of giving a verbal report based on someone's subjective experiences is still used in many parts of the field of psychology. This

includes self reports, surveys, and even clinical reports. Their subject matter, the conscious experience, was also clearly defined. Their research methods were used as science is traditionally used. They also clearly described the conscious experience, and the fact that, because it is subjective, that studying it needed self observation.