1. Record Nr. UNINA9910966511903321

Titolo	Electrophysiology of mind : event-related brain potentials and cognition / / edited by Michael D. Rugg and Michael G.H. Coles
Pubbl/distr/stampa	Oxford ; ; New York, : Oxford University Press, 1995
ISBN	0-19-154558-9
Edizione	[1st ed.]
Descrizione fisica	1 online resource (239 p.)
Collana	Oxford psychology series ; ; no. 25
Altri autori (Persone)	RuggM. D (Michael D.) ColesMichael G. H
Disciplina	612.8/22
Soggetti	Evoked potentials (Electrophysiology) Neuropsychology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references (p. 209-215) and index.
Nota di contenuto	""Foreword""; ""Preface""; ""Contents""; ""List of contributors""; ""1 EVENT-RELATED BRAIN POTENTIALS: AN INTRODUCTION""; ""1.1 Introduction""; ""1.2 ERP recording and analysis""; ""1.2.1 Derivation""; ""1.2.2 The generation of the ERP""; ""1.2.3 Recording issues""; ""1.2.4 Conditioning the signal""; ""1.2.5 Artefacts""; ""1.2.6 Extracting the signal""; ""1.3 ERP components and their measurement""; ""1.3.1 Defining and extracting ERP components""; ""1.3.2 A compendium of ERP components""; ""References""; ""2 THE ERP AND COGNITIVE PSYCHOLOGY: CONCEPTUAL ISSUES"" ""2.1 The ERP in cognitive psychology""""2.2 Other physiological measures of cognitive processing""; ""2.3 Making inferences from ERPs""; ""2.3.1 Making inferences from ERPs I""; ""2.3.2 Making inferences from ERPs II""; ""2.4 Conclusions""; ""References""; ""3 MECHANISMS AND MODELS OF SELECTIVE ATTENTION""; ""3.1 Introduction""; ""3.1.1 Selective attention""; ""3.1.2 Electrophysiological approaches""; ""3.2 Visual a€? spatial attention""; ""3.2.1 Spatial cueing of attention: perceptual sensitivity or decision bias?""; ""3.2.2 Localizing attention effects in the brain"" ""3.2.3 Selectivity during spatial attention""""3.2.4 Common mechanisms for search and spatial selection?""; ""3.3 Visual feature selection""; ""3.3.1 The neural specificity model""; ""3.3.2 Hierarchical selection of visual inputs""; ""3.4 Executive processes of visual

attention""; ""3.4.1 Brain systems controlling sensory selection""; ""3.5 Auditory selective attention""; ""3.5.1 Subcortical gating and early selection in the auditory cortex""; ""3.5.2 Long-latency attention effects in the auditory cortex""; ""3.6 Auditory feature selection""; ""3.6.1 Hierachical auditory selection""
""3.6.2 Stages of auditory feature selection""""""3.6.3 Auditory sensory memory and the mismatch response""; ""3.6.4 Attentional modulation of automatic processes""; ""3.7 Conclusions and summary""; ""Acknowledgements""; ""References""; ""4 MENTAL CHRONOMETRY AND THE STUDY OF HUMAN INFORMATION PROCESSING""; ""4.1 Introduction""; ""4.2 Mental chronometry""; ""4.2.1 The Donders subtraction method""; ""4.2.2 The Sternberg additive factors method""; ""4.2.3 Other methods: primes and probes""; ""4.3 Chronopsychophysiology""; ""4.3.1 Selective influence versus selective sensitivity""
""4.3.2 ERP components and mental chronometry""""""4.4 The locus of experimental effects""; ""4.4.1 Stroop and related conflict tasks""; ""4.4.2 Eriksen noise/compatibility paradigm""; ""4.4.3 Spatial stimulus-response compatibility""; ""4.4.4 The Sternberg task""; ""4.4.5 Summary""; ""4.5 Structure and function of the information processing system""; ""4.5.1 The nature of transmission""; ""4.5.2 Control""; ""4.5.3 Summary""; ""4.6 Conclusions""; ""References""; ""5 ERP STUDIES OF MEMORY""; ""5.1 Introduction""; ""5.1.1 Scope of Chapter""; ""5.1.2 Overview of relevant memory research""
""5.2 ERPs and memory""

Sommario/riassunto

Event-related potential methodology has long been used in neuroscience to measure electrical activity in the brain. It has become clear, however, that it can also be a powerful tool in studying and illuminating central psychological issues relating to attention, information processing, mental dynamics, memory, and language. Linking this technology to newer imaging techniques such as positron emission tomography and functional magnetic resonance imaging, makes it possible to build up a spatial and temporal picture of the brain during the performance of high-level skills. This volume provides strong evidence that cognitive psychology can benefit from the use of brain electrical activity, and will be of great interest to neuroscientists and psychologists alike.