

Contents

Preface	ix
Acknowledgements	xi
Contributors	xiii

Part I: Skilled Thinking

Thinking Skills	3
K. J. Gilhooly	
Chapter 1 Theoretical Issues in the Study of Exceptional Performance ..	5
K. A. Ericsson	
XChapter 2 The Role of Schemata in the Comprehension of Maps	29
J. Williamson and C. McGuinness	
Chapter 3 Apperception and Restructuring in Chess Players' Problem Solving	41
P. Saariluoma	
Chapter 4 Programming Plans: Internal or External Structures	59
R. K. E. Bellamy and D. J. Gilmore	
Chapter 5 Statistical Computing: Individual Differences in Learning at Macroscopic and Microscopic Levels	73
A. J. K. Green and K. J. Gilhooly	
Chapter 6 Talking about Cognitive Processes	87
D. C. Berry	
Chapter 7 Working Memory and Modes of Thinking: A Secondary Task Approach	99
R. H. Logie and A. F. S. Salway	

Part II: Emotion and Thinking

Emotion and Thinking	117
F. N. Watts	
Chapter 8 Do Emotional States Produce Irrational Thinking?	121
K. Oatley	
Chapter 9 Conceptual Representation of Emotions: The Role of Autobiographical Memories	133
M. A. Conway	
Chapter 10 The Cohesiveness of Phobic Concepts	145
F. N. Watts	
Chapter 11 A Prime Time for Emotion: Cognitive Vulnerability and the Emotional Disorders	157
M. J. Power	

Part III: Creative Processes

Creativity	169
G. Erdos	
Chapter 12 Artificial Intelligence and the Enhancement of Human Creativity	173
D. H. Sleeman	
Chapter 13 Psychosemantic Foundations of Creativity	191
H. Kreitler and S. Kreitler	
Chapter 14 The Embodiment Theory of Pre-reflexive Thought and Creativity	203
J. T. Haworth	
Chapter 15 Creativity: A New Evolutionary Perspective on the Relationship Between 'Person', 'Process' and 'Press'	217
J. Gear	

Part IV: Individual Differences

Individual Differences in Thinking	231
R. H. Logie	
Chapter 16 Inspection Time and Cognitive Ability	235
I. J. Deary and P. G. Caryl	

Chapter 17 The Nature of the Dysexecutive Syndrome in Parkinson's Disease	247
R. G. Morris, J. J. Downes and T. W. Robbins	
Chapter 18 Concept Attainment Solution Strategies and Age	259
D. Gregory	
✓ Chapter 19 Visual-Spatial Abilities in Art, Maths and Science Majors: Effects of Sex, Family Handedness and Spatial Experience ..	275
M. B. Casey, E. Winner, M. Brabeck and K. Sullivan	
Part V: Teaching Thinking	
Teaching Thinking Skills	297
G. Erdos	
Chapter 20 Talking about Thinking: The Role of Metacognition in Teaching Thinking	301
C. McGuinness	
Chapter 21 Problem Solving and Metacognition	313
R. L. Dominowski	
✓ Chapter 22 Training in Metacognition: An Application to Industry	329
A. J. Clark and H. Palm	
Chapter 23 Teaching Problem-Solving Skills to Adult Developmental Students	339
B. Seagull and G. Erdos	
Author Index	349
Subject Index	355
Contents of Volume 1	359