

Contents

List of contributors ix

Editors' introduction xiii

Jacqueline Nadel and Darwin Muir

Section I: **Psychobiological approaches and evolutionary perspectives**

Neural bases of emotions and evolution 3

1 The search for the fundamental brain/mind sources of affective experience 5

Jaak Panksepp and Marcia Smith Pasqualini

2 Emotions in chimpanzee infants: the value of a comparative developmental approach to understand the evolutionary bases of emotion 31

Kim A. Bard

3 Action and emotion in development of cultural intelligence: why infants have feelings like ours 61

Colwyn Trevarthen

Ontogeny 93

4 Maternal–fetal psychobiology: a very early look at emotional development 95

Amy Salisbury, Penelope Yanni, Linda Lagasse, and Barry Lester

5 Emotional processes in human newborns: a functionalist perspective 127

Robert Soussignan and Benoist Schaal

6 Emotions in early mimesis 161

Giannis Kugiumutzakis, Theano Kokkinaki, Maria Makrodimitraki, and Elena Vitalaki

7 Feeling shy and showing-off: self-conscious emotions must regulate self-awareness 183

Vasudevi Reddy

New technology 205

8 Infant perception and production of emotions during face-to-face interactions with live and 'virtual' adults 207

Darwin Muir, Kang Lee, Christine Hains, and Sylvia Hains

- 9 Emotion understanding: robots as tools and models 235
Lola Cañamero and Philippe Gaussier

Section II: **Comparative approaches: typical and impaired emotional development**

- 10 The repertoire of infant facial expressions: an ontogenetic perspective 261
Harriet Oster
- 11 Why is connection with others so critical? The formation of dyadic states of consciousness and the expansion of individuals' states of consciousness: coherence governed selection and the co-creation of meaning out of messy meaning making 293
Edward Tronick
- 12 Prenatal depression effects on the fetus and neonate 317
Tiffany Field
- 13 Emotion sharing and emotion knowledge: typical and impaired development 341
Helene Tremblay, Philippe Brun, and Jacqueline Nadel
- 14 Social-emotional impairment and self-regulation in autism spectrum disorders 365
Katherine A. Loveland
- 15 Emotional regulation and affective disorders in children and adolescents with obsessive compulsive disorder 383
Martine Flament and David Cohen
- 16 Loss of emotional fluency as a developmental phenotype: the example of anhedonia 409
Stéphanie Dubal and Roland Jouvent
- Discussion 429
- Emotion, body, and parent–infant interaction
George Downing
- Index 451