Contents

	List of contributors	page vii
	Foreword Jerome Kagan and Peter B. Read	ix
Par	rt I Introduction	
1	Measuring emotions in human development Carroll E. Izard	3
Par	t II Psychobiological functions	
2	Developmental psychoendocrinology: an approach to the study of emotions Katherine H. Tennes and John W. Mason	21
3	Heart rate and heart rate variability as signs of a temperamental dimension in infants <i>Jerome Kagan</i>	38
4	Psychophysiological patterning and emotion revisited: a systems perspective <i>Gary E. Schwartz</i>	67
Par	t III Facial, vocal, and body signals	
5	Two complementary systems for measuring facial expressions in infants and children Carroll E. Izard and Linda M. Dougherty	97
6	The assessment of vocal expression in infants and children <i>Klaus R. Scherer</i>	127
7	Gaze behavior in infants and children: a tool for the study of emotions? <i>Ralph V. Exline</i>	164
8	The measurement of emotional state Michael Lewis and Linda Michaelson	178

9	Measuring the development of sensitivity to nonverbal communication Bella M. DePaulo and Robert Rosenthal	208
Par	t IV Subjective experience, empathy, and attachment	
10	The construct validity of the Differential Emotions Scale as adapted for children and adolescents William E. Kotsch, David W. Gerbing, and Lynne E. Schwartz	251
11	The measurement of empathy Martin L. Hoffman	279
Par	t V Commentary	
12	Emotion and the cardiovascular system: a critical perspective Paul A. Obrist, Kathleen C. Light, and Janice L. Hastrup	299
13	An ethological approach to research on facial expressions William R. Charlesworth	317
14	The construction of emotion in the child George Mandler	335
	Index	345