Contents

Contributors Foreword Preface	xi xv xxv
1. The Present, Past, and Future of Research on Aging and Decision Making	
JONELL STROUGH, CORINNA E. LÖCKENHOFF, THOMAS M. HESS Basic Issues in the Study of Aging and Decisions Book Overview Conclusion References	2 8 12 13
1 NEUROBIOLOGICAL MECHANISMS	
2. Modeling Cost–Benefit Decision Making in Aged Rodents B. SOFIA BEAS, BARRY SETLOW, GREGORY R. SAMANEZ-LARKIN, JENNIFER L. BIZON	
Introduction Individual Differences and Cognitive Aging Cross-Species Comparisons of Neural Circuitry Relevant for Decision Making Cross-Species Considerations of Reinforcers Intertemporal Decision Making Probabilistic (Risky) Decision Making The Role of Age-Related Memory Impairment in Decision Making Conclusion References	17 18 19 20 21 28 31 33
3. Decision Neuroscience and Aging GREGORY R. SAMANEZ-LARKIN	
Overview of Frontostriatal Neural Circuitry Gains and Losses Intertemporal Decision Making Risky Decision Making	41 44 45 47

vi CONTENTS	
Learning Conclusions References	50 53 55
4. Towards a Mechanistic Understanding of Age-Related Changes in Learning and Decision Making: A Neuro- Computational Approach BEN EPPINGER, RASMUS BRUCKNER	
Age-Related Decline in the Dopamine System Age Differences in Learning from Experience Conclusions References	62 65 71 74
5. Age-Associated Executive Dysfunction, the Prefrontal Cortex, and Complex Decision Making NATALIE L. DENBURG, WILLIAM M. HEDGCOCK	
Guiding Observations, Theoretical Frameworks, and Key Empirical Tests Research on Aging Conclusions and Implications References	81 85 96 98
2	
BEHAVIORAL MECHANISMS	
6. Adaptive Decision Making and Aging RUI MATA, ANIKA K. JOSEF, PATRICK LEMAIRE	
An Ecological Perspective on Life-Span Changes in Strategy Use Cognitive Aging: The Role of Cognitive Control and Reward Processing Aging and Strategy Use Aging and Strategy Use in Decision Making Implications of Age Differences in Strategy Selection and Execution Summary and Conclusion References	105 108 109 114 120 121 122
7. Aging, Memory, and Decision Making FABIO DEL MISSIER, TIMO MÄNTYLÄ, LARS-GÖRAN NILSSON	
Introduction Age-Related Changes in Memory Functioning and Their Influence on Judgment and Decision Making Aging, Memory, and Decision Making: Where Do We Go From Here? References	127 128 141 142

	• •
CONTENTS	V11

CONTENTS	VII
8. Complementary Contributions of Fluid and Crystallized Intelligence to Decision Making Across the Life Span	
LISA ZAVAL, YE LI, ERIC J. JOHNSON, ELKE U. WEBER	
Better or Worse Off? Cognitive Capabilities and Decision Making Across the Adult Life Span Complementary Cognitive Capabilities Practical Decision Making and the Role of Domain-Specific Experience Implications for Public Policy and Effective Decision Environments Summary References	149 150 153 157 161 164 164
9. Aging, Emotion, and Decision Making	
JOSEPH A. MIKELS, MICHAEL M. SHUSTER, SYDNEY T. THAI	
Age-Related Changes in Cognition, Emotion, and Motivation Theoretical Perspectives on the Role of Affect in Judgment and Decision Making Decision Making Across the Adult Life Span Conclusions and Future Research Directions References	170 172 178 182 184
10. A Prospect Theory-Based Evaluation of Dual-Process Influences on Aging and Decision Making: Support for a Contextual Perspective THOMAS M. HESS	
Dual-Process Perspectives on Decision Making Dual-Process Influences and Prospect Theory Conclusions References	190 192 206 209
11. Age Differences in Time Perception and Their Implications for Decision Making Across the Life Span CORINNA E. LÖCKENHOFF, JOSHUA L. RUTT	
Age Differences in Global Time Horizons and Mental Representations of Time Mechanisms Implications for Decision Making Future Directions and Practical Implications References	214 217 220 225 227
12. Understanding Life-Span Developmental Changes in Decision-Making Competence	
JONELL STROUGH, ANDREW M. PARKER, WÄNDI BRUINE DE BRUIN	
Overview Defining Decision-Making Competence Deliberation, Affect, and Decision-Making Competence	235 236 238

viii	CONTENTS	
	Making Competence of Aging and Decision-Making Competence and Directions for Future Research	239 242 246
Summary and Conclu References		251 252
	3	
	APPLIED PERSPECTIVES	
13. Decision Ma	king and Health Literacy among Older Adults	
Introduction		261
Older Adults and He	ealth Decisions acy, and Health-Related Decisions	262 268
Conclusions	cy, and reality-related Decisions	276
References		278
	d Actions for Life Patterns and Health Practices ottom-up Approach	
HOWARD LEVENTHAL MICHAEL A. DIEFENBA	., JENNA HEROLD, ELAINE A. LEVENTHAL, EDITH BURNS, ACH	
Overview		283
	g Health Preferences and Decisions	284
	ses Underlying Health Decisions and Actions in a Common-Sense Framework: Selective Evidence	285 295
Summary and Thoug		303
References		306
15. Choice and	Aging: Less is More	
PI-JU LIU, STACEY WO	OD, YANIV HANOCH	
Introduction		309
Choice Preference a	nd Size in Decision Making	310
Dual-Process Models Adults	s and Implications for Decision Making in Older	212
	Testing the Mediating Effect of Cognitive Ability on	312
Choice Preference	e	314
Numeracy and Choi	ce Set Size in Decision Making	317
Additional Factors is Summary	n Relation to Choice Set Size and Preference	319
References		321 324

CONTENTS	ix
ng across the Adult Life Span: es and Real-World Competence	

393

16. Financial Decision Making across the Adult Life Span: Dynamic Cognitive Capacities and Real-World Competence DOUGLAS A. HERSHEY, JAMES T. AUSTIN, HELEN C. GUTIERREZ	
Fluid Abilities, Crystallized Abilities, and Financial Knowledge The Nature of Financial Decision-Making Tasks Reasons Why Individuals Make Poor Financial Decisions Interventions Designed to Improve Financial Decision Making Summary and Conclusion References	330 332 336 342 344 345
17. Aging and Consumer Decision Making STEPHANIE M. CARPENTER, CAROLYN YOON	
Age Differences in Basic Decision Skills and Strategies Age Differences in Consumer Choice and Decision Making Moderating Influences on Aging and Decision Making Conclusions References	351 354 357 365 366
18. A Framework for Decision Making in Couples across Adulthood	
TARA L. QUEEN, CYNTHIA A. BERG, WILLIAM LOWRANCE	
A Framework for Understanding Dyadic Decision-Making Processes Existing Literature on Dyadic Decision Making Future Directions Conclusion References	372 379 385 387 388

Index