<table>
<thead>
<tr>
<th>Brief Contents</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>List of Contributors</strong></td>
</tr>
<tr>
<td><strong>Preface to Third Edition</strong></td>
</tr>
</tbody>
</table>

### PART I: INTRODUCTION

1. **The Scope and Methods of Developmental Psychology**  
   *Alan Slater, Scott P. Johnson and Darwin Muir*  
   Page 3

2. **Theories and Issues in Child Development**  
   *Scott P. Johnson, Alan Slater and Ian Hocking*  
   Page 41

3. **The Nature–Nurture Debate**  
   *Alan Slater*  
   Page 79

### PART II: INFANCY

4. **Prenatal Development**  
   *Christine Moon and William P. Fifer*  
   Page 109

5. **Perception, Knowledge and Action in Infancy**  
   *J. Gavin Bremner, Kirsty Dunn and Diana S.Y. Tham*  
   Page 143

6. **Emotional Development and Attachment Relationships**  
   *Elizabeth Meins*  
   Page 183

7. **Early Social Interactions with People and Objects**  
   *Cintia Rodríguez, Julia Benassi, Luisa Estrada, and Nicolás Alessandroni*  
   Page 213

8. **The Development of Self and Gender**  
   *Wendy Lawrenson*  
   Page 259

### PART III: CHILDHOOD

9. **Cognitive Development**  
   *Margaret Anne Defeyter*  
   Page 305

10. **The Development of Language**  
    *Heather M. Hill and Stan A. Kuczaj II*  
    Page 341

11. **Acquiring a Theory of Mind**  
    *Peter Mitchell*  
    Page 381

12. **Reading and Mathematics in Developmental Psychology**  
    *Peter Bryant*  
    Page 407
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>Memory Development and Eyewitness Testimony</td>
<td>439</td>
</tr>
<tr>
<td></td>
<td>Stephen J. Ceci, Stanka A. Fitneva, Cagla Aydin and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Nadia Chernyak</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Play and the Beginnings of Peer Relationships</td>
<td>477</td>
</tr>
<tr>
<td></td>
<td>Peter K. Smith</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Prosocial Tendencies, Antisocial Behaviour and Moral</td>
<td>511</td>
</tr>
<tr>
<td></td>
<td>Development in Childhood</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Daniel Hart, Neeta Goel and Robert Atkins</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PART IV ADOLESCENCE</td>
<td>541</td>
</tr>
<tr>
<td>16</td>
<td>Cognitive Development in Adolescence</td>
<td>543</td>
</tr>
<tr>
<td></td>
<td>Kang Lee, Gizelle Anzures and Alejo Freire</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Social Development</td>
<td>577</td>
</tr>
<tr>
<td></td>
<td>Tirza H.J. Van Noorden and William M. Bukowski</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PART V PRACTICAL ISSUES</td>
<td>611</td>
</tr>
<tr>
<td>18</td>
<td>Educational Implications</td>
<td>613</td>
</tr>
<tr>
<td></td>
<td>Alyson Davis and Naomi Winstone</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Risk and Resilience in Development</td>
<td>645</td>
</tr>
<tr>
<td></td>
<td>Leslie Morrison Gutman and Eirini Flouri</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Social Problems in Schools</td>
<td>683</td>
</tr>
<tr>
<td></td>
<td>Peter K. Smith and Julian Elliott</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Atypical Development</td>
<td>715</td>
</tr>
<tr>
<td></td>
<td>Sarah Norgate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Glossary</td>
<td>751</td>
</tr>
<tr>
<td></td>
<td>Names Index</td>
<td>785</td>
</tr>
<tr>
<td></td>
<td>Subject Index</td>
<td>805</td>
</tr>
</tbody>
</table>
## Contents

### List of Contributors

### Preface to Third Edition

### PART I  INTRODUCTION

1. The Scope and Methods of Developmental Psychology  
   **Alan Slater, Scott P. Johnson and Darwin Muir**  
   Introduction  
   Studying Changes with Age  
   Concepts of Human Development  
   ‘Folk’ theories of development: Punishment or praise?  
   Defining development according to world views  
   Ways of Studying Development  
   Designs for studying age-related changes  
   Research methods  
   Beyond Common Sense: The Importance of Research Evidence  
   Social policy implications of child development research  
   Developmental Functions: Growing and Changing  
   Continuous function (a) – increasing ability  
   Continuous function (b) – decreasing ability  
   Discontinuous (step) function  
   U-shaped functions  
   Comparing developmental functions  
   Summary and Conclusions  
   Discussion Points  
   Suggestions for Further Reading  
   References

2. Theories and Issues in Child Development  
   **Scott P. Johnson, Alan Slater and Ian Hocking**  
   Introduction  
   Motor Development  
   Maturation theories  
   Dynamic systems theory  
   Cognitive Development  
   Piaget’s theory of development  
   Developmental psychology before Piaget  
   Fundamental aspects of human development, according to Piaget  
   The four stages of cognitive development
Information Processing Approaches
Cognitive development in infancy
Cognitive development in childhood
Connectionism and brain development
Summary
Comparing information-processing approaches with Piaget’s approach
Social-Cognitive Development
Vygotsky
Behaviourism and social learning theory
Ethology and Evolution
Evolution
The ethological approach
Emotional Development
Attachment theory – John Bowlby and Mary Ainsworth
Psychoanalytic Theories
Sigmund Freud – The founder of psychoanalysis
The five psychosexual stages
Problems with Freudian theory
Psychoanalysis, then and now: An overview
Modern psychoanalysts – Anna Freud and Erik Erikson
Humanistic Theory – Abraham Maslow
Abraham Maslow’s hierarchy of needs
Putting It all Together – Different Theories for Different Needs
Gender development
Issues in Child Development
The nature–nurture issue
Stability versus change
Continuity versus discontinuity
Summary and Conclusions
Discussion Points
Suggestions for Further Reading
References

3 The Nature–Nurture Debate
Alan Slater
Introduction
Precocial and altricial species
Nativism and empiricism
Cognitive Development
The start of it all: The first intelligence test
What is intelligence – one ability or several?
Intelligence test items
Controversies and issues in intelligence
Heritability
Heritability estimates
Genetic Contributions to Cognitive Growth
Familial resemblance
Missing heritability
Gene × environment interaction (G×E)
Environmental Influences on Cognitive Development 92
  Adoption studies 92
  The Flynn effect 98
Compensatory Education 98
  Poverty and malnutrition 98
  Head Start and Sure Start 99
Summary and Conclusions 101
Discussion Points 102
Suggestions for Further Reading 102
References 103

PART II  INFANCY 107

4  Prenatal Development 109
Christine Moon and William P. Fifer
Introduction 112
The Brain, the Spinal Cord and the Emergence of Mind 113
  Processes and sequencing of brain development 113
  Development of the cerebral cortex 114
  Behavioural organisation 115
Sensations 118
  Touch 118
  The chemosensory system 118
  The vestibular system 120
  The visual system 121
  The auditory system 124
Prenatal and Transnatal Auditory Learning 127
  Learning about mother’s voice and language 128
Summary 129
Risks to Foetal Development 129
  Effects of exposure to psychoactive substances 130
  Nutrition and foetal development 131
  Effects of maternal stress 132
Prenatal Development of Postnatal Functions: The Bridge to Infancy 133
Summary and Conclusions 133
Discussion Points 134
Suggestions for Further Reading 135
References 135

5  Perception, Knowledge and Action in Infancy 143
J. Gavin Bremner, Kirsty Dunn and Diana S.Y. Tham
Introduction 145
Visual Perception from Birth to Six Months 146
  Early limitations of vision: Are they really a problem? 146
  How can we investigate infant perception? 147
  Shape perception in newborns 148
  Newborns perceive a three-dimensional world 150
  Perceptual development in the first six months 150
Summary 153
Infants’ Perception of People

Face perception

Discriminating between faces

Preference for attractive faces

Perceptual narrowing and face processing specialisation

Imitation

Voice perception

Voice and speech discrimination

Summary

Infants’ Knowledge of the World

Jean Piaget and the development of object permanence

Later Work on Infant Cognition

The violation of expectation technique

Evidence of object knowledge: The ‘drawbridge study’ and others

Young infants reason about the number of objects in an event

Young infants discriminate different numbers of items

Summary

Object Search Revisited

Search failure is not due to lack of motor skill

Seeking an explanation of the A not B error

Summary and Conclusions

Early knowledge

Early knowledge does not guide action

Remodelling Piaget’s account

Discussion Points

Suggestions for Further Reading

References

6 Emotional Development and Attachment Relationships

Elizabeth Meins

Introduction

Emotional Development

Expressing and recognising emotional expressions

Infant discrimination of facial expressions

Emotion understanding

Emotion understanding tasks

Emotion regulation

Attachment Relationships

Bowlby’s theory of attachment

Mary Ainsworth and the strange situation procedure

Internal working models and the Adult Attachment Interview

Longitudinal stability in attachment security

Summary and Conclusions

Emotional competence in infancy

Later emotional competence

Attachment theory

Discussion Points

Suggestions for Further Reading

References
Gender Identity Development 284
  Evaluating Freudian theory 285
  Boys and girls and shades of gender 285
  The boy who was raised as a girl 287
  Rewarding gender-appropriate behaviours 288
  Cognitive components of gender identity 290
  Construction of gender identity 291
  The Chosen Categorical Self 292
    Developing a national identity 292
  Summary and Conclusions 294
  Discussion Points 295
  Suggestions for Further Reading 296
  References 296

PART III  CHILDHOOD 303

9  Cognitive Development 305
  Margaret Anne Defeyter
  Introduction 306
  Piaget’s Cognitive-Developmental Theory 307
    Underlying structures and processes 307
    Piaget’s stages of cognitive development 308
    Overall evaluation of Piaget’s theory 326
  Case’s Neo-Piagetian Theory 327
  Siegler’s Overlapping Waves Theory 328
  Vygotsky’s Sociocultural Perspective 330
    Overall evaluation of Vygotsky’s theory 331
  Theory of Core Knowledge 331
  Summary and Conclusions 334
  Discussion Points 335
  Suggestions for Further Reading 335
  References 335

10  The Development of Language 341
  Heather M. Hill and Stan A. Kuczaj II
  Introduction 343
  What Is Human Language? 344
    A communication system 344
    A symbolic system 345
    A rule-governed system 345
    Language is productive 345
  The Development of the Pragmatic System 346
    Turn-taking 346
    Initiating interactions 348
    Maintaining conversations 349
    Repairing faulty conversations 349
  The Development of the Phonological System 350
    Speech perception 350
    Speech production 353
    The development of articulation 355
<table>
<thead>
<tr>
<th>Contents</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Development of the Syntactic System</td>
<td>356</td>
</tr>
<tr>
<td>The one-word period</td>
<td>357</td>
</tr>
<tr>
<td>The two-word period</td>
<td>358</td>
</tr>
<tr>
<td>Later syntactic development</td>
<td>359</td>
</tr>
<tr>
<td>The significance of overregularisation errors and creative generalisations</td>
<td>360</td>
</tr>
<tr>
<td>How can syntactic development be explained?</td>
<td>362</td>
</tr>
<tr>
<td>The Acquisition of Word Meaning</td>
<td>364</td>
</tr>
<tr>
<td>Guessing a word’s meaning</td>
<td>365</td>
</tr>
<tr>
<td>The complexity of the task</td>
<td>366</td>
</tr>
<tr>
<td>Is children’s acquisition of word meaning constrained?</td>
<td>366</td>
</tr>
<tr>
<td>The importance of semantic relations</td>
<td>367</td>
</tr>
<tr>
<td>The Interaction of Language and Cognitive Development</td>
<td>368</td>
</tr>
<tr>
<td>Summary and Conclusions</td>
<td>369</td>
</tr>
<tr>
<td>Discussion Points</td>
<td>370</td>
</tr>
<tr>
<td>Suggestions for Further Reading</td>
<td>370</td>
</tr>
<tr>
<td>References</td>
<td>370</td>
</tr>
</tbody>
</table>

11 Acquiring a Theory of Mind

Peter Mitchell

Introduction | 383
Early attunement to others’ minds | 383
Focusing on false beliefs: The unexpected transfer test | 384
When Do Children Begin to Understand that People Hold Beliefs? | 386
Do Children Acquire a Theory of Mind? | 386
The deceptive box test | 387
Is There a Developmental Stage? | 388
The case for gradual change | 388
Do children suddenly begin giving correct judgements of false belief? | 389
Understanding the question asked | 390
Signs of Competence During Infancy: Can Infants Understand False Belief? | 390
Adults’ Difficulty with False Beliefs | 392
Factors that Influence Development | 394
Nature versus nurture | 394
Are we equipped with a dedicated module in the brain for understanding other minds? | 395
The role of the family: Siblings | 397
The role of the family: Adults | 398
The characteristics of the child | 399
Autism | 399
Lack of imagination | 400
Socialisation and communication | 400
Causes of autism | 400
Failure to understand the mind | 400
What is the Purpose of a Theory of Mind? | 402
Summary and Conclusions | 403
Discussion Points | 403
Suggestions for Further Reading | 404
References | 404
Sex Differences in Play and Social Behaviour

- Explanations of sex differences
- Gender-typed beliefs

Ethnicity

- Immigrant children

Summary and Conclusions

Discussion Points

Suggestions for Further Reading

References

15 Prosocial Tendencies, Antisocial Behaviour and Moral Development in Childhood

Daniel Hart, Neeta Goel and Robert Atkins

Introduction

What Do Prosocial and Antisocial Mean?

- Continuity and transformation
- Are prosocial and antisocial poles on the same dimension?

Preview of the Research Review

The Developmental Trajectory of Prosocial and Antisocial Behaviour and Thought

- Toddlers
- Middle childhood
- Moral judgement development and personality

Social Influences on Prosocial and Antisocial Development

Development within Relationships

- Parents
- Peers

Culture and Development

- Cultural variability
- Media and development
- Culture and identity

Summary and Conclusions

Discussion Points

Suggestions for Further Reading

References

PART IV ADOLESCENCE

16 Cognitive Development in Adolescence

Kang Lee, Gizelle Anzures and Alejo Freire

Introduction

Perception and Attention

- Perception
- Selective attention

Speed of Processing

Memory

- Short-term memory
- Long-term memory
- Memory strategies
<table>
<thead>
<tr>
<th>Topic</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Equifinality and multifinality</td>
<td>660</td>
</tr>
<tr>
<td>Levels of risk</td>
<td>661</td>
</tr>
<tr>
<td>Protective/Vulnerability Factors</td>
<td>661</td>
</tr>
<tr>
<td>Personal characteristics</td>
<td>663</td>
</tr>
<tr>
<td>Family characteristics</td>
<td>665</td>
</tr>
<tr>
<td>External support systems</td>
<td>667</td>
</tr>
<tr>
<td>Theoretical Models of Risk and Resilience</td>
<td>669</td>
</tr>
<tr>
<td>Moderator (interactive) effects models</td>
<td>669</td>
</tr>
<tr>
<td>Main effects models</td>
<td>670</td>
</tr>
<tr>
<td>Mediator effects models</td>
<td>671</td>
</tr>
<tr>
<td>Moderator versus main/mediator effects models</td>
<td>671</td>
</tr>
<tr>
<td>Developmental Outcomes: Competence and Maladjustment</td>
<td>672</td>
</tr>
<tr>
<td>Contributions of Risk and Resilience Research to the Design of</td>
<td>673</td>
</tr>
<tr>
<td>Successful Interventions</td>
<td></td>
</tr>
<tr>
<td>Summary and Conclusions</td>
<td>674</td>
</tr>
<tr>
<td>Discussion Points</td>
<td>675</td>
</tr>
<tr>
<td>Suggestions for Further Reading</td>
<td>675</td>
</tr>
<tr>
<td>References</td>
<td>676</td>
</tr>
<tr>
<td>Social Problems in Schools</td>
<td>683</td>
</tr>
<tr>
<td>Peter K. Smith and Julian Elliott</td>
<td></td>
</tr>
<tr>
<td>Introduction</td>
<td>685</td>
</tr>
<tr>
<td>The School Context</td>
<td>686</td>
</tr>
<tr>
<td>Social pressures in the classroom</td>
<td>686</td>
</tr>
<tr>
<td>Victimisation and Bullying in School</td>
<td>688</td>
</tr>
<tr>
<td>What do we mean by ‘bullying’?</td>
<td>688</td>
</tr>
<tr>
<td>How do we find out about bullying?</td>
<td>689</td>
</tr>
<tr>
<td>Incidence figures for bullying</td>
<td>689</td>
</tr>
<tr>
<td>Types of bullying</td>
<td>690</td>
</tr>
<tr>
<td>Roles in bullying</td>
<td>691</td>
</tr>
<tr>
<td>Some structural features of bullying</td>
<td>691</td>
</tr>
<tr>
<td>Effects of being bullied</td>
<td>692</td>
</tr>
<tr>
<td>Causes of bullying</td>
<td>692</td>
</tr>
<tr>
<td>Parental maltreatment and abuse</td>
<td>693</td>
</tr>
<tr>
<td>Risk factors for being a victim</td>
<td>693</td>
</tr>
<tr>
<td>Interventions to Reduce Bullying</td>
<td>693</td>
</tr>
<tr>
<td>A whole-school policy</td>
<td>694</td>
</tr>
<tr>
<td>Curriculum work</td>
<td>694</td>
</tr>
<tr>
<td>Methods and programmes</td>
<td>694</td>
</tr>
<tr>
<td>Social and Emotional Aspects of Learning (SEAL)</td>
<td>695</td>
</tr>
<tr>
<td>Assertiveness training</td>
<td>695</td>
</tr>
<tr>
<td>Peer support systems</td>
<td>695</td>
</tr>
<tr>
<td>Working in the playground</td>
<td>696</td>
</tr>
<tr>
<td>Reactive strategies</td>
<td>697</td>
</tr>
<tr>
<td>Large-scale school-based interventions</td>
<td>699</td>
</tr>
<tr>
<td>School Refusal</td>
<td>700</td>
</tr>
<tr>
<td>Types of school refuser</td>
<td>702</td>
</tr>
<tr>
<td>Assessment</td>
<td>705</td>
</tr>
<tr>
<td>Intervention</td>
<td>705</td>
</tr>
</tbody>
</table>