

---

# Contents

<b>1 Introduction: Grounding Self-Regulation in the Brain and Body .....</b>	<b>1</b>
Guido H.E. Gendolla, Mattie Tops and Sander L. Koole	
<b>Part I Integrative Perspectives</b>	
<b>2 An Evolving View of the Structure of Self-Regulation .....</b>	<b>9</b>
Charles S. Carver, Sheri L. Johnson, Jutta Joormann and Michael F. Scheier	
<b>3 Self-Regulation in an Evolutionary Perspective.....</b>	<b>25</b>
Marco Del Giudice	
<b>4 Self-Regulatory Strength: Neural Mechanisms and Implications for Training .....</b>	<b>43</b>
Richard B. Lopez, Kathleen D. Vohs, Dylan D. Wagner and Todd F. Heatherton	
<b>5 The Muscle Metaphor in Self-Regulation in the Light of Current Theorizing on Muscle Physiology.....</b>	<b>55</b>
Michael Richter and Joséphine Stanek	
<b>6 Protective Inhibition of Self-Regulation and Motivation: Extending a Classic Pavlovian Principle to Social and Personality Functioning.....</b>	<b>69</b>
Mattie Tops, Caroline Schlinkert, Mandy Tjew-A-Sin, Dalya Samur and Sander L. Koole	
<b>Part II Interactions between Affect and Cognition in Self-Regulation</b>	
<b>7 Affective Modulation of Cognitive Control: A Biobehavioral Perspective.....</b>	<b>89</b>
Henk van Steenbergen	

<b>8 Error Monitoring Under Negative Affect: A Window into Maladaptive Self-Regulation Processes .....</b>	<b>109</b>
Kristien Aarts and Gilles Pourtois	
<b>9 Pupillometry and Memory: External Signals of Metacognitive Control .....</b>	<b>125</b>
Megan H. Papesh and Stephen D. Goldinger	
<b>10 From Distraction to Mindfulness: Psychological and Neural Mechanisms of Attention Strategies in Self-Regulation .....</b>	<b>141</b>
Lotte F. van Dillen and Esther K. Papies	

### **Part III The Central Nervous System and Self-Regulation**

<b>11 From the Reward Circuit to the Valuation System: How the Brain Motivates Behavior .....</b>	<b>157</b>
Mathias Pessiglione and Maël Lebreton	
<b>12 Neural Foundations of Motivational Orientations .....</b>	<b>175</b>
Eddie Harmon-Jones and Cindy Harmon-Jones	
<b>13 Motus Moderari: A Neuroscience-Informed Model for Self-Regulation of Emotion and Motivation .....</b>	<b>189</b>
Jordan L. Livingston, Lauren E. Kahn and Elliot T. Berkman	
<b>14 More than the Medial Prefrontal Cortex (MPFC): New Advances in Understanding the Neural Foundations of Self-Insight .....</b>	<b>209</b>
Jennifer S. Beer and Taru Flagan	
<b>15 Self-Control in Social Decision Making: A Neurobiological Perspective .....</b>	<b>221</b>
Daria Knoch and Kyle Nash	

### **Part IV Self-Regulation of Effort**

<b>16 Mental Effort: Brain and Autonomic Correlates in Health and Disease .....</b>	<b>237</b>
Eugenia Radulescu, Yoko Nagai and Hugo Critchley	
<b>17 Psychobiology of Perceived Effort During Physical Tasks .....</b>	<b>255</b>
Helma M. de Morree and Samuele M. Marcora	
<b>18 Bounded Effort Automaticity: A Drama in Four Parts .....</b>	<b>271</b>
Guido H.E. Gendolla and Nicolas Silvestrini	

<b>19 The Intensity of Behavioral Restraint: Determinants and Cardiovascular Correlates .....</b>	<b>287</b>
Rex A. Wright and Stephanie D. Agtarap	
<b>20 Self-Striving: How Self-Focused Attention Affects Effort-Related Cardiovascular Activity .....</b>	<b>301</b>
Paul J. Silvia	
<b>21 Future Thought and the Self-Regulation of Energization .....</b>	<b>315</b>
A. Timur Sevincer and Gabriele Oettingen	
<b>Part V Self-Regulatory Problems and Their Development</b>	
<b>22 Depression and Self-Regulation: A Motivational Analysis and Insights from Effort-Related Cardiovascular Reactivity .....</b>	<b>333</b>
Kerstin Brinkmann and Jessica Franzen	
<b>23 Perinatal Developmental Origins of Self-Regulation .....</b>	<b>349</b>
Jens Henrichs and Bea R. H. Van den Bergh	
<b>24 Self-Regulation Through Rumination: Consequences and Mechanisms .....</b>	<b>371</b>
Ernst H. W. Koster, Lin Fang and Igor Marchetti	
<b>25 Biological Aspects of Self-Esteem and Stress .....</b>	<b>385</b>
Jens C. Pruessner and Mark Baldwin	
<b>26 A Basic and Applied Model of the Body–Mind System .....</b>	<b>397</b>
W.M. Bernstein	
<b>Index .....</b>	<b>419</b>

Handbook of Biobehavioral Approaches to  
Self-Regulation

Gendolla, G.H.E.; Tops, M.; Koole, S.L. (Eds.)

2015, XIV, 421 p. 58 illus., 11 illus. in color., Hardcover

ISBN: 978-1-4939-1235-3