Contents

Contributors xi
Foreword xv
Preface xvii
About the Editors xix

Part One
Concepts, Theory, and Methods in the Psychology of Aging

1. Theoretical Issues in the Psychology of Aging
Timothy A. Salthouse

I. A Taxonomy of Major Questions 4
II. Criteria for Evaluating Explanations 6
III. Evaluating Criteria 11
IV. Theoretical Progress 11
V. Conclusion 12
References 13

2. Design and Analysis of Longitudinal Studies on Aging
Scott M. Hofer and Martin J. Sliwinski

I. Research Design and Inferential Scope 17
II. Understanding Heterogeneity in Age-Related Processes 23
III. Methodological Issues in the Study of Aging-Related Change 24
IV. Statistical Analysis of Longitudinal Studies of Aging 26
V. Summary 30
References 31
Part Three
Behavioral Processes and Aging

7. Vision and Aging
   Frank Schieber
   I. Introduction 129
   II. Structural Changes in the Visual System 129
   III. Visual Impairment and Age-related Pathology 133
   IV. Age-related Changes in Visual Function 134
       References 154

8. Aging, Complexity, and Motor Performance
   Karl M. Newell, David E. Vaillancourt, and Jacob J. Sosnow
   I. Introduction 163
   II. Aging and Movement Complexity 163
   III. Complexity in Posture, Locomotion, and Manipulation 165
   IV. Aging and Loss of Adaptation in Motor Performance 174
       V. Concluding Comments 177
           References 178

9. Changing Role of the Speed of Processing Construct
    in the Cognitive Psychology of Human Aging
   Alan Hartley
   I. Earlier Reviews 183
   II. Current Research 189
   III. Summary 200
       References 203

10. Memory Aging
    William J. Hoyer and Paul Verhaeghen
    I. Introduction 209
    II. Varieties of Memory Aging 210
    III. Explanations of the Aging of Memory 218
    IV. Memory Interventions 221
    V. Summary and Conclusions 223
        References 224

11. Applied Learning and Aging: A Closer Look at Reading
    Bonnie J. F. Meyer and Carlee K. Pollard
    I. Introduction 233
    II. Summary of Past Reviews of Aging and Learning
        and Memory from Text 234
### III. Aging: Cognitive and Motivational Changes and How They May Impact Reading 235

IV. Aging and Models of Reading Comprehension 239

References 252

### 12. Language Comprehension and Production in Normal Aging

*Robert Thornton and Leah L. Light*

I. Lexical Processing 262

II. Sentence Processing 268

III. Discourse Processes 272

IV. A Concluding Word 278

References 279


*Michaela Riediger, Shu-Chen Li, and Ulman Lindenberger*

I. Introduction 289

II. Resource-Allocation Processes in Life Span Development 290

III. Four Current Approaches to Adaptive Regulation of Life Span Development 291

IV. The Utility of SOC as an Integrative Framework: Selective Review of Empirical Findings 294

V. Research on SOC: Future Directions 300

VI. Summary and Outlook 306

References 307

### 14. Everyday Problem Solving and Decision Making

*Michael Marsiske and Jennifer A. Margrett*

I. Introduction 315

II. Evaluating Age, Cognition, and Function Relatedness 320

III. Unanswered Questions and Future Directions 332

IV. Conclusions 335

References 336

### 15. Aging and the Intersection of Cognition, Motivation, and Emotion

*Laura L. Carstensen, Joseph A. Mikels, and Mara Mather*

I. Cognitive Aging 343

II. Socioemotional Aging 345

III. Socioemotional Selectivity Theory 346

IV. Emotion-Cognition Interactions with Age 347

V. Memory for Emotion in General 348

VI. Positivity Effects in Memory 349

VII. Positivity Effects in Initial Attention 351

VIII. Mechanisms Underlying the Positivity Effect 352

IX. Future Directions 354

X. Summary 355

References 356
16. Personality and Aging  
   **Daniel K. Mroczek, Avion Spiro III, and Paul W. Griffin**  
   I. Personality Organization: The Broadening of Conceptual Models 363  
   II. Personality Development: Individual Differences in Change 365  
   III. What Gives Rise to Individual Differences in Intraindividual Personality Change? 367  
   IV. Personality and Mortality among Older Adults 369  
   V. Future Directions in the Study of Personality and Aging 371  
   References 372  

17. Attitudes toward Aging and Their Effects on Behavior  
   **Thomas M. Hess**  
   I. Introduction 379  
   II. Other’s Attitudes about Aging 380  
   III. Self-Related Attitudes 391  
   IV. Conclusions 398  
   References 399  

18. Improving the Mental Health of Older Adults  
   **Bob G. Knight, Brian Kaskie, Gia Robinson Shurgot, and Jennifer Dave**  
   I. Current Research on Psychotherapy with Older Adults 408  
   II. Ethnic Diversity and Interventions for Older Adults 414  
   III. Policy Dimensions of Mental Health Services for Older Adults 415  
   IV. Discussion and Conclusions 418  
   References 419  

19. Adaptive Technology  
   **Charles T. Scialfa and Geoff R. Fernie**  
   I. Eating 426  
   II. Hygiene 426  
   III. Health 427  
   IV. Communications 429  
   V. The Internet and World Wide Web 431  
   VI. Mobility 432  
   VII. Driving 434  
   VIII. The Future 436  
   References 436  

Part Four  
Complex Behavioral Concepts and Processes in Aging  

20. Wisdom and Aging  
   **Gerard M. Brugman**  
   I. Introduction 445  
   II. Philosophical Roots of Psychological Conceptualizations of Wisdom 446  
   III. The Concept of Wisdom: Theories 448
21. Autobiographical Memory and the Narrative Self over the Life Span
   James E. Birren and Johannes J. F. Schroots
   I. Introduction 477
   II. Autobiographical Memory 478
   III. The Narrative Self 487
   IV. Summary 494
   References 495

22. Religion and Health in Late Life
   Neal Krause
   I. Church Attendance 500
   II. Prayer 501
   III. Religious Coping Responses 503
   IV. Forgiveness 504
   V. Church-Based Social Support 506
   VI. Religious Meaning in Life 509
   VII. Issues in Assessing Life Course Changes in Religion 511
   VIII. Conclusions 513
   References 515

Author Index 519
Subject index 555