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Child Health and Human Development Tom James Truss 1981
Attention and Performance Viii R. S. Nickerson 2014-01-14 First published in 1980. Routledge is an imprint of Taylor & Francis, an informa company.
Tutorials in Event Related Potential Research: Endogenous Components W. Ritter 2000-04-01 From the human brain, event related potentials (ERPs) can be obtained which reflect psychological information processing. This book summarizes the theoretical and methodological aspects of research on the so-called ``endogenous'' components of the ERP. These components are invoked by psychological processing rather than evoked by the mere presentations of external stimuli.
Volitional Action W.A. Hershberger 1989-11-02 Individuals from diverse disciplines, including neurology, physiology, psychology, mathematics, and engineering have contributed to this volume. Their scientific investigations of volitional action are part of the resurgence of interest in the psychology and physiology of volition which has taken place in recent years. The book comprises a significant sample of their observations, both rational and empirical, which have new practical implications for our understanding of human conduct. The book was designed to serve a threefold purpose: a) to consolidate the gains of the various scholars, relatively isolated in their respective disciplines, b) to foster and help focus future research on conation and self-control and c) to provide practitioners in applied psychology with a broad-based tutorial.
Niedermeyer's Electroencephalography Fernando H. Lopes da Silva 2018 Niedermeyer's Electroencephalography: Basic Principles, Clinical Applications, and Related Fields, Seventh Edition keeps the clinical neurophysiologist on the forefront of medical advancements. This authoritative text covers basic neurophysiology, neuroanatomy, and neuroimaging to provide a better understanding of clinical neurophysiological findings. This edition further delves into current state-of-the-art recording EEG activity both in the normal clinical environment and unique situations such as the intensive care unit, operating rooms, and epilepsy monitoring suites. As computer technology evolves, so does the integration of analytical methods that significantly affect the reader's interpretations of waveforms and trends that are occurring on long-term monitoring sessions. Compiled and edited by Donald L. Schomer and Fernando H. Lopes da Silva, along with a global team of experts, they collectively bring insight to crucial sections including basic principles of EEG and MEG, normal EEG, EEG in a clinical setting, clinical EEG in seizures and epilepsy, complementary and special techniques, event-related EEG phenomena, and shed light on the future of EEG and clinical neurophysiology. Akin to an encyclopedia of everything EEG, this comprehensive work is perfect for neurophysiology fellows, as well as neurology, neurosurgery, and general medical residents, and for the interns and medical students, and is a one-stop-shop for anyone training in EEG or preparing for neurophysiology or epilepsy board exams.
Attention and Memory Nelson Cowan 1998-01-15
Attention and Performance VII Jean Requin 2022-08-19 Originally published in 1978, this seventh volume of an international series continues the objective to increase and disseminate scientific knowledge in the area of human attention, performance and information processing, and to foster international communication in this area. This volume covers the following topics: time in perception; word perception and reading; speech perception and coding; hemisphere differences; response and physiological processes; theories and models. Today it can be read and enjoyed in its historical context.
Cognitive Psychophysiology: Event-Related Potentials and the Study of Cognition Emanuel Donchin 2022-09-16 Originally published in 1984, Cognitive Psychophysiology: Event-related Potentials and the Study of Cognition is the first volume to come out of The Carmel Conferences: designed to examine in detail the assertion that the endogenous components of the Event-Related Brain Potential (ERP) can serve as a tool in the analysis of cognition. The intent of this book was to examine on a rather broad front the claims of cognitive psychophysiology to a niche in the domain of cognitive science. Discussions included: selective attention; the ERP and decision and memory processes; preparatory processes; mental chronometry; perceptual processes; individual differences and clinical applications. It provides an interesting snapshot of the status of ERP research just as it was venturing assertively into cognitive science.
Motor Behavior Herbert Heuer 2012-12-06 In recent years there has been steadily increasing interest in motor behavior and a growing awareness that a person not only has to know what to do in a particular situation, but also how to do it. The question of how actions are performed is of central concern in the area of motor control. This volume provides an advanced-level treatment of some of the main issues. Experiments concerned with basic processes of motor control typ ically examine very simple movements. At first glance these tasks appear to be far removed from real-world tasks, but it should be kept in mind that they are not studied for their own sake. One of the main reasons for using them is the well-recognized, but sometimes questioned, scientific principle that basic laws may be discovered more easily in simple situations than ili complex situations. Another reason is that the simple tasks studied constitute building blocks of more complex tasks. For example, some complex skills can be consid ered as consisting of sequences of aimed movements, although, as no one would doubt, knowing everything about these individual movements does not mean knowing everything about, for example, typing. The first two chapters of the present volume focus on behavioral and physiological studies of programming and preparation of move ments. In the first chapter D. Rosenbaum introduces the concept of a motor program that is set up in advance of the overt movement.
Investigation of Brain Function A. W. Wilkinson 2013-03-09 During the past fifteen or twenty years there have been remarkable advances in the methods of study of the functions of the brain in a wide range of species including man. As a result there has been a large increase in the factual knowledge of brain function but the interpretation and the application of these new facts has often tended to lag. The chapters in this book are the formal statements of those specialists of various disciplines who took part in a course of lectures and discussions of methods of the investigation of brain function in May 1980. Not only do they usually indicate the present state of knowledge and comprehension of the many functions of the brain of several species, but they also give valuable indications of where future studies might profitably be directed. G. Pampiglione A. W. Wilkinson v CONTENTS Steady State Radioisotopic Assessment of Brain Function . . . . . 1 F. Fazio, C. Fieschi, and G. L. Lenzi Cerebral Blood Flow and Brain Function . 9 Bo Larsen Regional Cerebral Blood Flow and Regional Cerebral Oxygen Utilisation in Acute Cerebral Ischaemia . . . . . 27 G. L. Lenzi, C. Fieschi, and F. Fazio The Electroencephalogram of Mental Abilities 35 Duilio Giannitrapani Sensory Processes and the Making of Decisions in Man . . . . . 59 R. Cooper Computed EEG Topography: Theory, Implementation and Application . . . . . 79 Richard N. Harner Investigations of Apneic Syndrome during Sleep . . . . . 103 D. Kurtz Automatic Analysis of Human Sleep EEGs . . . . . 123 D. Samson-Dollfus Electrical Milestones in Mammalian Brain Development 139 G.
EPA-600/9 1978-12
Motor Control G.N. Gantchev 2012-12-06 This book encompasses part of the papers presented at the Fifth International Symposium on Motor Control held in Varna, Bulgaria from 10 to 14 June 1985. The Motor Control Symposia organized in Bulgaria became tradition following the successful initiation of Professor Gydikov and his collaborators of the previous four meetings (Sofia, 1969, Varna, 1972, Albena, 1976, Varna, 1981). More than 140 scientists participated in the last Symposium, 40 from East Europe, 15 from West Europe, 15 from USA and Canada. These Symposia established an opportunity for encounter of prom inent scientists from allover the world, representatives of different schools and mainstreams. The participation of R. Granit, W. R. Ashby, B. C. Matthews, V. S. Gurfinkel, E. V. Evarts etc., is to be mentioned. The main topics of the Symposium included: 1) Motor Unit Activity; 2) Reflex Control of Movements; 3) Central Control of Movements; 4) Posture Control; 5) Locomotion; 6) Arm Movement; 7) Motor Control Models. 43 oral presentations and 103 posters were reported, 36 of them being presented in this volume. The presented papers deal with the complex mechanisms of movement and posture control, investigations of considerable interest in recent years. This interest was prompted by the huge biological importance of the motor activity as a most common mechanism of adaptation to the environment. Motor activity is also inadvertently involved in various fields of human practice: occupational activities, including extreme conditions, motor handicaps, sports, bioprosthetic devices, bionics, robotics etc.
Abilities, Motivation and Methodology Ruth Kanfer 2014-06-17 Diverse developments in ability and motivation research, and in the derivations of new methodological techniques have often run on parallel courses. The editors of this volume felt that communication across domains could be vastly improved through intensive interaction between researchers. This interaction was realized in The Minnesota Symposium on Learning and Individual Differences, which directly addressed ability, motivation and methodology concerns. This book, compiled as a result of the Symposium, unites theoretical and empirical advances in learning and individual differences. The resulting volume, divided in five parts, encompasses not only prepared papers that were presented at the symposium, but compiled and edited transcriptions of the spontaneous discussions that took place at the symposium. Part I provides an orientation to the treatment of learning and individual differences from three major perspectives: experimental psychology, motivational psychology, and differential/ methodological psychology. Part II continues and expands the discussion of quantitative methodology and applications to learning and individual differences. Part III is devoted primarily to developments in the cognitive ability domain, while Part IV addresses the impact of non-cognitive, personal constructs on learning and performance. The volume concludes with Part V which contains chapters from the closing session of the conference.
Finding Consciousness in the Brain Peter G. Grossenbacher 2001-01-01 How does the brain go about the business of being conscious? Though we cannot yet provide a complete answer, this book explains what is now known about the neural basis of human consciousness.The last decade has witnessed the dawn of an exciting new era of cognitive neuroscience. For example, combination of new imaging technologies and experimental study of attention has linked brain activity to specific psychological functions. The authors are leaders in psychology and neuroscience who have conducted original research on consciousness. They wish to communicate the highlights of this research to both specialists and interested others, and hope that this volume will be read by students concerned with the neuroscientific underpinnings of subjective experience. As a whole, the book progresses from an overview of conscious awareness, through careful explanation of identified neurocognitive systems, and extends to theories which tackle global aspects of consciousness. (Series B)
Attention and Performance XIV David E. Meyer 1993 Attention and Performance XIV, provides a broad, historic, and timely synthesis ofthe empirical and theoretical ideas on which performance theory now rests.
Neural Mechanisms of Anesthesia Joseph E. Antognini 2002-08-22 Leading investigators critically evaluate the latest information on how anesthetics work at the molecular, cellular, organ, and whole animal level. These distinguished experts review anesthetic effects on memory, consciousness, and movement and spell out in detail both the anatomic structures and physiological processes that are their likely targets, as well as the cellular and molecular mechanisms by which they operate. Comprehensive and authoritative, Neural Mechanisms of Anesthesia draws together and critically reviews all the recent research on anesthetic mechanisms, highlighting the precise routes along which these substances operate, and how this deeper understanding will lead to the design of effective drugs free ofundesirable side effects.
The Attentive Brain Raja Parasuraman 2000 Of the myriad tasks that the brain has to perform, perhaps none is as crucial to the performance of other tasks as attention. A central thesis of this book on the cognitive neuroscience of attention is that attention is not a single entity, but a finite set of brain processes that interact mutually and with other brain processes in the performance of perceptual, cognitive, and motor skills.After an introductory part I, the book consists of three parts. Part II, Methods, describes the major neuroscience methods, including techniques used only with animals (anatomical tract tracing, single-unit electrophysiology, neurochemical manipulations), noninvasive human brain-imaging techniques (ERPs, positron emission tomography, and functional magnetic resonance imaging), and studies with brain-damaged individuals. This part also includes a chapter on the computational modeling of attention. Part III, Varieties of Attention, looks at three major components of attention from the cognitive neuroscience perspective: selection, vigilance, and control. It also discusses links to memory and language. Finally, part IV, Development and Pathologies, discusses the application of findings from the previous sections to the analysis of normal and abnormal development and to pathologies of attention such as schizophrenia and attention deficit disorders. Contributors Edward Awh, Gordon C. Baylis, Jochen Braun, Dennis Cantwell, Vincent P. Clark, Maurizio Corbetta, Susan M. Courtney, Francis Crinella, Matthew C. Davidson, Gregory J. DiGirolamo, Jon Driver, Jane Emerson, Pauline Filipek, Ira Fischler, Massimo Girelli, Pamela M. Greenwood, James V. Haxby, Mark H. Johnson, John Jonides, Julian S. Joseph, Robert T. Knight, Christof Koch, Steven J. Luck, Richard T. Marrocco, Brad C. Motter, Ken Nakayama, Orhan Nalcioglu, Paul G. Nestor, Ernst Niebur, Brian F. O'Donnell, Raja Parasuraman, Michael I. Posner, Robert D. Rafal, Trevor W. Robbins, Lynn C. Robertson, Judi E. See, James Swanson, Diane Swick, Don Tucker, Leslie G. Ungerleider, Joel S. Warm, Maree J. Webster, Sharon Wigal
Schizophrenia Bulletin 1994
Perspectives on Perception and Action Herbert Heuer 2016-07-07 Originally published in 1987, this title aimed to present an eclectic and biased account of the status of perception-action relationships in various fields at the time. The chapters can be divided into three sections. The first focuses on motor control, a neglected topic in the past and hence deserving the role of the starting point of this volume. In addition motor control provides a good background to discuss the clear sensory and perceptual effects. However, motor processes are also highly relevant to perception, which was usually less emphasized in the literature at the time. Therefore a special section is devoted to motor processes in perception together with the issue of integrating information from different sources. The book concludes with a section on attention and selection of perceptual information for subsequent action.
The MIT Encyclopedia of the Cognitive Sciences (MITECS) Robert A. Wilson 2001-09-04 Since the 1970s the cognitive sciences have offered multidisciplinary ways of understanding the mind and cognition. The MIT Encyclopedia of the Cognitive Sciences (MITECS) is a landmark, comprehensive reference work that represents the methodological and theoretical diversity of this changing field. At the core of the encyclopedia are 471 concise entries, from Acquisition and Adaptationism to Wundt and X-bar Theory. Each article, written by a leading researcher in the field, provides an accessible introduction to an important concept in the cognitive sciences, as well as references or further readings. Six extended essays, which collectively serve as a roadmap to the articles, provide overviews of each of six major areas of cognitive science: Philosophy; Psychology; Neurosciences; Computational Intelligence; Linguistics and Language; and Culture, Cognition, and Evolution. For both students and researchers, MITECS will be an indispensable guide to the current state of the cognitive sciences.
Central Nervous System Monitoring in Anesthesia and Intensive Care Jochen Schulte am Esch 2012-12-06 Research in electrophysiologic monitoring in anesthesia and intensive care has focussed mostly on questions pertinent for patient care: First how to quantitate drug effects on brain electrical activity and the degree of anesthetic-induced suppression of the central nervous system. Second, how to monitor functional impairment following cerebral ischemia and hypoxia. And third, how to differ entiate between drug-induced effects on the central nervous system and deleteri ous events related to reductions in cerebral blood flow and/or oxygen delivery. Even though progress has been achieved over the last 10 years in this field and fascinating new techniques have been developed, it is still not clear which monitor parameter will provide adequate information on the depth of anes thesia and the analgesic level. Because the central nervous system has been one of the main research areas in our department over the last 10 years, we organized a workshop to summarize the latest developments in central nervous system monitoring. This book comprises the topics of this workshop and is intended to provide insight into the current status of central nervous system monitoring, elucidating possible indications and delineating its limitations.
Evoked Potential Manual E. Colon 2012-12-06 Evoked potentials are potentials that are derived from the peripheral or central nervous system. They are time locked with an external stimulus and can be influenced by subjective intentions. Evoked potentials have become increasingly popular for clinical diagnosis over the last few years. Evoked potentials from the visual system are used by ophthalmologists in order to localize the abnormalities in the visual pathway. The otologists are mainly involved in brainstem auditory evoked potentials, while the pediatricians, neonatologists, neurologists and clinical neurophysiologists make use of multimodal stimulation. The

psychiatrists and psychologists, generally, examine the slow potentials such as P300 and CNV. Anesthesiologists use short latency somatosensory and visual evoked potentials in order to monitor the effectiveness of the anesthesia. Pharmaco evoked potentials are very promising measures for the quan tification of the effectiveness of drug action on the cerebral cortex. Urologists are more and more involved in pudendal somatosensory evoked potentials and in the intensive care unit evoked potentials are used in order to monitor the functional state of the central nervous system of the patient. This overwhelming number of examinations and exam ina tors clearly demonstrates the need for guidelines and standardization of the methods used. The evoked potential methodology is restricted by the relative poor signal to noise ratio. In many diseases this signal to noise ratio decrease rapidly during the progression of the illness. Optimal technical equipment and methodology are therefore essential.
Orienting of Attention Richard D. Wright 2008-04-16 This book is a succinct introduction to the orienting of attention. Richard Wright and Lawrence Ward describe the covert orienting literature clearly and concisely, illustrating it with numerous high-quality images, specifically designed to make the challenging theoretical concepts very accessible. The book begins with an historical introduction that provides a great deal of information about orienting, much of which will be new even to seasoned researchers. Wright and Ward then systematically describe the development of various experimental paradigms that have been devised to study covert orienting, and the theoretical issues raised by this research. One trend that they analyze in detail is the progression from relatively simple models of spatial attention (attention spotlight and zoom lens models) to an integrative computational framework based on a concept called the "activity distribution." They also present a comprehensive survey of cognitive neuroscience research on the brain mechanisms underlying spatial attention shifts, as well as a chapter summarizing recent research on crossmodal attention shifts, and elucidating the links between attention orienting in the visual, auditory, and tactile domains. In the Epilogue they offer a concise summary of the book, and develop preliminary frameworks for understanding the relationship between spatial attention and orienting in response to social cues (social cognitive neuroscience) and for describing the evolution of covert orienting. Orienting of Attention provides a systematic survey that is ideal for those looking for an accessible introduction to the field and also for students and researchers who want a state-of the-art overview.
Attention and Orienting Peter J. Lang 2013-04-15 Orienting is the gateway to attention, the first step in processing stimulus information. This volume examines these initial stages of information intake, focusing on the sensory and motivational mechanisms that determine such phenomena as stimulus selection and inhibition, habituation, pre-attentive processing, and expectancy. Psychophysiological methods are emphasized throughout. The contributors consider analyses based on cardiovascular and electrodermal changes, reflex reactions, and neural events in the cortex and subcortex. Stimulated by a conference lauding Frances Graham -- held before and during a recent meeting of the Society for Psychophysiological Research, the book presents current theory and research by an international cadre of outstanding investigators. A major researcher and theorist in the field of attention for more than three decades, Dr. Graham contributes an Afterword to the present volume which is both a consideration of the work which has gone before, and a new, original theory paper on preattentive processing and attention.
Evoked Brain Potentials and Behavior Henri Begleiter 2012-12-06 This volume is the second in "The Downstate Series of Research in Psychiatry." It is aseries devoted to the presentation of sig nificant research with relevance for both clinicians and researchers in the multiple subfields of psychiatry. This book focuses on the interactions between psychic phenomena and physical processes as studied by evoked brain potentials. It presents material concerned with physiological and psychological unifying processes, as well as research concerning technology and methods of obtaining meaningful measurements. As such it is representative of biological psychiatry at its best. Thus, it represents another step in new directions in psychiatric research but not an unanticipated direction. Scientific investigation into the human psyche took an unex pected turn when Sigmund Freud in the last part of the 19th Century turned his attention from neurological concerns to those of psychol ogy. His first attempts at explanations as noted in the "project," included a heavy emphasis on the biological substrate of behavior.
Slow Potential Changes in the Human Brain W.C. McCallum 2013-11-11 This volume is based on the proceedings of a NATO Advanced Research Workshop on Slow Potential Changes in the Human Brain that was held at Il Ciocco, Tuscany, Italy over the period 13-16th May, 1990. The Workshop Director was Dr. W. C. McCallum of the Burden Neurological Institute, Bristol, England. The meeting was superbly organised and proved to be both stimulating and productive. On behalf of everyone who attended the meeting, I would like to Il Ciocco for express my appreciation to NATO for the provision of funding and to providing such a marvellous conference venue. I must apologise to everyone who has contributed to this volume for the length of time it has taken to produce a finished book. As you are all aware, the untimely death of Cheyne McCallum, who was to have been the sole editor of this volume, was very disruptive to both the book and myself. Following Cheyne's death I assumed the responsibility for completing the book as was his wish. I would like to thank you all for your patience and understanding. I would like to acknowledge my indebtedness to the Burden Neurological Institute in general and very specifically to Mrs. Chris Gough who has laboured extensively in the production of this volume.
Topographic Brain Mapping of EEG and Evoked Potentials Konrad Maurer 2012-12-06 Imaging procedures have been used for many years and are becoming increasingly important in a number of medical disciplines. This is due to recent technological advances, primarily computerization. The meth ods employed in CNS diagnostics are collectively referred to as "neu roimaging" and include procedures for investigating both cerebral morphology and cerebral function, such as computed tomography (CT), magnetic resonance imaging (MRI), positron emission tomogra phy (PET), and single-photon emission computed tomography (SPECT). Topographic mapping of electroencephalograms (EEG) and evoked potentials represents one of the functional procedures and per mits topographic imaging of EEG, evoked potentials, and magnetic fields. The latter application includes not only magnetic fields evoked by stimuli relating to different sensory modalities, but also endogenous and motor fields resulting from spontaneous brain magnetic activity, as recorded by magnetoencephalograms (MEG), the magnetic comple ment of the EEG. The advantage of recording electric and magnetic fields over other neuroimaging procedures is that these techniques are completely noninvasive and have extremely short analysis times (in the millisecond range). The aim of this book is to clarify the current state of this emerging technology, to assess its potential for substantive contributions to brain research, to delineate areas for further research and, over all, to envis age clinical applications in disciplines such as psychiatry, neurology, and neuropsychology.
Neurophysiology of Consciousness LIBET 1993-01-01 and made insignificant in practice, by selecting for study simple kinds of ex periences which are devoid of emotional content and which can be tested for reliability. A simple somatosensory "raw feel" fulfills these characteristics (see papers nos. 2,5). In any case, if we fail to find ways to use introspective reports in convincingly acceptable studies we would give up the ability to investigate the relation between conscious experience and neural activity, something warned against by William James (Krech, 1969). Another factor in the dearth of direct experimental studies is, of course, the comparative inaccessibility of the human brain for such purposes. Meaningful investigations of the issue in question requires simultaneous study of brain events and introspective reports of experiences in an awake, cooperative human subject. Analysis by neuropsychologists of pathological lesions in the brain and the related disturbances of conscious functions have contributed much to mapping the pos sible representations of these functions. The non-invasive recording of electrical activity with electrodes on the scalp, starting from Berger's initial EEG record ings in 1929, has contributed much to the problems of states of consciousness and to various cognitive features associated with sensory inputs, but not as much to the specific issue of conscious experience.
Human Evoked Potentials Dietrich Lehmann 2013-03-08 From August 25 - 28, 1978 a conference on averaged evoked po tentials was held at Konstanz, West Germany. Research on human evoked potentials has progressed rapidly in the past decade, and a series of international conferences have served to maintain com munication between active workers in the field. Among the organiza tions that have a tradition of supporting such mUlti-national com munication are the North Atlantic Treaty Organization Scientific Affairs Division, the u.s. Office of Naval Research and the German Research Society (Deutsche Forschungsgemeinschaft). We have been fortunate to have the support of all three. In the early stages of planning, a committee was formed composed of Professors Rudolph Cohen (Konstanz), Otto Creutzfeldt (Goettingen), John Desmedt (Brussels), A.M. Halliday (London), Anthony Remond (Paris) and Herbert Vaughan (New York). A call for papers was circulated as widely as possible, and this committee carried out the difficult task of selecting a limited number of participants from a large number of excellent abstracts. At the same time Professor Cohen of the University of Konstanz was generous enough to shoulder the task of playing host to the conference. His thoughtful arrangements contributed enormously to the comfort of the participants. He and his colleagues also engi neered an ideal ambience for sharing of ideas and observations, while the University of Konstanz generously provided audio-visual support.
Brain and Mind G. E. W. Wolstenholme 2009-09-16 The Novartis Foundation Series is a popular collection of the proceedings from Novartis Foundation Symposia, in which groups of leading scientists from a range of topics across biology, chemistry and medicine assembled to present papers and discuss results. The Novartis Foundation, originally known as the Ciba Foundation, is well known to scientists and clinicians around the world.
Conscious and Unconscious Programs in the Brain Benjamin Kissin 2012-12-06 For almost a century now, since Freud described the basic motivations and Pavlov the basic mechanisms of human behavior, we have had a reasonable concept of the forces that drive us. Only recently have we gained any real insight into how the brain really works to produce such behavior. The new developments in cognitive psychology and neuroscience have taught us things about the function of the brain that would have been inconceivable even ten years ago. Yet, there still remains a tremendous gap between the two studies-human behavior and brain function-a gap which often seems irrec oncilable in view of the basic differences in the methodologies and approaches of the two fields. Students of behavior are frequently disinterested in the underlying neu rophysiology while neurophysiologists tend to consider the concepts of psychiatrists and clinical psychologists too vague and theoretical to be applicable to their own more limited schemata. Several valiant attempts have been made by experimentalists to develop a theoretical context in which behavior is described, not separately from brain function but rather as its direct outgrowth. This present work is still another attempt to develop a theoretical system which, given the limitations of our present knowledge, as completely as possible, the underlying brain mechanisms that influ will describe ence and determine human behavior. The main emphasis of this work, however, will be not on normal behavior but rather on more neurotic manifestations.
The Human Psyche J. C. Eccles 2012-12-06 In February and March 1978 I delivered my first series of Gifford Lectures in the University of Edinburgh. These lectures have been published under the title The Human Mystery. The second series of ten lectures were delivered from April 18 to May 4 1979 under the title The Human Psyche. As with the first series, the printed text is actually the manuscript prepared for those lectures, not some later compilation. The lectures were delivered informally, but based strictly on this manuscript. It is hoped that the printed text will convey the dramatic character of a lecture presenta tion. This book must not be regarded as a definitive text in neuroscience, psychology and philosophy, but rather as a series of 'adventures of ideas', to revive a Whiteheadean title. The brain-mind problem has been the theme of three recent books: The Self and Its Brain; The Human Mystery (in its latter part); and now The Human Psyche. In this book there is critical discussion in the first lecture of the materialist hypotheses of the relationship of the self-con scious mind to the brain. In the subsequent lectures the strong dualist-interactionism developed in The Self and Its Brain is explored in depth in relation to a wide variety of phenomena relating to self-consciousness. The aim has been to demonstrate the great explanatory power of dualist interactionism in contrast to the poverty and inadequacy of all varieties of the materialist theories of the mind.
Attention, Voluntary Contraction, and Event-related Cerebral Potentials J. E. Desmedt 1977
The Oxford Handbook of Event-Related Potential Components Steven J. Luck 2013-07-04 The Oxford Handbook of Event-Related Potential Components provides a detailed and comprehensive overview of the major ERP components.
Caffeine and Behavior: Current Views & Research Trends B.S. Gupta 2020-03-05 The psychobehavioral effects of caffeine on humans is analyzed in this book from an experimental approach. Caffeine and Behavior: Current Views and Research Trends is unique in its emphasis on empirical research and its inclusion of articles concerning the addictive potential of caffeine. Topics covered include addiction, neurotransmission
Electrophysiologic Evaluation in Otolaryngology Bobby Ray Alford 1997-01-01 The past decade has seen a rapid increase in the application of electrophysiologic measurement techniques in evaluating patients with hearing and balance disorders. Advances in computer technology have generated new and exciting applications in the areas of electrocochleography, electroneuronography, electronystagmography, and the auditory brainstem response. This book examines these recent developments and explores new areas of the field currently under investigation. An important issue in electrocochleography today is the widened AP-SP complex. Contributors to this book evaluate its significance in patients with cerebellopontine angle tumor. The many applications of the auditory brainstem response are surveyed, as well as the current status of the mid- and long-latency evoked responses. An overview of the relatively new area of otoacoustic emissions and its clinical applications is also included. Practicing otolaryngologists, otolaryngology residents, audiologists, audiology students, and auditory and vestibular scientists will benefit most from this well-researched book.
Event-Related Brain Potentials in Man Enoch Callaway 2012-12-02 Event-Related Brain Potentials in Man contains the proceedings of a conference held on April 26-29, 1977, and sponsored by the National Institute of Mental Health in Rockville, Maryland to assess the field of event-related brain potential (ERP) research. The papers explore findings on ERPs in man in relation to the link between brain and behavior, brain functions, mental states, and drug interactions. Organized into eight chapters, this volume begins with an overview of the functional neuroanatomy and neurophysiology of ERPs, along with their measurement. It then proceeds with a discussion of some applications of ERPs to patients with neurological and sensory impairment, the use of ERPs to analyze sensation as well as perception and attention, the endogenous components of the ERP, the ERP correlates of psychopathology, and the event-related brain potentials across the life span. The reader is also introduced to ethical issues regarding ERPs, with reference to the history of encephalography. An epilogue assessing the increased status and maturity of the ERP field, along with uncharted territories and future prospects, concludes the book. This book will be of interest to scientists and clinical investigators working in biological sciences, neuropsychology, psychiatry, and neurology.
Cognitive Electrophysiology H.-J. Heinze 2012-12-06 MICHAEL S. GAZZANIGA The investigation of the human brain and mind involves a myriad of ap proaches. Cognitive neuroscience has grown out of the appreciation that these approaches have common goals that are separate from other goals in the neural sciences. By identifying cognition as the construct of interest, cognitive neuro science limits the scope of investigation to higher mental functions, while simultaneously tackling the greatest complexity of creation, the human mind. The chapters of this collection have their common thread in cognitive neuroscience. They attack the major cognitive processes using functional stud ies in humans. Indeed, functional measures of human sensation, perception, and cognition are the keystone of much of the neuroscience of cognitive sci ence, and event-related potentials (ERPs) represent a methodological "coming of age" in the study of the intricate temporal characteristics of cognition. Moreover, as the field of cognitive ERPs has matured, the very nature of physiology has undergone a significant revolution. It is no longer sufficient to describe the physiology of non-human primates; one must consider also the detailed knowledge of human brain function and cognition that is now available from functional studies in humans-including the electrophysiological studies in humans described here. Together with functional imaging of the human brain via positron emission tomography (PET) and functional magnetic resonance imaging (fMRI), ERPs fill our quiver with the arrows required to pierce more than the single neuron, but the networks of cognition.
The Cognitive Neuropsychology of Attention Vincent Walsh 1994 The theme of this Special Issue is one that is ill-served by the existing neuropsychological literature. A publication that collates reviews of the developmental, physiological, clinical and cognitive aspects of this topic is therefore timely and would prove valuable to clinicians, researchers and students alike. The underlying problem addressed by the invited contributors is how attention is manifest in the intact brain, and how disorders of attention present themselves in the damaged brain. The topics to be covered will range from the physiology of attention (as revealed by single unit recording studies of extra-striate cortex of monkeys and PET scans in humans and low frequency EEG recordings) to disorders of attention after brain damage (e.g. stroke) and chronic pathological disorders of the brain (e.g. dyslexia and mental retardation). The range of contributions to the Special Issue demonstrates that the kinds of attentional processing required are determined by the task in hand. Correspondingly the volume discusses attention in the parietal, temporal and frontal lobes of the human and macaque brain, investigated by clinical, electrophysiological and behavioural methods. Attentional processes are also shown to be distributed in the brain and the effects of diminished attentional capacities which do not result from focal brain lesions are discussed in the context of mental retardation and dyslexia.
Attention and Brain Function Risto Naatanen 1992 This book delineates cerebral mechanisms of attention in humans as they presently appear in the light of data obtained by using various modern brain-research techniques. While the book focuses primarily on the ways humans select environmental information, the selectivity manifest in human thinking, consciousness, and motor behavior is also dealt with in the framework of an expanded attention concept. By combining the most recent evidence from diverse fields of human brain research and relating these physiological data to achievements of modern cognitive psychology, the author has developed an integrative view of human information processing. This theory concentrates on mechanisms of attentional selection and on the automatic processing which provides a basis for the selective processes.