

Chapter 1 : Music & How It Impacts Your Brain, Emotions

Psychology comes from two words: psyche and logos. Psyche is the greek word which means soul or spirit, loosely translated as mind. Logos means knowledge or study like all "logies".

How do I become a psychologist? Psychology is the study of the mind and behavior, according to the American Psychological Association. It is the study of the mind, how it works, and how it affects behavior. The APA adds that it "embraces all aspects of the human experience, from the functions of the brain to the actions of nations, from child development to care for the aged. A psychologist treats a patient through psychotherapy, helping to relieve symptoms through behavioral change. The role of the psychiatrist, who is a medical doctor, focuses more on prescribing medication and other interventions to manage mental health conditions. Fast facts about psychology Psychology is the study of behavior and the mind. There are different types of psychology, such as cognitive, forensic, social, and developmental psychology. A person with a condition that affects their mental health may benefit from assessment and treatment with a psychologist. A psychologist may offer treatment that focuses on behavioral adaptations. A psychiatrist is a medical doctor who is more likely to focus on medical management of mental health issues. The work of a psychologist can range from counseling individuals with anxiety to advising companies on how to build better teams. The mind is highly complex, and conditions that relate to it can be hard to treat. Thought processes, emotions, memories, dreams, perceptions, and so on cannot be seen physically, like a skin rash or heart defect. A practicing psychologist will meet with patients, carry out assessments to find out what their concerns are and what is causing any difficulties, and recommend or provide treatment, for example, through counselling and psychotherapy. Psychologists may have other roles, too. They may carry out studies to advise health authorities and other bodies on social and other strategies, assess children who find it difficult to learn in school, give workshops on how to prevent bullying, work with recruitment teams in companies, and much more. Branches of psychology There are different types of psychology that serve different purposes. There is no fixed way of classifying them, but here are some common types. Clinical psychology Clinical psychology integrates science, theory, and practice in order to understand, predict and relieve problems with adjustment, disability, and discomfort. It promotes adaption, adjustment, and personal development. Psychological assessment and psychotherapy are central to the practice of clinical psychology, but clinical psychologists are often also involved in research, training, forensic testimony, and other areas. Cognitive psychology Cognitive psychology investigates internal mental processes, such as problem solving, memory, learning, and language. It looks at how people think, perceive, communicate, remember, and learn. It is closely related to neuroscience , philosophy, and linguistics. Cognitive psychologists look at how people acquire, process, and store information. Practical applications include how to improve memory, increase the accuracy of decision-making, or how to set up educational programs to boost learning. Developmental psychology This is the scientific study of systematic psychological changes that a person experiences over the life span, often referred to as human development. It focuses not only on infants and young children but also teenagers, adults, and older people. Factors include motor skills, problem solving, moral understanding, acquiring language, emotions, personality, self-concept, and identity formation. Developmental psychology overlaps with fields such as linguistics. Evolutionary psychology Evolutionary psychology looks at how human behavior, for example language, has been affected by psychological adjustments during evolution. An evolutionary psychologist believes that many human psychological traits are adaptive in that they have enabled us to survive over thousands of years. Forensic psychology Forensic psychology involves applying psychology to criminal investigation and the law. A forensic psychologist practices psychology as a science within the criminal justice system and civil courts. It involves assessing the psychological factors that might influence a case or behavior and presenting the findings in court. Health psychology Health psychology is also called behavioral medicine or medical psychology. It observes how behavior, biology, and social context influence illness and health. A physician often looks first at the biological causes of a disease, but a health psychologist will focus on the whole person and what influences their health status. This may include their socioeconomic

status, education, and background, and behaviors that may have an impact on the disease, such as compliance with instructions and medication. Health psychologists usually work alongside other medical professionals in clinical settings. Neuropsychology Neuropsychology looks at the structure and function of the brain in relation to behaviors and psychological processes. A neuropsychology may be involved if a condition involves lesions in the brain, and assessments that involve recording electrical activity in the brain. A neuropsychological evaluation is used to determine whether a person is likely to experience behavioral problems following suspected or diagnosed brain injury, such as a stroke. The results can enable a doctor to provide treatment that may help the individual achieve possible improvements in cognitive damage that has occurred. Occupational psychology In a corporate setting, a psychologist can help boost productivity and enhance employee retention. Occupational or organizational psychologists are involved in assessing and making recommendations about the performance of people at work and in training. They help companies to find more effective ways to function, and to understand how people and groups behave at work. This information can help improve effectiveness, efficiency, job satisfaction, and employee retention. Social psychology Social psychology uses scientific methods to understand how social influences impact human behavior. It seeks to explain how feelings, behavior, and thoughts are influenced by the actual, imagined or implied presence of other people. A social psychologist looks at group behavior, social perception, non-verbal behavior, conformity, aggression, prejudice, and leadership. Social perception and social interaction are seen as key to understanding social behavior. Other branches include military, consumer, educational, cross-cultural, and environmental psychology. The number of branches continues to grow.

Chapter 2 : 29 Free Psychology Courses to Study the Mind

If the mind is defined as the flow of information in our nervous system then it is not the mind that initiates the signal. So this brings us to the concept of the soul.

Saul McLeod , published Psychology is the scientific study of the mind and behavior. Psychology is a multifaceted discipline and includes many sub-fields of study such areas as human development, sports, health, clinical, social behavior and cognitive processes. Psychology is really a very new science, with most advances happening over the past years or so. However, its origins can be traced back to ancient Greece, 400 years BC. The emphasis was a philosophical one, with great thinkers such as Socrates influencing Plato, who in turn influenced Aristotle. Philosophers used to discuss many topics now studied by modern psychology, such as memory , free will, attraction etc. In the early days of psychology there were two dominant theoretical perspectives. An American psychologist named William James developed an approach which came to be known as functionalism. He argued that the mind is constantly changing and it is pointless to look for the building blocks of experience. Instead, focus should be on how and why an organism does something. It was suggested that psychologists should look for the underlying cause of behavior and the mental the processes involved. This emphasis on the causes and consequences of behavior has influenced contemporary psychology. Structuralism was the name given to the approach pioneered by Wilhelm Wundt. The term originated from Edward Titchener, an American psychologist who had been trained by Wundt. Structuralism relied on trained introspection, a research method whereby subjects related what was going on in their minds while performing a certain task. However, it proved to be unreliable method because there was too much individual variation in the experiences and reports of research subjects. Despite the failing of introspection Wundt is an important figure in the history of psychology as he opened the first laboratory dedicated to psychology in , and its opening is usually thought of as the beginning of modern psychology. Wundt was important because he separated psychology from philosophy by analyzing the workings of the mind using more objective and standardized procedures. Because psychology is a science it attempts to investigate the causes of behavior using systematic and objective procedures for observation, measurement and analysis,backed-up by theoretical interpretations, generalizations, explanations and predictions. The classic contemporary perspectives in psychology to adopt these strategies were the behaviorists , who were renowned for their reliance on controlled laboratory experiment and rejection of any unseen or subconscious forces as causes of behavior. And later, cognitive psychology adopted this rigorous, scientific, lab based scientific approach too. With its broad scope, psychology investigates an enormous range of phenomena: Furthermore, psychologists examine these topics from a variety of complementary psychological perspectives. Each psychological perspective is underpinned by a shared set of assumptions of what people are like, what is important to study and how to study it. Some conduct detailed biological studies of the brain, others explore how we process information; others analyze the role of evolution, and still others study the influence of culture and society. Critical Evaluation Kuhn argues that a field of study can only legitimately be regarded as a science if most of its followers subscribe to a common perspective or paradigm. The crucial point here is: How to reference this article:

Chapter 3 : The Psychology of it All! | Into The Mind

The Human Mind Psychology and the human mind are inextricably linked. Indeed, the word psychology is derived from the Greek words psuche, meaning mind or soul, from which the term psych e arose; and logos meaning study or discourse.

Definition[edit] Theory of mind is a theory insofar as the mind is the only thing being directly observed. As originally defined, it enables one to understand that mental states can be the cause of and thus be used to explain and predict the behavior of others. Theory of mind appears to be an innate potential ability in humans that requires social and other experience over many years for its full development. Different people may develop more, or less, effective theory of mind. Neo-Piagetian theories of cognitive development maintain that theory of mind is a byproduct of a broader hypercognitive ability of the human mind to register, monitor, and represent its own functioning. Recent neuro-ethological studies of animal behaviour suggest that even rodents may exhibit ethical or empathetic abilities. An alternative account of theory of mind is given within operant psychology and provides significant empirical evidence for a functional account of both perspective-taking and empathy. The most developed operant approach is founded on research on derived relational responding and is subsumed within what is called relational frame theory. According to this view, empathy and perspective-taking comprise a complex set of derived relational abilities based on learning to discriminate and respond verbally to ever more complex relations between self, others, place, and time, and through established relations. Most prominent recently are two contrasting approaches in the philosophical literature, to theory of mind: The theory is developed automatically and innately, though instantiated through social interactions. The intuitive assumption that others are minded is an apparent tendency we all share. We anthropomorphize non-human animals, inanimate objects, and even natural phenomena. Daniel Dennett referred to this tendency as taking an "intentional stance" toward things: The intentional stance is a detached and functional theory we resort to during interpersonal interactions. A shared world is directly perceived and its existence structures reality itself for the perceiver. It is not just automatically applied to perception; it in many ways constitutes perception. The philosophical roots of the relational frame theory RFT account of Theory of Mind arise from contextual psychology and refer to the study of organisms both human and non-human interacting in and with a historical and current situational context. It is an approach based on contextualism, a philosophy in which any event is interpreted as an ongoing act inseparable from its current and historical context and in which a radically functional approach to truth and meaning is adopted. As a variant of contextualism, RFT focuses on the construction of practical, scientific knowledge. This scientific form of contextual psychology is virtually synonymous with the philosophy of operant psychology. In studies with non-human animals and pre-verbal humans, in particular, researchers look to these behaviors preferentially in making inferences about mind. Baron-Cohen speculates that the inclination to spontaneously reference an object in the world as of interest "protodeclarative pointing" and to likewise appreciate the directed attention and interests of another may be the underlying motive behind all human communication. Both 2- and 3-year-old children could discriminate when an experimenter intentionally vs. Meltzoff found that month-old infants could perform target manipulations that adult experimenters attempted and failed, suggesting the infants could represent the object-manipulating behavior of adults as involving goals and intentions. Some researchers in comparative disciplines have hesitated to put a too-ponderous weight on imitation as a critical precursor to advanced human social-cognitive skills like mentalizing and empathizing, especially if true imitation is no longer employed by adults. A test of imitation by Alexandra Horowitz [25] found that adult subjects imitated an experimenter demonstrating a novel task far less closely than children did. Horowitz points out that the precise psychological state underlying imitation is unclear and cannot, by itself, be used to draw conclusions about the mental states of humans. While much research has been done on infants, theory of mind develops continuously throughout childhood and into late adolescence as the synapses neuronal connections in the prefrontal cortex develop. The prefrontal cortex is thought to be involved in planning and decision-making. The first skill to develop is the ability to recognize that others have diverse

desires. Children are able to recognize that others have diverse beliefs soon after. The next skill to develop is recognizing that others have access to different knowledge bases. Finally, children are able to understand that others may have false beliefs and that others are capable of hiding emotions. While this sequence represents the general trend in skill acquisition, it seems that more emphasis is placed on some skills in certain cultures, leading to more valued skills to develop before those that are considered not as important. For example, in individualistic cultures such as the United States, a greater emphasis is placed on the ability to recognize that others have different opinions and beliefs. In a collectivistic culture, such as China, this skill may not be as important and therefore may not develop until later. However, many other abilities develop during this same time period as well, and do not produce such high correlations with one another nor with theory of mind. There must be something else going on to explain the relationship between theory of mind and language. Pragmatic theories of communication [29] assume that infants must possess an understanding of beliefs and mental states of others to infer the communicative content that proficient language users intend to convey. Since a verbal utterance is often underdetermined, and therefore, it can have different meanings depending on the actual context theory of mind abilities can play a crucial role in understanding the communicative and informative intentions of others and inferring the meaning of words. Some empirical results [30] suggest that even month-old infants have an early capacity for communicative mind-reading that enables them to infer what relevant information is transferred between communicative partners, which implies that human language relies at least partially on theory of mind skills. Miller posed further possible explanations for this relationship. One idea was that the extent of verbal communication and conversation involving children in a family could explain theory of mind development. The belief is that this type of language exposure could help introduce a child to the different mental states and perspectives of others. Since a mental state is not something that one can observe from behavior, children must learn the meanings of words denoting mental states from verbal explanations alone, requiring knowledge of the syntactic rules, semantic systems, and pragmatics of a language. Recognizing these sentential complements as being independent of one another is a relatively complex syntactic skill and has been shown to be related to increased scores on theory of mind tasks in children. The temporoparietal junction has been shown to be involved in the ability to acquire new vocabulary, as well as perceive and reproduce words. The temporoparietal junction also contains areas that specialize in recognizing faces, voices, and biological motion, in addition to theory of mind. Since all of these areas are located so closely together, it is reasonable to conclude that they work together. In contrast to theory of mind, empathy shows no impairments in aging. Cognitive theory of mind is further separated into first order e. There is evidence that cognitive and affective theory of mind processes are functionally independent from one another. However, it is difficult to discern a clear pattern of theory of mind variation due to age. There have been many discrepancies in the data collected thus far, likely due to small sample sizes and the use of different tasks that only explore one aspect of theory of mind. Many researchers suggest that the theory of mind impairment is simply due to the normal decline in cognitive function. Although they begin the development of theory of mind around the same time, toddlers from these countries understand knowledge access KA before Western children but take longer to understand false beliefs FB. Because of these different cultural values, Iranian and Chinese children might take longer to understand that other people have different, sometimes false, beliefs. This suggests that the development of theory of mind is not universal and solely determined by innate brain processes but also influenced by social and cultural factors. It is a challenging question, due to the difficulty of assessing what pre-linguistic children understand about others and the world. Tasks used in research into the development of Theory of Mind must take into account the *umwelt* – the German word *Umwelt* means "environment" or "surrounding world" – of the pre-verbal child. Numerous versions of the false-belief task have been developed, based on the initial task done by Wimmer and Perner. For example, the child is shown two dolls, Sally and Anne, who have a basket and a box, respectively. Sally also has a marble, which she places into her basket, and then leaves the room. While she is out of the room, Anne takes the marble from the basket and puts it into the box. Sally returns, and the child is then asked where Sally will look for the marble. The child passes the task if she answers that Sally will look in the basket, where Sally put the marble; the child fails the task if she answers that Sally will look in the box, where the child knows the marble

is hidden, even though Sally cannot know this, since she did not see it hidden there. Another example is when a boy leaves chocolate on a shelf and then leaves the room. His mother puts it in the fridge. To pass the task, the child must understand that the boy, upon returning, holds the false belief that his chocolate is still on the shelf. For instance, when they show hindsight bias, defined as: In the "Unexpected contents", or "Smarties" task, experimenters ask children what they believe to be the contents of a box that looks as though it holds a candy called "Smarties". After the child guesses usually "Smarties", it is shown that the box in fact contained pencils. The experimenter then re-closes the box and asks the child what she thinks another person, who has not been shown the true contents of the box, will think is inside. Other tasks [edit] The "false-photograph" task [51] [52] is another task that serves as a measure of theory of mind development. In this task, children must reason about what is represented in a photograph that differs from the current state of affairs. Within the false-photograph task, either a location or identity change exists. While the photograph is developing, the examiner moves the object to a different location e. The examiner asks the child two control questions: The subject is also asked a "false-photograph" question: However, the last question might be misinterpreted as: One category of tasks uses a preferential looking paradigm, with looking time as the dependent variable. For instance, 9-month-old infants prefer looking at behaviors performed by a human hand over those made by an inanimate hand-like object. Using a variety of experimental procedures, studies have shown that infants from their first year of life have an implicit understanding of what other people see [56] and what they know. Therefore, their looking-times measures would give researchers an indication of what infants might be inferring, or their implicit understanding of events. One recent study using this paradigm found that month-olds tend to attribute beliefs to a person whose visual perception was previously witnessed as being "reliable", compared to someone whose visual perception was "unreliable". Following this training phase, infants witnessed, in an object-search task, the same persons either searching for a toy in the correct or incorrect location after they both witnessed the location of where the toy was hidden. Infants who experienced the reliable looker were surprised and therefore looked longer when the person searched for the toy in the incorrect location compared to the correct location. In contrast, the looking time for infants who experienced the unreliable looker did not differ for either search locations. This is also sometimes referred to as mind-blindness. This means that individuals with a theory of mind impairment would have a difficult time seeing phenomena from any other perspective than their own. Theory of mind deficits have also been observed in deaf children who are late signers i. These difficulties persist when children are matched for verbal skills [63] and have been taken as a key feature of autism. Many individuals classified as autistic have severe difficulty assigning mental states to others, and they seem to lack theory of mind capabilities. One account assumes that theory of mind plays a role in the attribution of mental states to others and in childhood pretend play. This might explain why some autistic individuals show extreme deficits in both theory of mind and pretend play. However, Hobson proposes a social-affective justification, [66] which suggests that with an autistic person, deficits in theory of mind result from a distortion in understanding and responding to emotions. Other scholars emphasize that autism involves a specific developmental delay, so that autistic children vary in their deficiencies, because they experience difficulty in different stages of growth. Very early setbacks can alter proper advancement of joint-attention behaviors, which may lead to a failure to form a full theory of mind.

Inside the Criminal Mind: Understanding the dark side of human conduct, by Stanton E. Samenow, Ph.D.

This definition enjoyed widespread currency for decades. However, this meaning was contested, notably by radical behaviorists such as John B. Watson, who in his manifesto defined the discipline of psychology as the acquisition of information useful to the control of behavior. Also since James defined it, the term more strongly connotes techniques of scientific experimentation. History of psychology The ancient civilizations of Egypt, Greece, China, India, and Persia all engaged in the philosophical study of psychology. Historians note that Greek philosophers, including Thales, Plato, and Aristotle especially in his *De Anima* treatise, [14] addressed the workings of the mind. This body of knowledge involves insights drawn from introspection and observation, as well as techniques for focused thinking and acting. It frames the universe as a division of, and interaction between, physical reality and mental reality, with an emphasis on purifying the mind in order to increase virtue and power. Chinese scholarship focused on the brain advanced in the Qing Dynasty with the work of Western-educated Fang Yizhi, Liu Zhi, and Wang Qingren. Wang Qingren emphasized the importance of the brain as the center of the nervous system, linked mental disorder with brain diseases, investigated the causes of dreams and insomnia, and advanced a theory of hemispheric lateralization in brain function. Divergent Hindu doctrines, and Buddhism, have challenged this hierarchy of selves, but have all emphasized the importance of reaching higher awareness. Yoga is a range of techniques used in pursuit of this goal. However, Indian doctrines influenced Western thinking via the Theosophical Society, a New Age group which became popular among Euro-American intellectuals. In Germany, Gottfried Wilhelm Leibniz applied his principles of calculus to the mind, arguing that mental activity took place on an indivisible continuum—most notably, that among an infinity of human perceptions and desires, the difference between conscious and unconscious awareness is only a matter of degree. Christian Wolff identified psychology as its own science, writing *Psychologia empirica* in and *Psychologia rationalis* in . This notion advanced further under Immanuel Kant, who established the idea of anthropology, with psychology as an important subdivision. However, Kant explicitly and notoriously rejected the idea of experimental psychology, writing that "the empirical doctrine of the soul can also never approach chemistry even as a systematic art of analysis or experimental doctrine, for in it the manifold of inner observation can be separated only by mere division in thought, and cannot then be held separate and recombined at will but still less does another thinking subject suffer himself to be experimented upon to suit our purpose, and even observation by itself already changes and displaces the state of the observed object. However, this discipline did not yet embrace experimentation. Gustav Fechner began conducting psychophysics research in Leipzig in the s, articulating the principle that human perception of a stimulus varies logarithmically according to its intensity. Wundt, in turn, came to Leipzig University, establishing the psychological laboratory which brought experimental psychology to the world. Wundt focused on breaking down mental processes into the most basic components, motivated in part by an analogy to recent advances in chemistry, and its successful investigation of the elements and structure of material. Stanley Hall who studied with Wundt, formed a psychology lab at Johns Hopkins University in Maryland, which became internationally influential. Hall, in turn, trained Yujiro Motora, who brought experimental psychology, emphasizing psychophysics, to the Imperial University of Tokyo. Catell, who also studied with eugenicist Francis Galton, went on to found the Psychological Corporation. Wittmer focused on mental testing of children; Scott, on selection of employees. Structuralism sought to analyze and classify different aspects of the mind, primarily through the method of introspection. In , James wrote an influential book, *The Principles of Psychology*, which expanded on the realm of structuralism, memorably described the human "stream of consciousness", and interested many American students in the emerging discipline. This approach is based upon the idea that individuals experience things as unified wholes. Rather than breaking down thoughts and behavior into smaller elements, as in structuralism, the Gestaltists maintained that whole of experience is important, and differs from the sum of its parts. Other 19th-century contributors to the field include the German psychologist Hermann Ebbinghaus, a pioneer in the experimental study of memory, who

developed quantitative models of learning and forgetting at the University of Berlin , [32] and the Russian-Soviet physiologist Ivan Pavlov , who discovered in dogs a learning process that was later termed " classical conditioning " and applied to human beings. William James was one of three Americans among the four hundred attendees. The American Psychological Association was founded soon after, in The International Congress continued to be held, at different locations in Europe, with wider international participation. In , the Congress took place at Yale University in New Haven, Connecticut, attended by hundreds of members of the American Psychological Association [23] Tokyo Imperial University led the way in bringing the new psychology to the East, and from Japan these ideas diffused into China. University of Michigan psychologist Dorwin Cartwright reported that university researchers began large-scale propaganda research in " , and "the last few months of the war saw a social psychologist become chiefly responsible for determining the week-by-week-propaganda policy for the United States Government. In the s, the Rockefeller Foundation and Ford Foundation collaborated with the Central Intelligence Agency to fund research on psychological warfare. Freudian psychoanalysts were expelled and persecuted under the anti-Jewish policies of the Nazi Party, and all psychologists had to distance themselves from Freud and Adler. This psychotherapy aimed to align suitable Germans with the overall goals of the Reich; as described by one physician: Alexander Mitscherlich founded a prominent applied psychoanalysis journal called *Psyche* and with funding from the Rockefeller Foundation established the first clinical psychosomatic medicine division at Heidelberg University. In , psychology was integrated into the required studies of medical students. Thus, university psychology departments trained large numbers of students, for whom positions were made available at schools, workplaces, cultural institutions, and in the military. An especial focus was pedology , the study of child development, regarding which Lev Vygotsky became a prominent writer. Luria , and Aron Zalkind were denounced; Ivan Pavlov posthumously and Stalin himself were aggrandized as heroes of Soviet psychology. There emerged a new field called "engineering psychology" which studied mental aspects of complex jobs such as pilot and cosmonaut. Interdisciplinary studies became popular and scholars such as Georgy Shchedrovitsky developed systems theory approaches to human behavior. Chinese psychologists were encouraged to focus on education and language learning, with the aspiration that education would enable modernization and nationalization. John Dewey, who lectured to Chinese audiences in " , had a significant influence on this doctrine. They developed a concept of "recognition" *jen-shih* which referred the interface between individual perceptions and the socially accepted worldview. Failure to correspond with party doctrine was "incorrect recognition". Most leading psychologists were educated in the United States, and the first concern of the Academy was re-education of these psychologists in the Soviet doctrines. Child psychology and pedagogy for nationally cohesive education remained a central goal of the discipline. Several associations including the Association of Black Psychologists and the Asian American Psychological Association have arisen to promote non-European racial groups in the profession. It holds the Interamerican Congress of Psychology and had members in year The European Federation of Professional Psychology Associations, founded in , represents 30 national associations with a total of , individual members. At least 30 other international groups organize psychologists in different regions. Parapsychology, hypnotism , and psychism were major topics of the early International Congresses. But students of these fields were eventually ostracized, and more or less banished from the Congress in " Skeptics have suggested that personality , thinking , and emotion , cannot be directly measured and are often inferred from subjective self-reports, which may be problematic. Experimental psychologists have devised a variety of ways to indirectly measure these elusive phenomenological entities. Critics inside and outside the field have argued that mainstream psychology has become increasingly dominated by a "cult of empiricism" which limits the scope of its study by using only methods derived from the physical sciences. Jean Grimshaw, for example, argues that mainstream psychological research has advanced a patriarchal agenda through its efforts to control behavior. The arrow indicates the position of the hypothalamus. Psychologists generally consider the organism the basis of the mind, and therefore a vitally related area of study. Psychiatrists and neuropsychologists work at the interface of mind and body. Key research topics in this field include comparative psychology , which studies humans in relation to other animals, and perception which involves the physical mechanics of sensation as

well as neural and mental processing. From Phineas Gage to H. Soon after, Carl Wernicke identified a related area necessary for the understanding of speech. For example, physiological psychologists use animal models, typically rats, to study the neural, genetic, and cellular mechanisms that underlie specific behaviors such as learning and memory and fear responses. The biopsychosocial model is an integrated perspective toward understanding consciousness, behavior, and social interaction. It assumes that any given behavior or mental process affects and is affected by dynamically interrelated biological, psychological, and social factors. This perspective suggests that psychological adaptations evolved to solve recurrent problems in human ancestral environments. Evolutionary psychology offers complementary explanations for the mostly proximate or developmental explanations developed by other areas of psychology: The idea of white supremacy and indeed the modern concept of race itself arose during the process of world conquest by Europeans. Race was also used to justify the construction of socially specific mental disorders such as drapetomania and dysaesthesia aethiopica – the behavior of uncooperative African slaves. Much of the research in this area began with tests on mammals, based on the idea that humans exhibit similar fundamental tendencies. Behavioral research ever aspires to improve the effectiveness of techniques for behavior modification. Play media The film of the Little Albert experiment Early behavioral researchers studied stimulus–response pairings, now known as classical conditioning. They demonstrated that behaviors could be linked through repeated association with stimuli eliciting pain or pleasure. Ivan Pavlov – known best for inducing dogs to salivate in the presence of a stimulus previously linked with food – became a leading figure in the Soviet Union and inspired followers to use his methods on humans. Thorndike wrote in Watson coined the term behaviorism for this school of thought. Hull , Edwin Guthrie , and others, behaviorism became a widely used research paradigm. Radical behaviorists avoided discussing the inner workings of the mind, especially the unconscious mind, which they considered impossible to assess scientifically. Skinner , who emerged as a leading intellectual of the behaviorist movement. Tolman advanced a hybrid "cognitive behavioral" model, most notably with his publication discussing the cognitive maps used by rats to guess at the location of food at the end of a modified maze.

Chapter 5 : What is Psychology? | Simply Psychology

The Intellectual Basis: The intersection between psychology and mind/brain/behavior is concerned with how mental capacities -- such as memory, perception, mental imagery, and language -- arise from brain function. Thus, studies in the Cognitive Science track involve studying mechanisms that ultimately produce cognition and behavior.

A tool for arousing emotions and feelings, music is far more powerful than language. Be it within films, live orchestras, concerts or a simple home stereo, music can be so evocative and overwhelming that it can only be described as standing halfway between thought and phenomenon. But why exactly does this experience of music distinctly transcend other sensory experiences? How is it able to evoke emotion in a way that is incomparable to any other sense? Music can be thought of as a type of perceptual illusion, much the same way in which a collage is perceived. The brain imposes structure and order on a sequence of sounds that, in effect, creates an entirely new system of meaning. The appreciation of music is tied to the ability to process its underlying structure -- the ability to predict what will occur next in the song. But this structure has to involve some level of the unexpected, or it becomes emotionally devoid. This successful manipulation is what elicits the chills that are part of any moving song. Music, though it appears to be similar to features of language, is more rooted in the primitive brain structures that are involved in motivation, reward and emotion. Music involves subtle violations of timing and, because we know through experience that music is not threatening, these violations are ultimately identified by the frontal lobes as a source of pleasure. The expectation builds anticipation, which, when met, results in the reward reaction. More than any other stimulus, music has the ability to conjure up images and feelings that need not necessarily be directly reflected in memory. When we are born, our brain has not yet differentiated itself into different components for different senses -- this differentiation occurs much later in life. So as babies, it is theorized that we view the world as a large, pulsing combination of colors and sounds and feelings, all melded into one experience -- ultimate synesthesia. As our brains develop, certain areas become specialized in vision, speech, hearing, and so forth. The extent of this connection is seemingly variable among individuals, which is how certain musicians have the ability to create pieces of music which are brimming with emotional quality, and others simply cannot. Be it classics from the Beatles and Stevie Wonder or fiery riffs from Metallica and Led Zeppelin, the preference for a certain type of music has an effect on its very experience. It could be this heightened level of experience in certain people and musicians that allows them to imagine and create music that others simply cannot, painting their very own sonic image. Retrieved on November 11, , from <https://>

Chapter 6 : Psychology - Wikipedia

The Social Psychology of the Political Mind (20 ratings) Course Ratings are calculated from individual students' ratings and a variety of other signals, like age of rating and reliability, to ensure that they reflect course quality fairly and accurately.

The study of religious psychology involves both the gathering and classification of data and the building and testing of various usually rather wide-ranging explanations. The former activity overlaps with the phenomenology of religion, so it is to some extent an arbitrary decision. Early history In Western culture , contributors to the development of psychology came from many areas, beginning with philosophers such as Plato and Aristotle. Hippocrates philosophized about basic human temperaments e. Informed by the biology of his time, he speculated that physical qualities, such as yellow bile or too much blood, might underlie differences in temperament see also humour. Two figures who helped to found psychology as a formal discipline and science in the 19th century were Wilhelm Wundt in Germany and William James in the United States. During the first half of the 20th century, however, behaviourism dominated most of American academic psychology. In John B. Watson , one of the influential founders of behaviourism, urged reliance on only objectively measurable actions and conditions, effectively removing the study of consciousness from psychology. He argued that psychology as a science must deal exclusively with directly observable behaviour in lower animals as well as humans, emphasized the importance of rewarding only desired behaviours in child rearing, and drew on principles of learning through classical conditioning based on studies with dogs by the Russian physiologist Ivan Pavlov and thus known as Pavlovian conditioning. In the United States most university psychology departments became devoted to turning psychology away from philosophy and into a rigorous empirical science. Skinner leading the way in demonstrating the power of operant conditioning through reinforcement. Their work showed that social behaviour is readily influenced by manipulating specific contingencies and by changing the consequences or reinforcement rewards to which behaviour leads in different situations. Changes in those consequences can modify behaviour in predictable stimulus-response S-R patterns. Likewise, a wide range of emotions , both positive and negative, may be acquired through processes of conditioning and can be modified by applying the same principles. Freud and his followers Concurrently, in a curious juxtaposition , the psychoanalytic theories and therapeutic practices developed by the Vienna-trained physician Sigmund Freud and his many disciplesâ€”beginning early in the 20th century and enduring for many decadesâ€”were undermining the traditional view of human nature as essentially rational. Freudian theory made reason secondary: Making the unconscious conscious became the therapeutic goal of clinicians working within this framework. Much of it also reflects conflicts grounded in early childhood that play out in complex patterns of seemingly paradoxical behaviours and symptoms. His followers, the ego psychologists, emphasized the importance of the higher-order functions and cognitive processes e. They also shifted their focus to the roles of interpersonal relations and of secure attachment in mental health and adaptive functioning, and they pioneered the analysis of these processes in the clinical setting. After World War II and Sputnik After World War II , American psychology, particularly clinical psychology, grew into a substantial field in its own right, partly in response to the needs of returning veterans. The growth of psychology as a science was stimulated further by the launching of Sputnik in and the opening of the Russian-American space race to the Moon. As part of this race, the U. For the first time, massive federal funding became available, both to support behavioral research and to enable graduate training. Psychology became both a thriving profession of practitioners and a scientific discipline that investigated all aspects of human social behaviour, child development , and individual differences, as well as the areas of animal psychology, sensation , perception , memory , and learning. Training in clinical psychology was heavily influenced by Freudian psychology and its offshoots. But some clinical researchers, working with both normal and disturbed populations, began to develop and apply methods focusing on the learning conditions that influence and control social behaviour. This behaviour therapy movement analyzed problematic behaviours e. Behavioral approaches led to innovations for therapy by working to modify problematic behaviour not through

insight, awareness, or the uncovering of unconscious motivations but by addressing the behaviour itself. They also intended to show that such efforts could be successful without the symptom substitution that Freudian theory predicted. Freudians believed that removing the troubling behaviour directly would be followed by new and worse problems. Behaviour therapists showed that this was not necessarily the case. To begin exploring the role of genetics in personality and social development, psychologists compared the similarity in personality shown by people who share the same genes or the same environment. Twin studies compared monozygotic identical as opposed to dizygotic fraternal twins, raised either in the same or in different environments. Overall, these studies demonstrated the important role of heredity in a wide range of human characteristics and traits, such as those of the introvert and extravert, and indicated that the biological-genetic influence was far greater than early behaviourism had assumed. At the same time, it also became clear that how such dispositions are expressed in behaviour depends importantly on interactions with the environment in the course of development, beginning in utero.

Impact and aftermath of the cognitive revolution

By the early s the relevance of the Skinnerian approach for understanding complex mental processes was seriously questioned. In conjunction with concurrent analyses and advances in areas from computer science and artificial intelligence to neuroscience, genetics, and applications of evolutionary theory, the scientific study of the mind and mental activity quickly became the foundation for much of the evolving new psychological science in the 21st century. Psychological scientists demonstrated that organisms have innate dispositions and that human brains are distinctively prepared for diverse higher-level mental activities, from language acquisition to mathematics, as well as space perception, thinking, and memory. They also developed and tested diverse theoretical models for conceptualizing mental representations in complex information processing conducted at multiple levels of awareness. They asked such questions as: How is memory organized? In a related direction, the analysis of visual perception took increasing account of how the features of the environment e. Concurrently, to investigate personality, individual differences, and social behaviour, a number of theorists made learning theories both more social interpersonal and more cognitive. Research demonstrated the importance of learning through observation from real and symbolic models, showing that it occurs spontaneously and cognitively without requiring any direct reinforcement. Likewise, studies of the development of self-control and the ability to delay gratification in young children showed that it is crucially important how the situation and the temptations are cognitively appraised: Traditional personality-trait taxonomies continued to describe individuals and types using such terms as introversion-extraversion and sociable-hostile, based on broad trait ratings. Research examined the nature of the consistencies and variability that characterize individuals distinctively across situations and over time and began to identify how different types of individuals respond to different types of psychological situations. The often surprising findings led to new models of cognitive and affective information-processing systems. In clinical applications, cognitive-behaviour therapy CBT was developed. CBT focuses on identifying and changing negative, inaccurate, or otherwise maladaptive beliefs and thought patterns through a combination of cognitive and behaviour therapy. It helps people to change how they think and feel about themselves and others. In time, these cognitive-behavioral treatment innovations, often supplemented with medications, were shown to be useful for treating diverse problems, including disabling fears, self-control difficulties, addictions, and depression. In social psychology, beginning in the early s, social cognition—how people process social information about other people and the self—became a major area of study. Recognizing that much information processing occurs at levels below awareness and proceeds automatically, research turned to the effects of subliminal below awareness stimuli on the activation of diverse kinds of mental representations, emotions, and social behaviours. Working with a variety of animal species, from mice and birds to higher mammals such as apes, researchers investigated social communication and diverse social behaviours, psychological characteristics, cognitive abilities, and emotions, searching for similarities and differences in comparison with humans. In developmental psychology, investigators identified and analyzed with increasing precision the diverse perceptual, cognitive, and numerical abilities of infants and traced their developmental course, while others focused on life-span development and mental and behavioral changes in the aging process. Developmental research provided clear evidence that humans, rather than entering the world with a

mental blank slate, are extensively prepared for all sorts of cognitive and skill development. At the same time, research also has yielded equally impressive evidence for the plasticity of the human brain and the possibilities for change in the course of development. Linking mind, brain, and behaviour Late in the 20th century, methods for observing the activity of the living brain were developed that made it possible to explore links between what the brain is doing and psychological phenomena, thus opening a window into the relationship between the mind, brain, and behaviour. The functioning of the brain enables everything one does, feels, and knows. To examine brain activity, functional magnetic resonance imaging fMRI is used to measure the magnetic fields created by the functioning nerve cells in the brain, detecting changes in blood flow. They thus allow a much more precise and detailed analysis of the links between activity in the brain and the mental state a person experiences while responding to different types of stimuli and generating different thoughts and emotions. These can range, for example, from thoughts and images about what one fears and dreads to those directed at what one craves the most. The result of this technology is a virtual revolution for work that uses the biological level of neural activity to address questions that are of core interest for psychologists working in almost all areas of the discipline. Displayed by permission of The Regents of the University of California.

Social cognitive neuroscience The advances described above led to the development in the early years of the 21st century of a new, highly popular field: This interdisciplinary field asks questions about topics traditionally of interest to social psychologists, such as person perception, attitude change, and emotion regulation. It does so by using methods traditionally employed by cognitive neuroscientists, such as functional brain imaging and neuropsychological patient analysis. By integrating the theories and methods of its parent disciplines, SCN tries to understand the interactions between social behaviour, cognition, and brain mechanisms. In contemporary use, the term refers to efforts to explain individual differences in physical as well as behavioral traits e. Thus, while the genome provides the possibilities, the environment determines which genes become activated. In the early 21st century there emerged evidence for the important role of the environment e. Epigenetic factors may serve as a critical biological link between the experiences of an individual and subsequent individual differences in brain and behaviour, both within and across generations. Epigenetic research points to the pathways through which environmental influence and psychological experiences may be transformed and transmitted at the biological level. It thus provides another route for the increasingly deep analysis of mind-brain-behaviour links at multiple levels of analysis, from the psychological to the biological.

Evolving scope and structure of psychological science The discoveries and advances of psychological science keep expanding its scope and tools and changing its structure and organization. For most of the 20th century, psychological science consisted of a variety of specialized subfields with little interconnection. They ranged from clinical psychology to the study of individual differences and personality, to social psychology, to industrial-organizational psychology, to community psychology, to the experimental study of such basic processes as memory, thinking, perception and sensation, to animal behaviour, and to physiological psychology. In larger academic psychology departments, the list got longer. The various subfields, each with its own distinct history and specialized mission, usually were bundled together within academic departments, essentially a loose federation of unrelated disciplines, each with its own training program and research agenda. Late in the 20th century this situation began to change, fueled in part by the rapid growth of developments in cognitive science and social cognitive neuroscience, including the discovery of new methods for studying cognition, emotion, the brain, and genetic influences on mind and behaviour. In the early years of the 21st century, psychology became an increasingly integrative science at the intersection or hub of diverse other disciplines, from biology, neurology, and economics to sociology and anthropology. Likewise, advances in cognitive neuroscience led to the subfield of neuroeconomics. In another direction, links deepened between psychology and law. This connection reflected new findings in psychology about the nature of human social behaviour, as well as the fallibility of eyewitness testimony in legal trials and the distortions in retrospective memory. Likewise, with recognition of the role of mental processes and self-care behaviour in the maintenance of health, the fields of behavioral medicine and health psychology emerged. These subfields study links between psychological processes, social behaviour, and health. At the same time, within psychology, old sub-disciplinary boundaries were crossed more freely. Interdisciplinary teams often

work on a common problem using different methods and tools that draw on multiple levels of analysis, from the social to the cognitive and to the biological. Research methods Multiple tools and methods for diverse goals An extremely wide range of diverse research methods are used by psychological scientists to pursue their particular goals. To study verbal and nonverbal behaviour and mental processes in humans, these include questionnaires, ratings, self-reports, and case studies; tests of personality, attitudes, and intelligence ; structured interviews; daily diary records; and direct observation and behaviour sampling outside the laboratory. Diverse laboratory measures are used to study perception, attention , memory, decision making, self-control, delay of gratification , and many other visual, cognitive, and emotional processes, at levels of both conscious and automatic or unconscious information processing. Complex data -analysis methods The astonishing growth in computational power that began in the final decades of the 20th century transformed research on methods of data analysis in psychology. More-flexible and more-powerful general linear models and mixed models became available. Similarly, for nonexperimental data, multiple regression analysis began to be augmented by structural equation models that allow for chains and webs of interrelationships and for analysis of extremely complex data. The availability of free, fast, and flexible software also began to change teaching in the measurement area.

Chapter 7 : BBC Science | Human Body & Mind | What is Psychology?

Why do we dream? How do dreams provide insight into the mind? Are dreams relevant to waking life? From ancient times when dreams were considered to hold prophetic powers to the neurological phenomena studied today, dreams remain one of psychology's most enduring mysteries.

A mild, normal-person sensation seeking experience would be like riding a rollercoaster, for example. Super-tasting has previously been linked to increased emotionality in humans, another characteristic typical of psychopaths. We can speculate that psychopaths would enjoy bitter foods because, in the wild, bitter foods are a warning sign of being poisonous, so they might get a thrill from eating them again, sensation-seeking behavior. Psychopathic Tendencies This is very disturbing footage of a psychopathic child from the documentary Child of Rage: Luckily, her psychopathic tendencies never grew into true psychopathy. They are at high risk of substance abuse and incarceration. Researchers believe that psychopathy has roots in early childhood. Children who show an early lack of fear, indifference towards peers and appear callous in the face of emotion are at the greatest risk. The Brain of a Psychopath Researchers believe that psychopaths have different brain activity patterns than non-psychopaths. Specifically, less exhibit less activity in the amygdala where fear is processed and in the orbital frontal cortex or regions where decision making happens. This study also found that psychopaths have less activity in the area of the brain that processes empathy. This suggests that there is a relationship between how the brain functions and the behavior of a psychopath. The CIA has released all kinds of interesting personality reports of historical figures. Read some of the findings below. Murray was tasked with putting together a personality evaluation of Adolf Hitler in The outstanding neurotic elements in his personality are his hunger for power and his need for the recognition and adulation of the masses. In pursuing his goals, Saddam uses aggression instrumentally. He uses whatever force is necessary, and will, if he deems it expedient, go to extremes of violence, including the use of weapons of mass destruction. While Hussein is not psychotic, he has a strong paranoid orientation. Can Psychopaths be Cured? It is incredibly difficult to teach empathy, but loving relationships and therapy can help reengage healthy, social behaviors. The discussion on treating psychopaths is not that different from the conversation about lowering recidivism and helping criminal rehabilitation. One model that has had some success is called the Decompression Model. The Decompression Model is all about positive reinforcement. Whenever good behavior is spotted, staff members at the MJTC immediately offer some kind of reward. This increases and reinforces learning a new behavior. This is a 34 percent reduction in recidivism! If so, this last study with MJTC criminal youth is crucial for you. When dealing with psychopaths, punishments do not work. Positive reinforcement is the kindest and most effective thing you can do. Most importantly, I think this is a better way to interact in general. Always look for good behavior to reward instead of bad behavior to punish. Always reward the good, and you will see more of it. Could you be a human lie detector? Learn the 5 scientifically proven steps to being a lie detector in our online training. Never miss a lie again.

Chapter 8 : What is psychology?

The article delves into the psychology of words and explains why the words do matter and the profound effect they have on each and every one of us.

The human mind is the most complex machine on Earth. It is the source of all thought and behaviour. How do psychologists study the mind? But how can we study something as complex and mysterious as the mind? Even if we were to split open the skull of a willing volunteer and have a look inside, we would only see the gloopy grey matter of the brain. We cannot see someone thinking. Nor can we observe their emotions, or memories, or perceptions and dreams. So how do psychologists go about studying the mind? In fact, psychologists adopt a similar approach to scientists in other fields. Nuclear physicists interested in the structure of atoms cannot observe protons, electrons and neutrons directly. Instead, they predict how these elements should behave and devise experiments to confirm or refute their expectations. Although we cannot observe the mind directly, everything we do, think, feel and say is determined by the functioning of the mind. So psychologists take human behaviour as the raw data for testing their theories about how the mind works. Since the German psychologist Wilhelm Wundt opened the first experimental psychology lab in Leipzig in 1879, we have learned an enormous amount about the relationship between brain, mind and behaviour. Psychology and other disciplines Psychology lies at the intersection of many other different disciplines, including biology, medicine, linguistics, philosophy, anthropology, sociology, and artificial intelligence AI. For example, neuropsychology is allied with biology, since the aim is to map different areas of the brain and explain how each underpins different brain functions like memory or language. Other branches of psychology are more closely connected with medicine. Health psychologists help people manage disease and pain. Similarly, clinical psychologists help alleviate the suffering caused by mental disorders. Branches of psychology Any attempt to explain why humans think and behave in the way that they do will inevitably be linked to one or another branch of psychology. The different disciplines of psychology are extremely wide-ranging.

Chapter 9 : Everything You Wanted to Know About the Science of Psychopaths

Psychology is the study of the mind and behavior. Research in psychology seeks to understand and explain how people think, act, and feel. Psychologists strive to learn more about the many factors that can impact thought and behavior, ranging from biological influences to social pressures.