

# PSYCH 101

## Chapter 1

-Levels of analysis: rungs on a ladder of analysis, lower levels tied mostly to biological influences and higher levels tied mostly to social influences



-multiply determined: produced by many factors, ie. Human behavior/actions

-reciprocal determinism: by Albert Bandura, the fact that humans mutually influence each other's behavior

-naïve realism: belief that we see the world precisely as it is, can lead us to draw incorrect conclusions about human nature

-scientific theory: explanation for a large number of findings in the natural world, must generate novel predictions that researchers can test, can't be "proved" bc a better explanation may come someday

-confirmation bias: tendency to seek out evidence that supports our hypothesis and deny, dismiss, or distort evidence that contradicts them

-belief perseverance: the tendency to stick to our initial beliefs even when evidence contradicts them

-metaphysical claims: assertions about the world that we can't test, ex) God, the soul

-pseudoscience: a set of claims that seems scientific but isn't, lacks safeguards against confirmation bias/belief perseverance that characterize science

-ad hoc immunizing hypothesis: escape hatch or loophole that defenders of a theory use to protect their theory from falsification

signs of pseudoscience

SIGN OF PSEUDOSCIENCE	EXAMPLE
Overuse of ad hoc immunizing hypotheses	The psychic who claimed to predict the future failed all controlled tests in the lab, but that's because the experimenters inhibited his extrasensory powers.
Exaggerated claims	Three simple steps will change your love life forever!
Overreliance on anecdotes	This woman practiced yoga daily for three weeks and hasn't had a day of depression since.
Absence of connectivity to other research	Amazing new innovations in research have shown that eye massage results in reading speeds 10 times faster than average!
Lack of review by other scholars (called <i>peer review</i> ) or replication by independent labs	Fifty studies conducted by the company all show overwhelming success!
Lack of self-correction when contrary evidence is published	Although some scientists say that we use almost all our brains, we've found a way to harness additional brain power previously undiscovered.
Meaningless "psychobabble" that uses fancy scientific-sounding terms that don't make sense	Sine-wave filtered auditory stimulation is carefully designed to encourage maximal orbitofrontal dendritic development.
Talk of "proof" instead of "evidence"	Our new program is proven to reduce social anxiety by at least 50 percent!

-patternicity: tendency to detect meaningful patterns in random stimuli

-terror management theory: proposing that our awareness of our death leaves us with an underlying sense of terror with which we cope by adopting reassuring cultural worldviews (life has a broader meaning/purpose)

-scientific skepticism: approach of evaluating all claims with an open mind but insisting on persuasive evidence before accepting them

-critical thinking: set of skills for evaluating all claims in an open minded and careful fashion

-correlation-causation fallacy: error of assuming that because one thing is associated with another, it must cause the other

-falsifiability: can the claim be disproved? Can it be proven wrong through evidence?

-replicability: when a study's findings are able to be duplicated, ideally by independent investigators

\*the more we can replicate findings in new settings, cultures, races, the more confidence we can place in those findings

-decline effect: fact that size of certain psychological findings appears to be shrinking over time

-extraordinary claims must have extraordinary evidence, if a claim contradicts what we already know then the evidence must be persuasive






-Occam's Razor: "principle of parsimony" (parsimony meaning logical simplicity), between two explanations take the simplest one

-introspection: method by which trained observers carefully reflect and report on their mental experiences

\*started with Wilhem Wundt, late 1800's, first psych lab

-early psychology confused with spiritualism and paranormal (channeling spirits, extrasensory abilities)

\*brought upon psychology of human error and self deception; how people could fool themselves so easily without evidence

PERSPECTIVE	LEADING FIGURES	SCIENTIFIC GOAL	LASTING SCIENTIFIC INFLUENCE
 Structuralism ◀ E. B. Titchener	E.B. Titchener	Uses introspection to identify basic elements or "structures" of experience	Emphasis on the importance of systematic observation to the study of conscious experience
 Functionalism ◀ William James	William James; influenced by Charles Darwin	To understand the functions or adaptive purposes of our thoughts, feelings, and behaviors	Has been absorbed into psychology and continues to influence it indirectly in many ways
 Behaviorism ◀ B. F. Skinner	Ivan Pavlov; John B. Watson; B. F. Skinner	To uncover the general principles of learning that explain all behaviors; focus is largely on observable behavior	Influential in models of human and animal learning and among the first to focus on need for objective research
 Cognitivism ◀ Jean Piaget	Jean Piaget; Ulric Neisser	To examine the role of mental processes on behavior	Influential in many areas, such as language, problem solving, concept formation, intelligence, memory, and psychotherapy
 Psychoanalysis ◀ Sigmund Freud	Sigmund Freud	To uncover the role of unconscious psychological processes and early life experiences in behavior	Understanding that much of our mental processing goes on outside of conscious awareness

-structuralism: school of psychology that aimed to identify the basic elements of psychological experience

\*Edward Bradford Titchener, used introspection to map out consciousness (feelings, sensations, images)

-functionalism: school of thought that aimed to understand the adaptive purpose of psychological characteristics (thoughts, feelings, behaviors)