

# **affective neuroscience definition**

**affective neuroscience definition** refers to the interdisciplinary field that bridges the study of emotions and the neural mechanisms underlying them. This field seeks to understand how affective processes—such as feelings, moods, and emotional responses—are represented, processed, and regulated within the brain. By integrating insights from psychology, neuroscience, and cognitive science, affective neuroscience provides a comprehensive framework to explore the biological basis of emotions and their impact on behavior and mental health. This article will delve into the fundamental concepts, historical development, key brain structures involved, research methods, and the practical applications of affective neuroscience. Understanding the affective neuroscience definition also sheds light on the clinical implications for mood disorders, emotional regulation, and social cognition.

- Understanding Affective Neuroscience
- Historical Development of Affective Neuroscience
- Key Brain Structures in Affective Neuroscience
- Research Methods in Affective Neuroscience
- Applications and Clinical Implications

## **Understanding Affective Neuroscience**

The affective neuroscience definition encompasses the scientific study of the neural bases of emotions and affective states. It explores how the brain processes emotional information, the physiological responses triggered by emotions, and how these affective processes influence cognition and behavior. By examining the neural circuits involved in emotional experiences, affective neuroscience aims to elucidate the complex interactions between brain function and emotional regulation. This field also investigates the evolutionary significance of emotions and their role in survival and social communication.

## **Core Concepts in Affective Neuroscience**

Affective neuroscience centers on several core concepts, including affect, emotion, mood, and feelings. Affect refers to the broad range of emotional experiences, while emotions are more specific, short-lived responses to stimuli. Moods are longer-lasting affective states without a clear cause, and feelings represent the subjective experience of emotions. Understanding these

distinctions is crucial for interpreting research findings and applying them to clinical and psychological contexts.

## **Relation to Other Disciplines**

Affective neuroscience intersects with multiple disciplines such as psychology, psychiatry, neurobiology, and cognitive science. It complements psychological theories of emotion by providing a biological basis for observed behaviors and mental states. Additionally, affective neuroscience informs psychiatric research by identifying neural dysfunctions associated with emotional disorders, contributing to the development of new therapeutic strategies.

## **Historical Development of Affective Neuroscience**

The affective neuroscience definition has evolved significantly since the early 20th century. Initially, emotions were largely studied through behavioral observation and psychological theory. The advent of brain imaging technologies and neurophysiological methods propelled the understanding of the neural underpinnings of affective processes.

## **Early Theories of Emotion**

Early emotion theories, such as those by William James and Carl Lange, proposed that emotions result from physiological responses to stimuli. Later, the Cannon-Bard theory suggested simultaneous processing of physiological reactions and emotional experience. These foundational ideas set the stage for exploring the neural correlates of emotions.

## **Modern Advances in Affective Neuroscience**

The term "affective neuroscience" was popularized in the late 20th century, particularly following the work of researchers like Jaak Panksepp. Modern advances include the use of functional magnetic resonance imaging (fMRI), positron emission tomography (PET), and electrophysiological techniques to map emotion-related brain activity. These technologies have enabled detailed study of brain networks involved in affective processing.

## **Key Brain Structures in Affective Neuroscience**

Understanding the affective neuroscience definition requires knowledge of the primary brain regions involved in emotion processing. These structures form

interconnected networks that regulate emotional responses, memory, and decision-making.

## **The Limbic System**

The limbic system is central to affective neuroscience and includes the amygdala, hippocampus, hypothalamus, and cingulate cortex. The amygdala plays a critical role in detecting emotional salience and generating fear responses. The hippocampus is involved in emotional memory formation, while the hypothalamus regulates autonomic and endocrine responses to emotions.

## **Prefrontal Cortex**

The prefrontal cortex (PFC) is essential for emotional regulation, decision-making, and social behavior. It modulates limbic activity to control impulsive emotional reactions and supports higher-order cognitive functions related to affective states. Different regions within the PFC, such as the ventromedial and dorsolateral prefrontal cortex, contribute distinctively to emotional processing.

## **Other Relevant Structures**

Additional brain areas implicated in affective neuroscience include the insula, which processes interoceptive awareness and subjective feelings, and the basal ganglia, which influence reward processing and motivation. These structures collaborate to generate a comprehensive emotional experience.

## **Research Methods in Affective Neuroscience**

Research in affective neuroscience employs diverse methodologies to investigate the neural correlates of emotion. These methods facilitate the examination of brain activity, connectivity, and neurochemical processes involved in affective phenomena.

## **Neuroimaging Techniques**

Functional magnetic resonance imaging (fMRI) and positron emission tomography (PET) are pivotal in mapping brain regions activated during emotional tasks. These imaging tools provide spatial and temporal information about neural activity, enabling researchers to identify networks associated with specific affective states.

## **Electrophysiological Methods**

Electroencephalography (EEG) and magnetoencephalography (MEG) capture electrical and magnetic signals generated by neuronal activity. These techniques offer high temporal resolution, allowing detailed analysis of the timing of emotional processing.

## **Behavioral and Psychophysiological Measures**

In addition to brain imaging, affective neuroscience utilizes behavioral experiments and psychophysiological recordings such as heart rate, skin conductance, and facial electromyography. These measures assess autonomic and somatic responses linked to emotional experiences.

## **Animal Models**

Animal research provides insights into the neurobiological mechanisms of emotion that are difficult to study in humans. Techniques such as lesion studies, optogenetics, and pharmacological manipulations help to establish causal relationships between brain regions and affective behaviors.

## **Applications and Clinical Implications**

The affective neuroscience definition extends beyond theoretical knowledge, impacting clinical practice and mental health research. Understanding neural mechanisms of emotion contributes to better diagnosis, treatment, and prevention of affective disorders.

## **Mood and Anxiety Disorders**

Research has identified abnormalities in brain regions such as the amygdala and prefrontal cortex in conditions like depression and anxiety. Affective neuroscience informs the development of pharmacological and psychotherapeutic interventions targeting these neural circuits to alleviate symptoms.

## **Emotional Regulation Therapies**

Techniques such as cognitive-behavioral therapy (CBT) and mindfulness-based interventions rely on principles derived from affective neuroscience to enhance emotional regulation. These therapies aim to modify dysfunctional neural patterns and improve emotional resilience.

## **Advances in Neurotechnology**

Innovations like neurofeedback, deep brain stimulation, and transcranial magnetic stimulation (TMS) offer promising avenues for modulating affective brain circuits. These technologies are under investigation for treating mood disorders and enhancing emotional well-being.

## **Social and Developmental Implications**

Affective neuroscience also contributes to understanding social cognition, empathy, and developmental trajectories of emotional processing. This knowledge is valuable in addressing conditions such as autism spectrum disorder and in guiding educational and social interventions.

- Exploration of emotional brain networks
- Integration of psychological and biological data
- Development of targeted clinical therapies
- Improvement in diagnostic tools for affective disorders
- Enhanced understanding of social and developmental neuroscience

## **Frequently Asked Questions**

### **What is the definition of affective neuroscience?**

Affective neuroscience is the scientific study of the neural mechanisms underlying emotions and affective processes in the brain.

### **How does affective neuroscience differ from cognitive neuroscience?**

While cognitive neuroscience focuses on brain processes related to thinking, memory, and perception, affective neuroscience specifically examines the neural basis of emotions and feelings.

### **Why is affective neuroscience important?**

Affective neuroscience helps us understand how emotions influence behavior, decision-making, and mental health, providing insights for treating emotional disorders.

# What are the main brain regions studied in affective neuroscience?

Key brain regions include the amygdala, prefrontal cortex, hippocampus, and insula, which are involved in processing and regulating emotions.

# How does affective neuroscience contribute to psychology and psychiatry?

It offers a biological framework for understanding emotional disorders, aiding in the development of targeted therapies and improving diagnosis and treatment of conditions like depression and anxiety.

## Additional Resources

### 1. *Affective Neuroscience: The Foundations of Human and Animal Emotions*

This book by Jaak Panksepp explores the biological roots of emotions through the lens of neuroscience. It provides a comprehensive overview of the brain systems involved in emotional processes in both humans and animals. The work bridges psychology, neurobiology, and psychiatry to offer insights into how emotions originate and influence behavior.

### 2. *The Emotional Brain: The Mysterious Underpinnings of Emotional Life*

Authored by Joseph LeDoux, this book delves into the neural mechanisms that govern emotions, particularly fear and anxiety. It presents groundbreaking research on the amygdala and other brain regions involved in emotional processing. LeDoux combines scientific detail with accessible explanations to illuminate the complexity of affective neuroscience.

### 3. *How Emotions Are Made: The Secret Life of the Brain*

Lisa Feldman Barrett challenges traditional views by proposing that emotions are constructed by the brain rather than hardwired. Drawing from affective neuroscience, psychology, and anthropology, the book offers a new theory on emotional experience. It emphasizes the brain's predictive capabilities and the role of social context in shaping emotions.

### 4. *The Handbook of Affective Neuroscience*

This comprehensive volume compiles contributions from leading researchers in the field of affective neuroscience. It covers a wide range of topics, including emotion regulation, neural circuits, and the impact of emotions on cognition. The handbook serves as an essential resource for students and professionals interested in the scientific study of emotions.

### 5. *Affective Neuroscience and Psychology: Toward a New Understanding of Human Nature*

This book integrates findings from neuroscience and psychology to explore the emotional basis of human behavior. It discusses key brain areas involved in affective processes and their implications for mental health. The text aims

to foster a deeper understanding of how emotions shape personal and social experiences.

#### 6. *Emotion and the Human Brain*

Focusing on the neural substrates of emotion, this book reviews current research on brain structures such as the prefrontal cortex, amygdala, and insula. It highlights how these regions interact to produce emotional responses and influence decision-making. The author also examines clinical aspects, including emotional disorders and their neurological underpinnings.

#### 7. *Neuroscience of Emotion: A New Synthesis*

This book presents an integrative approach to understanding emotions through neuroscience. It combines behavioral studies, neuroimaging, and neurophysiology to map the emotional brain. The synthesis provides a framework for interpreting how emotions emerge from brain activity and affect overall human functioning.

#### 8. *The Neurobiology of Emotion*

Offering an in-depth examination of the biological basis of emotions, this text explores neurotransmitters, neural circuits, and brain regions involved in emotional experiences. It discusses both basic research and clinical applications, making it relevant for neuroscientists and mental health practitioners alike. The book emphasizes the dynamic nature of the emotional brain.

#### 9. *Emotion, Cognition, and the Brain: The Affective Neuroscience of Human Feelings*

This book investigates the interplay between emotion and cognition in the human brain. It explores how affective states influence attention, memory, and decision-making processes. With a focus on neural mechanisms, the text sheds light on the complexity of human feelings and their role in behavior and mental health.

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manner, the book offers a comprehensive summary of the fundamental neural sources of human and animal feelings, as well as a conceptual framework for studying emotional systems of the brain. Panksepp approaches emotions from the perspective of basic emotion theory but does not fail to address the complex issues raised by constructionist approaches. These issues include relations to human consciousness and the psychiatric implications of this knowledge. The book includes chapters on sleep and arousal, pleasure and fear systems, the sources of rage and anger, and the neural control of sexuality, as well as the more subtle emotions related to maternal care, social loss, and playfulness. Representing a synthetic integration of vast amounts of neurobehavioral knowledge, including relevant neuroanatomy, neurophysiology, and neurochemistry, this book will be one of the most important contributions to understanding the biology of emotions since Darwins *The Expression of the Emotions in Man and Animals*

**affective neuroscience definition:** Affective Neuroscience Jaak Panksepp, 2004-09-30 Some investigators have argued that emotions, especially animal emotions, are illusory concepts outside the realm of scientific inquiry. However, with advances in neurobiology and neuroscience, researchers are demonstrating that this position is wrong as they move closer to a lasting understanding of the biology and psychology of emotion. In *Affective Neuroscience*, Jaak Panksepp provides the most up-to-date information about the brain-operating systems that organize the fundamental emotional tendencies of all mammals. Presenting complex material in a readable manner, the book offers a comprehensive summary of the fundamental neural sources of human and animal feelings, as well as a conceptual framework for studying emotional systems of the brain. Panksepp approaches emotions from the perspective of basic emotion theory but does not fail to address the complex issues raised by constructionist approaches. These issues include relations to human consciousness and the psychiatric implications of this knowledge. The book includes chapters on sleep and arousal, pleasure and fear systems, the sources of rage and anger, and the neural control of sexuality, as well as the more subtle emotions related to maternal care, social loss, and playfulness. Representing a synthetic integration of vast amounts of neurobehavioral knowledge, including relevant neuroanatomy, neurophysiology, and neurochemistry, this book will be one of the most important contributions to understanding the biology of emotions since Darwins *The Expression of the Emotions in Man and Animals*

**affective neuroscience definition: Emotion Theory: The Routledge Comprehensive Guide** Andrea Scarantino, 2024-07-23 *Emotion Theory: The Routledge Comprehensive Guide* is the first interdisciplinary reference resource which authoritatively takes stock of the progress made both in the philosophy of emotions and in affective science from Ancient Greece to today. A two-volume landmark publication, it provides an overview of emotion theory unrivaled in terms of its comprehensiveness, accessibility and systematicity. Comprising 62 chapters by 101 leading emotion theorists in philosophy, classics, psychology, biology, psychiatry, neuroscience and sociology, the collection is organized as follows: Volume I: Part I: History of Emotion Theory (10 chapters) Part II: Contemporary Theories of Emotions (10 chapters) Part III: The Elements of Emotion Theory (7 chapters) Volume II: Part IV: Nature and Functions of 35 Specific Emotions (22 chapters) Part V: Challenges Facing Emotion Theory (13 chapters) Special Elicitors of Emotions Emotions and Their Relations to Other Elements of Mental Architecture Emotions in Children, Animals and Groups Normative Aspects of Emotions Most of the major themes of contemporary emotion theory are covered in their historical, philosophical, and scientific dimensions. This collection will be essential reading for students and researchers in philosophy, psychology, neuroscience, sociology, anthropology, political science, and history for decades to come.

**affective neuroscience definition: Oxford Companion to Emotion and the Affective Sciences** David Sander, Klaus Scherer, 2014-02-06 Few areas have witnessed the type of growth we have seen in the affective sciences in the past decades. Across psychology, philosophy, economics, and neuroscience, there has been an explosion of interest in the topic of emotion and affect. Comprehensive, authoritative, up-to-date, and easy-to-use, the new *Oxford Companion to Emotion and the Affective Sciences* is an indispensable resource for all who wish to find out about theories,

concepts, methods, and research findings in this rapidly growing interdisciplinary field - one that brings together, amongst others, psychologists, neuroscientists, social scientists, philosophers, and historians. Organized by alphabetical entries, and presenting brief definitions, concise overviews, and encyclopaedic articles (all with extensive references to relevant publications), this Companion lends itself to casual browsing by non-specialists interested in the fascinating phenomena of emotions, moods, affect disorders, and personality as well as to focused search for pertinent information by students and established scholars in the field. Not only does the book provide entries on affective phenomena, but also on their neural underpinnings, their cognitive antecedents and the associated responses in physiological systems, facial, vocal, and bodily expressions, and action tendencies. Numerous entries also consider the role of emotion in society and social behavior, as well as in cognitive processes such as those critical for perception, attention, memory, judgement and decision-making. The volume has been edited by a group of internationally leading authorities in the respective disciplines consisting of two editors (David Sander and Klaus Scherer) as well as group of 11 associate editors (John T. Cacioppo, Tim Dalgleish, Robert Dantzer, Richard J. Davidson, Ronald B. de Sousa, Phoebe C. Ellsworth, Nico Frijda, George Loewenstein, Paula M. Niedenthal, Peter Salovey, and Richard A. Shweder). The members of the editorial board have commissioned and reviewed contributions from major experts on specific topics. In addition to comprehensive coverage of technical terms and fundamental issues, the volume also highlights current debates that inform the ongoing research process. In addition, the Companion contains a wealth of material on the role of emotion in applied domains such as economic behaviour, music and arts, work and organizational behaviour, family interactions and group dynamics, religion, law and justice, and societal change. Highly accessible and wide-ranging, this book is a vital resource for scientists, students, and professionals eager to obtain a rapid, conclusive overview on central terms and topics and anyone wanting to learn more about the mechanisms underlying the emotions dominating many aspects of our lives.

**affective neuroscience definition:** Handbook of Sport Psychology Gershon Tenenbaum, Robert C. Eklund, 2020-03-31 4. Auflage dieses Klassikers und führenden Referenzwerks aus dem Bereich Sport-, Bewegungs- und Leistungspsychologie Die vollständige neue Ausgabe des Handbook of Sports Psychology, jetzt in 2 Bänden und mit unzähligen neuen Kapitel renommierter Wissenschaftler des Fachgebiets, greift auf eine Riege von Experten und Wissenschaftlern zurück, die ihr Wissen nach dem neuesten Forschungsstand in diesem gründlichen und zugänglichen Referenzwerk zusammenfassen. Die Publikation wird auch von der International Society of Sport Psychology unterstützt und ist eine unschätzbare Quelle für theoretische und praktische Informationen, mit denen sich die Rolle der Psychologie im Zusammenhang mit Sport, Bewegung und Leistung besser verstehen lässt und die zeigen, wie dieses Verständnis für die Ergebnisverbesserung in der Praxis Anwendung findet. Die 4. Auflage des Handbook of Sports Psychology präsentiert in acht Abschnitten neue Informationen zu neuen Gebieten, wie Achtsamkeit, Hirnkartierung, Selbstbewusstsein, mentale Stärke, und behandelt Spezialthemen wie Geschlecht, kulturelle Diversität, Sportler mit Behinderungen, Alkohol und Drogen im Sport. Darüber hinaus werden klassische Themen erörtert, z. B. Motivationsauslöser für sportliche Leistungen, Druck als Ansporn, Topathleten und ihr Umgang mit Führungsrollen, Bedeutung von mentalem Training, Umgang mit Verletzungen u.v.m. - 4. Auflage diese einflussreichen Referenzwerks der Sportpsychologie. - Neue Inhalte, u. a. Achtsamkeit in der Sport- und Bewegungspsychologie, Ethik, mentale Stärke, Sportsozialisierung, Einsatz von Brain-Technologien in der Praxis. - Unterstützt von der International Society of Sport Psychology (ISSP). Die 4. Auflage des Handbook of Sports Psychology ist ein Muss für Studenten und Praktiker, die sich für Sportpsychologie interessieren.

**affective neuroscience definition:** *Emotion* ,

**affective neuroscience definition:** **Recognising and Responding to Animal Emotion in a Shared World** Vicki Hutton, 2023-11-16 How is it that depending on the setting, the same cat can be perceived as a homeless annoyance, a potential research subject or a thinking and feeling family member? The answer is bound up in our perception of non-human animals' capacity to experience

emotions, and this book draws on contemporary evidence-based research, observations, interviews and anecdotal case scenarios to explore the growing knowledge base around animal emotion. Acknowledging that animals can experience feelings directly affects the way that they are perceived and treated in many settings, and the author explores the implications when humans apply - or ignore - this knowledge selectively between species and within species. This information is presented within the unique context of a proposed hierarchy of perceived non-human animals' emotional abilities (often based on human interpretation of the animal's emotional capacity), with examples of how this manifests at an emotional, spiritual and moral level. Implications for specific groups living with, caring for or working with non-human animals are examined, making the book of particular interest to those working, studying or researching in the veterinary professions; animal ethics, law and welfare; and zoology, biology and animal science. This book will also be fascinating reading for anyone interested in simply learning more about the animals with whom we share this planet. For some readers, it will validate the reciprocal emotional bond they feel for living creatures. For others, it will raise questions about the moral treatment of sentient non-human beings, breaking down the human protective barrier of cognitive dissonance and activating a cycle of change.

**affective neuroscience definition: Clinical Neuropsychology and Technology** Thomas D. Parsons, 2016-03-30 This ambitious and accessible guide reviews innovative technologies enhancing the field of neuropsychological testing. Starting with the premise that standard batteries—some nearly a century old—lag behind in our era of neuroimaging, genomic studies, psychophysiology, and informatics, it presents digital measures offering more efficient administration, more accurate data, and wider clinical applications. Ecological validity and evidence-based science are key themes in these advances, from virtual environments and assessment of social cognition to the shift toward situational reliability and away from lab-created constructs. These chapters also demonstrate how high-tech assessment tools can complement or supplement traditional pencil-and-paper measures without replacing them outright. This book covers in depth: · The evolution of neuropsychological testing over the past century. · Current applications of computer-based neuropsychological assessments. · The strengths and limitations of simulation technology. · The use of teleneuropsychology in reaching remote clients. · The potential of gaming technologies in neurocognitive rehabilitation. · How technology can transform test data into information useful across specialties. **Clinical Neuropsychology and Technology** brings neuropsychologists, clinical psychologists, and rehabilitation specialists into the vanguard of assessment measures and processes that will translate into more accurate testing, collaborations between disciplines, and valid and useful outcomes.

**affective neuroscience definition: Social and Affective Neuroscience of Everyday Human Interaction** Paulo Sérgio Boggio, Tanja S. H. Wingenbach, Marília Lira da Silveira Coêlho, William Edgar Comfort, Lucas Murrins Marques, Marcus Vinicius C. Alves, 2022-11-28 This Open Access book presents the current state of the art knowledge on social and affective neuroscience based on empirical findings. This volume is divided into several sections first guiding the reader through important theoretical topics within affective neuroscience, social neuroscience and moral emotions, and clinical neuroscience. Each chapter addresses everyday social interactions and various aspects of social interactions from a different angle taking the reader on a diverse journey. The last section of the book is of methodological nature. Basic information is presented for the reader to learn about common methodologies used in neuroscience alongside advanced input to deepen the understanding and usability of these methods in social and affective neuroscience for more experienced readers.

**affective neuroscience definition: Social and Affective Neuroscience** GE Federation of Psychologists, Social and Affective Neuroscience Defining Affective Neuroscience The Brain's Emotional Processing Pathways The Role of the Amygdala The Neurobiology of Fear The Neurobiology of Anxiety The Neurobiology of Depression The Neurobiology of Happiness The Neurobiology of Love The Neurobiology of Empathy The Social Brain Hypothesis The Mirror Neuron System Imitation and Social Learning Emotional Contagion Nonverbal Communication The Neuroscience of Attachment The Neuroscience of Rejection The Neuroscience of Trust The

Neuroscience of Cooperation The Neuroscience of Competition The Neuroscience of Morality The Neuroscience of Prosocial Behavior The Neuroscience of Prejudice The Neuroscience of Stereotyping The Neuroscience of Empathy Disorders The Neuroscience of Autism Spectrum Disorder The Neuroscience of Psychopathy The Neuroscience of Emotional Regulation The Neuroscience of Mindfulness The Neuroscience of Cognitive Behavioral Therapy The Neuroscience of Social Cognition The Neuroscience of Decision Making The Neuroscience of Risk Taking The Neuroscience of Persuasion The Neuroscience of Advertising The Neuroscience of Music and Emotion The Neuroscience of Art and Emotion The Neuroscience of Film and Emotion The Neuroscience of Video Games and Emotion The Neuroscience of Social Media and Emotion The Neuroscience of Loneliness The Neuroscience of Belonging The Neuroscience of Leadership The Neuroscience of Teamwork The Neuroscience of Cultural Differences The Future of Affective Neuroscience Conclusion: Implications and Applications

**affective neuroscience definition:** *Introduction to Positive Psychology* Dr. Asha Rani, 2021-09-11 Positive Psychology emerged at the beginning of the new millennium as a movement within psychology aimed at enhancing human strengths such as creativity, joy, flow, responsibility, and optimal performance and achievement. Most study of human behaviour has focused mainly on what goes wrong in human affairs: aggression, mental disease, failure, and so on. While it is essential to study and contain such pathologies, it is equally important to understand those aspects of human experience that make life worth living. Positive psychologists seek “to find and nurture genius and talent” and “to make normal life more fulfilling”, rather than merely treating mental illness. Positive psychology is primarily concerned with using psychological theory, research and intervention techniques to understand the positive, adaptive, creative and emotionally fulfilling aspects of human behaviour. The “positive” branch complements, with no intention to replace or ignore, the traditional areas of psychology. By adding an important emphasis to use the scientific method to study and determine positive human development, this area of psychology fits well with the investigation of how human development can falter. Using strategies from positive psychology, teachers, coaches, therapists and employers can motivate others and help individuals understand and develop their personal strengths. It is expected that the book will provide a fund of rich experiences to the students and teachers. Contents: • Cognitive Strategies: Algorhythms and Heuristics • Decision-Making • Creative Thinking and Problem-Solving • Language and Thought • Historical Antecedents of Motivation from Mechanism to Cognition • Cognitive Bases of Motivation: Intrinsic Motivation, Attribution, Competence • Measurement of Motives: Issues and Techniques • Cross-Cultural Perspectives of Motivation: Achievement, Aggression • Components of Emotion: Physiological, Expressive and Cognitive • Neural Mechanism of Emotion: Central and Peripheral • Stress and Coping: Reactions to Stress, Outcomes of Stress • Theories of Intelligence: Cattell, Jensen, Sternberg Goleman • Creativity: Views of Torrance, Getzels, Guilford

**affective neuroscience definition: Premenstrual Dysphoric Disorder** Mr. Rohit Manglik, 2024-05-20 This book delves into the severe form of premenstrual syndrome known as PMDD, discussing its psychological impact, diagnostic challenges, and therapeutic approaches including pharmacologic and cognitive-behavioral therapies.

**affective neuroscience definition:** *Oxytocin, Well-Being and Affect Regulation* Eliana Nogueira-Vale, 2024-05-21 This book brings together neuroscience and psychoanalysis to explain the complex interactions between neurobiological and psychological phenomena involved in the development of human attachment and affect regulation. The author reviews research from the burgeoning fields of affective neuroscience and neuropsychanalysis to tell the story of how the discovery of a specific hormone - oxytocin - paved the way for the study of the neurobiological bases of emotions in a way that can contribute to integrate neuroscientific research into psychotherapy, especially for the treatment of anxiety disorders. The book starts by presenting a brief history of neuroscience, spanning from the discovery of oxytocin, at the beginning of the 20th century, until the emergence of affective neuroscience and neuropsychanalysis as new scientific fields at the turn of the 20th to the 21st century. Then it reviews the long tradition of psychoanalytic research on

human attachment starting with John Bowlby's seminal Attachment Theory and explains how these early findings have been complemented by neuroscientific and psychological research on brain development and affect regulation. Finally, the two last chapters of the book show how this prolific dialogue between neuroscience and psychoanalysis can contribute to the future of psychotherapy. Oxytocin, Well-Being and Affect Regulation was originally published in Portuguese for the Brazilian market and this English edition for the international market is a revised version with two new additional chapters. It will be of interest to both students and professionals from different fields within the behavioral and health sciences, such as psychology and medicine, who will find in this book a brief and accessible introduction to key topics in the emerging fields of affective neuroscience and neuropsychanalysis. The translation of the original manuscript in Portuguese into English was done with the help of artificial intelligence. A subsequent human revision was done primarily in terms of content.

**affective neuroscience definition:** Faith, Rationality and the Passions Sarah Coakley, 2012-07-20 Faith, Rationality and the Passions presents a fresh and original examination of the relation of religious faith, philosophical rationality and the passions. Contributions see leading scholars refute the widely-held belief that religious Enlightenment forced passion and reason apart. Leading Philosophical experts offer new research on the relation of faith, reason and the passions in classic and Enlightenment figures Overturns the widely-held presumption that the Enlightenment was responsible for creating a gulf between reason and passion Presents original and innovative research on the importance of the late-19th century creation of the category of 'emotion', and its striking difference from classic ideas of passion Brings together secular science and philosophy of emotion with philosophical theology to seek a new integration of belief, emotion and reason

**affective neuroscience definition:** The Oxford Handbook of Positive Emotion and Psychopathology June Gruber, 2019-09-05 Considerable research has been devoted to understanding how positive emotional processes influence our thoughts and behaviors, and the resulting body of work clearly indicates that positive emotion is a vital ingredient in our human quest towards well-being and thriving. Yet the role of positive emotion in psychopathology has been underemphasized, such that comparatively less scientific attention has been devoted to understanding ways in which positive emotions might influence and be influenced by psychological disturbance. Presenting cutting-edge scientific work from an internationally-renowned group of contributors, The Oxford Handbook of Positive Emotion and Psychopathology provides unparalleled insight into the role of positive emotions in mental health and illness. The book begins with a comprehensive overview of key psychological processes that link positive emotional experience and psychopathological outcomes. The following section focuses on specific psychological disorders, including depression, anxiety, trauma, bipolar disorder, and schizophrenia, as well as developmental considerations. The third and final section of the Handbook discusses translational implications of this research and how examining populations characterized by positive emotion disturbance enables a better understanding of psychiatric course and risk factors, while simultaneously generating opportunities to bridge gaps between basic science models and psychosocial interventions. With its rich and multi-layered focus, The Oxford Handbook of Positive Emotion and Psychopathology will be of interest to researchers, teachers, and students from a range of disciplines, including social psychology, clinical psychology and psychiatry, biological psychology and health psychology, affective science, and neuroscience.

**affective neuroscience definition:** The Healing Power of Emotion Diana Fosha, Marion F. Solomon, 2009-11-16 The role of emotion in bodily regulation, dyadic connection, dissociation, trauma, transformation, marital communication, play, well-being, health, creativity, and social engagement is explored by today's leading researchers and clinicians.

**affective neuroscience definition:** The Polyvagal Theory Stephen W. Porges, 2011-04-25 A collection of groundbreaking research by a leading figure in neuroscience.

**affective neuroscience definition:** Theoretical Perspectives for Direct Social Work Practice Nick Coady, Peter Lehmann, 2016-05-15 This expanded third edition of a popular textbook

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