

HOFFNUNG | HOFFNUNG | SEIFERT | HINE | PAUSÉ  
WARD | SIGNAL | SWABEY | YATES | BURTON SMITH

# LIFESPAN DEVELOPMENT

FOURTH AUSTRALASIAN EDITION



Copyright © 2018. Wiley. All rights reserved.



# Lifespan development

FOURTH AUSTRALASIAN EDITION

Michele Hoffnung

Robert J. Hoffnung

Kelvin L. Seifert

Alison Hine

Cat Pausé

Lynn Ward

Tania Signal

Karen Swabey

Karen Yates

Rosanne Burton Smith

**WILEY**

Fourth edition published 2019 by  
John Wiley & Sons Australia, Ltd  
42 McDougall Street, Milton Qld 4064

First edition published 2010  
Second edition published 2013  
Third edition published 2016

Typeset in 10/12pt Times LT Std

© John Wiley & Sons, Australia, Ltd 2010, 2013, 2016, 2019

The moral rights of the authors have been asserted.

A catalogue record for this book is available from the National Library of Australia.

**Reproduction and Communication for educational purposes**

The Australian *Copyright Act 1968 (the Act)* allows a maximum of 10% of the pages of this work or — where this work is divided into chapters — one chapter, whichever is the greater, to be reproduced and/or communicated by any educational institution for its educational purposes provided that the educational institution (or the body that administers it) has given a remuneration notice to Copyright Agency Limited (CAL).

**Reproduction and Communication for other purposes**

Except as permitted under the Act (for example, a fair dealing for the purposes of study, research, criticism or review), no part of this book may be reproduced, stored in a retrieval system, communicated or transmitted in any form or by any means without prior written permission. All inquiries should be made to the publisher.

The authors and publisher would like to thank the copyright holders, organisations and individuals for the permission to reproduce copyright material in this book.

Every effort has been made to trace the ownership of copyright material. Information that will enable the publisher to rectify any error or omission in subsequent editions will be welcome. In such cases, please contact the Permissions Section of John Wiley & Sons Australia, Ltd.

*Cover image:* © Blend Images / Getty Images

Typeset in India by Aptara

Printed in Singapore by  
C.O.S. Printers Pte Ltd

10 9 8 7 6 5 4 3 2 1

# BRIEF CONTENTS

*About the authors* xiii

## **PART 1: Beginnings 1**

1. Studying development 2
2. Theories of development 43
3. Biological foundations, genetics, prenatal development and birth 95

## **PART 2: The first two years of life 160**

4. Physical and cognitive development in the first two years 161
5. Psychosocial development in the first two years 226

## **PART 3: Early childhood 275**

6. Physical and cognitive development in early childhood 276
7. Psychosocial development in early childhood 342

## **PART 4: Middle childhood 402**

8. Physical and cognitive development in middle childhood 403
9. Psychosocial development in middle childhood 466

## **PART 5: Adolescence 524**

10. Physical and cognitive development in adolescence 525
11. Psychosocial development in adolescence 583

## **PART 6: Early adulthood 647**

12. Physical and cognitive development in early adulthood 648
13. Psychosocial development in early adulthood 715

## **PART 7: Middle adulthood 779**

14. Physical and cognitive development in middle adulthood 780
15. Psychosocial development in middle adulthood 851

## **PART 8: Late adulthood 921**

16. Physical and cognitive development in late adulthood 922
17. Psychosocial development in late adulthood 998

## **PART 9: Endings 1062**

18. Dying, death and bereavement 1063

*Name index* 1114

*Subject index* 1163



# BRIEF CONTENTS

*About the authors* xiii

## **PART 1: Beginnings 1**

1. Studying development 2
2. Theories of development 43
3. Biological foundations, genetics, prenatal development and birth 95

## **PART 2: The first two years of life 160**

4. Physical and cognitive development in the first two years 161
5. Psychosocial development in the first two years 226

## **PART 3: Early childhood 275**

6. Physical and cognitive development in early childhood 276
7. Psychosocial development in early childhood 342

## **PART 4: Middle childhood 402**

8. Physical and cognitive development in middle childhood 403
9. Psychosocial development in middle childhood 466

## **PART 5: Adolescence 524**

10. Physical and cognitive development in adolescence 525
11. Psychosocial development in adolescence 583

## **PART 6: Early adulthood 647**

12. Physical and cognitive development in early adulthood 648
13. Psychosocial development in early adulthood 715

## **PART 7: Middle adulthood 779**

14. Physical and cognitive development in middle adulthood 780
15. Psychosocial development in middle adulthood 851

## **PART 8: Late adulthood 921**

16. Physical and cognitive development in late adulthood 922
17. Psychosocial development in late adulthood 998

## **PART 9: Endings 1062**

18. Dying, death and bereavement 1063

*Name index* 1114

*Subject index* 1163

# CONTENTS

About the authors *xiii*

## PART 1

### Beginnings 1

## CHAPTER 1

### Studying development 2

- 1.1 The nature of development 3
  - Multiple domains of development 4
  - Development from a lifespan perspective: voices across the lifespan 8
- 1.2 Why study development? 14
- 1.3 The life course in times past 15
  - Early precursors to developmental study 15
  - The emergence of modern developmental study 16
- 1.4 Perspectives on human development 17
  - Continuity within change 17
  - Lifelong growth 18
  - Changing meanings and vantage points 20
  - Developmental diversity 20
- 1.5 Methods of studying developmental psychology 23
  - Scientific methods 23
  - Variations in time frame 24
  - Variations in control: naturalistic and experimental studies 27
  - Variations in sample size 30
- 1.6 Ethical constraints on studying development 31
  - Strengths and limitations of developmental knowledge 33
  - Summary 34
  - Key terms 34
  - Review questions 36
  - Discussion questions 36
  - Application questions 36
  - Essay question 37
  - Websites 37
  - References 37
  - Acknowledgements 41

## CHAPTER 2

### Theories of development 43

- 2.1 The nature of developmental theories 45
  - What is a developmental theory? 45
  - How do developmental theories differ? 46
- 2.2 Psychodynamic developmental theories 48
  - Freudian theory 48
  - Erikson's psychosocial theory 50
  - Other psychodynamic approaches 55
  - Applications of psychodynamic developmental theories throughout the lifespan 57
- 2.3 Behavioural learning and social cognitive learning developmental theories 57
  - Behavioural learning theories 57
  - Social cognitive learning theory 61
  - Applications of learning theories throughout the lifespan 62
- 2.4 Cognitive developmental theories 63
  - Piaget's cognitive theory 63
  - Neo-Piagetian approaches 65
  - Information-processing theory 66
  - Applications of cognitive developmental theories throughout the lifespan 68
  - Moral developmental theories 69
- 2.5 Contextual developmental theories 71
  - Bronfenbrenner's bioecological systems theory 71
  - Vygotsky's sociocultural theory 71
  - Applications of contextual developmental theories throughout the lifespan 74
- 2.6 Adulthood and lifespan developmental theories 76
  - Normative-crisis model of development 76
  - Timing-of-events model 78
  - New directions: dynamic systems perspective 80
  - Developmental psychopathology 81
- 2.7 Developmental theories compared: implications for the student 81
  - Summary 84
  - Key terms 85
  - Review questions 86
  - Discussion questions 87
  - Application question 87

Essay question 88  
Websites 88  
References 88  
Acknowledgements 94

### CHAPTER 3

## Biological foundations, genetics, prenatal development and birth 95

- 3.1 Mechanisms of genetic transmission 96
  - The role of DNA 96
- 3.2 Individual genetic expression 99
  - Genotype and phenotype 99
  - Dominant and recessive genes 100
  - Transmission of multiple variations 101
  - Polygenic transmission 101
  - The determination of sex 101
- 3.3 Genetic abnormalities 105
  - Disorders due to abnormal chromosomes 107
  - Disorders due to abnormal genes 109
- 3.4 Genetic counselling and prenatal diagnosis 111
- 3.5 Relative influence of heredity and environment 113
  - Key concepts of behaviour genetics 114
  - Adoption and twin studies 114
- 3.6 Stages of prenatal development 117
  - Conception 117
  - The germinal stage (first two weeks) 118
  - The embryonic stage (third through eighth weeks) 118
  - The foetal stage (ninth week to birth) 119
  - The experience of pregnancy 121
  - Decisions and issues 121
- 3.7 Prenatal influences on the child 125
  - Harmful substances, diseases and environmental hazards 125
  - Maternal age and physical characteristics 130
  - Domestic violence 131
  - Prenatal health care 133
- 3.8 Birth 135
  - Childbirth settings and methods 136
  - Problems during labour and birth 140
  - Birth and the family 143
  - Moments after birth 144
  - Looking forward 147
  - Summary 148
  - Key terms 150

Review questions 151  
Discussion questions 151  
Application question 152  
Essay question 152  
Websites 153  
References 153  
Acknowledgements 159

### PART 2

## The first two years of life 160

### CHAPTER 4

## Physical and cognitive development in the first two years 161

- Physical development 163
- 4.1 Appearance of the infant at birth 163
  - The Apgar Scale 164
  - Size and bodily proportions 164
- 4.2 Sleep, arousal and the nervous system 165
  - Sleep 166
  - Parental response to infant sleep and arousal 168
  - States of arousal 169
- 4.3 Visual and auditory acuity 169
- 4.4 Motor development 171
  - The first motor skills 172
  - Cultural and sex differences in motor development 174
  - Motor development screening tests and scales 176
- 4.5 Nutrition during the first two years 177
  - Infant feeding 178
  - Poor nutrition 179
  - Malnutrition 179
  - Overnutrition 180
- 4.6 Impairments in growth 181
  - Low-birth-weight and preterm infants 181
  - Nonorganic failure to thrive 184
  - Mortality 185
- Cognitive development 188
- 4.7 Studying cognition and memory 188
  - Arousal and heart rates 188
  - Recognition and habituation 188
- 4.8 Perception and cognition 190
  - Visual thinking 190
  - Auditory thinking 193
  - Categorical thought — the reversal shift 194



4.9	Piaget's stage theory of cognitive development	196
	Stages of sensorimotor intelligence	196
	Assessment of Piaget's stage theory of cognitive development	201
4.10	Behavioural learning	203
	Classical conditioning	203
	Operant conditioning	204
	Imitation	205
4.11	Theories of language acquisition	207
	Learning theory approaches	207
	The nativist approach	208
	Phonology	209
	Semantics and first words	209
	Influencing language acquisition	210
	The end of infancy	214
	Summary	214
	Key terms	215
	Review questions	217
	Discussion questions	217
	Application questions	217
	Essay question	218
	Websites	218
	References	219
	Acknowledgements	224

## CHAPTER 5

### Psychosocial development in the first two years 226

5.1	Early social relationships	228
	Transition to parenthood	228
	Caregiver–infant synchrony	230
	Social interactions with family members	231
	Interactions with non-parental caregivers	234
	Interactions with peers	235
5.2	Emotions and temperament	237
	Emotions	238
	Temperament and development	239
5.3	Attachment formation	242
	Phases of attachment formation	244
	Assessing attachment: the 'strange situation'	245
	Consequences of different attachment patterns	248
	Influences on attachment formation	248
	Long-term and intergenerational effects of attachment	253
5.4	Toddlerhood and the emergence of autonomy	255

Sources of autonomy	257
Development of self	258
Development of competence and self-esteem	259
Looking back and looking forward	261
Summary	262
Key terms	263
Review questions	263
Discussion questions	264
Application questions	264
Essay question	264
Websites	265
References	265
Acknowledgements	274

## PART 3

### Early childhood 275

## CHAPTER 6

### Physical and cognitive development in early childhood 276

Physical development	278	
6.1 Variations in physical development	278	
6.2 Nutritional needs	280	
6.3 Health and illness	283	
	Injury	285
6.4 Bowel and bladder control	291	
6.5 Motor development	293	
	Gross motor skills	294
	Fine motor skills	294
	Variations in gross and fine motor development	296
	Brain development myelination	298
Cognitive development	300	
6.6 Thinking in early childhood	300	
	Piaget's preoperational stage	301
	Symbolic representations	302
	Limitations in preoperational thought	303
	Egocentrism and children's theory of mind	307
	Moral reasoning	309
	Neo-Piagetian theories	309
6.7 Language acquisition in the preschool years	310	
	Word acquisition and semantic development	311
	Grammatical development	313
	Development of pragmatics	315
6.8 Theories of language acquisition	317	

6.9 Language development in deaf children	319
6.10 Childcare and early childhood education	321
Summary	327
Key terms	328
Review questions	330
Discussion questions	330
Application questions	330
Websites	331
References	332
Acknowledgements	341

## CHAPTER 7

### Psychosocial development in early childhood 342

7.1 Relationships with parents	344
Parenting styles	345
Variations in parenting styles and practices	350
7.2 Relationships with siblings	352
Sibling influences	353
7.3 Peer relationships	355
Relationships with friends	356
Conceptions of friendship	356
7.4 Play	357
Types and levels of play	358
Theories of play	362
Parental and environmental influences on play	363
7.5 The development of prosocial and antisocial behaviour	365
Prosocial behaviour	365
Antisocial behaviour	368
Factors affecting the development of aggression	369
Helping aggressive children and their parents	373
7.6 Gender-role development	375
Biological theories	376
Learning theories	377
Cognitive theories	378
Androgyny	380
Looking back and looking forward	382
Summary	383
Key terms	385
Review questions	386
Discussion questions	386
Application questions	386
Essay question	388
Websites	388
References	389
Acknowledgements	401

## PART 4

### Middle childhood 402

## CHAPTER 8

### Physical and cognitive development in middle childhood 403

Physical development	404
8.1 Trends and variations in height and weight	405
8.2 Health and illness	410
Indigenous children's health	410
8.3 Motor development and sport	411
Physical and psychological effects of sport	413
Cognitive development	415
8.4 Piaget's theory: concrete operations	415
Conservation	415
Classification	419
Seriation	419
Spatial reasoning	419
Implications of Piaget's theory	420
8.5 Vygotsky's sociocultural theory	421
8.6 Information processing and cognitive development	422
Development of attention	422
Memory development	426
8.7 Language development	428
Bilingualism and its effects	429
8.8 Defining and measuring intelligence	431
The psychometric approach	432
Biases in intelligence testing	433
Uses of intelligence tests	436
Information processing approaches	436
8.9 Moral development and moral disengagement	439
8.10 The influence of formal education on cognitive development	443
Participation structures and classroom discourse	443
Social biases that affect learning	444
The impact of assessment and evaluation of student learning	446
The changing child: physical, cognitive and social	449
Summary	449
Key terms	451
Review questions	452
Discussion questions	452

Application questions	452
Essay question	453
Websites	454
References	454
Acknowledgements	465

## CHAPTER 9

### Psychosocial development in middle childhood 466

9.1 Psychosocial challenges of middle childhood	467
The challenge of knowing who you are	468
The challenge to achieve	468
The challenge of family relationships	468
The challenge of peers	468
The challenge of school	468
9.2 The sense of self	469
The development of self	469
9.3 The age of industry and achievement	471
Latency and the crisis of industry versus inferiority	471
Achievement motivation	473
9.4 Family relationships	477
The quality of parenting and family life	478
The changing nature of modern families	478
Divorce and its effects on children	480
The effects of parental employment on families	486
Non-parental sources of social support	490
9.5 Peer relationships	491
Why are peer relationships important?	491
The peer group	492
Peer group formation	497
Individual differences in peer status	498
Friendship	502
Looking back and looking forward	506
Summary	507
Key terms	508
Review questions	508
Discussion questions	509
Application questions	509
Essay question	510
Websites	510
References	511
Acknowledgements	522

## PART 5

### Adolescence 524

## CHAPTER 10

### Physical and cognitive development in adolescence 525

Physical development	526
10.1 Adolescence and society	527
10.2 Body growth and physical changes during adolescence	527
10.3 Puberty	530
10.4 Variations in pubertal development	532
Psychological consequences of non-normative puberty	534
10.5 Health in adolescence	536
Adolescent nutrition	537
Eating disorders	539
Sexually transmitted infections (STIs)	542
Substance abuse	543
Cognitive development	549
10.6 Piaget's theory: the stage of formal operations	549
Hypothetico-deductive reasoning	550
Propositional reasoning	551
Variations in the development of formal operations	551
The impact of formal operations on adolescent behaviour	552
10.7 Information-processing theories and adolescent cognitive development	553
10.8 The development of thinking skills during adolescence	555
Critical thinking	556
Decision making	558
10.9 Moral development	560
Elkind's egocentrism	561
Kohlberg's theory of moral development	563
Criticisms of cognitive–developmental theories of morality	565
Gilligan's theory of moral development	566
Moral reasoning and moral behaviour during adolescence	567

Summary	570
Key terms	572
Review questions	573
Discussion questions	573
Application questions	573
Essay question	575
Websites	575
References	575
Acknowledgements	582

## CHAPTER 11

### Psychosocial development in adolescence 583

11.1 Identity development during adolescence	585
Erikson's theory: the stage of identity versus role confusion	585
The process of identity formation	587
Individual differences in identity development: Marcia's identity status model	588
Factors affecting identity development	591
11.2 Development of self during adolescence	594
Self-esteem	595
11.3 Family relationships during adolescence	598
Relationships with parents	599
11.4 Peer relationships during adolescence	607
Adolescent peer groups	608
Peer group conformity	611
Adolescent gangs	613
Bullying	614
Adolescent friendships	616
Romantic relationships during adolescence	618
11.5 Sexuality during adolescence	620
Transition to coitus	621
Sexual orientation	622
Adolescent pregnancy and parenthood	625
Looking back and looking forward	631
Summary	632
Key terms	633
Review questions	634
Discussion questions	634
Application questions	634
Essay question	636
Websites	636
References	636
Acknowledgements	646

## PART 6

### Early adulthood 647

## CHAPTER 12

### Physical and cognitive development in early adulthood 648

Physical development	649
12.1 Physical functioning	649
Growth in height and weight	650
Strength	651
Age-related changes	652
12.2 Health in early adulthood	653
Health behaviours	654
12.3 Stress	657
Stress and health	657
The experience of stress	658
12.4 Health-compromising behaviours	661
Health beliefs model	669
12.5 Sexuality and reproduction	671
The sexual response cycle	671
Sexual attitudes and behaviours	672
Lesbian/gay sexual preference	674
Common sexual dysfunctions	675
12.6 Infertility	676
Reproductive technologies	678
Cognitive development	679
12.7 Postformal thought	679
Critiques of formal operations	680
Is there a fifth stage?	681
12.8 Development of contextual thinking	683
Schaie's stages of adult thinking	683
Contextual relativism	684
Adult moral reasoning	686
12.9 Post-secondary education	691
Who attends post-secondary education?	694
12.10 Work	695
Career stages	695
Gender, ethnicity and socioeconomic status in the workplace	697
Growth and change	701
Summary	701
Key terms	702
Review questions	704

Discussion questions 704  
Application questions 704  
Essay question 704  
Websites 705  
References 705  
Acknowledgements 714

## CHAPTER 13

### Psychosocial development in early adulthood 715

13.1 Theories of adult development 716  
Timing of events: social clocks 717  
Crisis theory: Erik Erikson's intimacy versus  
isolation 719  
Crisis theory: Vaillant and the Harvard  
'Grant study' 721  
Crisis theory: Levinson's seasons of adult  
lives 724  
Do men and women have the same  
'seasons'? 725  
Relational-cultural theories of women's  
development 727  
13.2 Intimate relationships 728  
Friendship 729  
Love 734  
Partner selection 737  
13.3 Marriage, divorce and remarriage 739  
Marriage types 739  
Culture and marriage 741  
Division of labour within the home 742  
Marital satisfaction 746  
Divorce 746  
Remarriage 749  
13.4 Other lifestyles 750  
Singlehood 750  
Cohabitation 751  
13.5 Parenthood 754  
Transition to parenthood 755  
Single parenthood 758  
Step-parent and blended families 759  
Gay and lesbian families 760  
Child free 762  
Looking back and looking forward 765  
Summary 766  
Key terms 767  
Review questions 768  
Discussion questions 768

Application questions 769  
Essay question 769  
Websites 769  
References 769  
Acknowledgements 777

## PART 7

### Middle adulthood 779

## CHAPTER 14

### Physical and cognitive development in middle adulthood 780

Physical development 782  
14.1 Physical functioning 782  
Strength 785  
External and internal age-related changes 785  
14.2 Health 788  
Health and health-compromising behaviours 788  
Health and inequality 791  
Breast cancer 793  
Prostate cancer 799  
Mental health and wellbeing 802  
14.3 Reproductive change and sexuality 802  
Menopause 802  
The male climacteric 806  
Sexuality 807  
Cognitive development 810  
14.4 Intelligence 810  
Does intelligence decline with age? 810  
Schaie's sequential studies 812  
Fluid and crystallised intelligence 814  
Neuroplasticity in middle age 817  
14.5 Practical intelligence and expertise 818  
Solving real-world problems 818  
Becoming an expert 820  
14.6 The adult learner 822  
Returning to education and training 822  
14.7 Work 825  
Age and job satisfaction 828  
Discrimination 829  
Gender 830  
Unemployment 832  
Change and growth 835  
Summary 835  
Key terms 836

## x CONTENTS

Review questions	837
Discussion questions	837
Application questions	838
Essay question	838
Websites	838
References	839
Acknowledgements	850

## CHAPTER 15

### Psychosocial development in middle adulthood 851

15.1 A multiplicity of images of middle age	852
Identity and perceptions of age	853
15.2 Crisis or no crisis?	854
Conceptual frameworks	854
Normative-crisis models	858
Personality	861
Normative personality change	862
15.3 Marriage, divorce and parenting	865
Long-term marriage	866
Cohabitation among midlife and older adults	868
The family life cycle	869
Delayed parenthood	875
Adolescent children	876
Young adult children	877
The empty nest	879
Multigenerational households	879
Midlife divorce	881
15.4 Extended family relationships	883
Grandparents	883
Ageing parents	890
Siblings	894
15.5 Bereavement	896
Mourning for parents	896
Bereavement and growth	897
Reactions to grief	898
15.6 Leisure	900
Looking back and looking forward	904
Summary	905
Key terms	906
Review questions	906
Discussion questions	907
Application questions	907
Essay question	907
Websites	907
References	907
Acknowledgements	919

## PART 8

### Late adulthood 921

## CHAPTER 16

### Physical and cognitive development in late adulthood 922

16.1 Ageing and ageism	924
Physical development	926
16.2 Longevity	926
Life expectancy	929
Theories of physical ageing	930
Mortality	931
16.3 Physical functioning in late adulthood	933
Slowing with age	933
Skin, bone and muscle changes	934
Cardiovascular system changes	936
Respiratory system changes	936
Sensory system changes	937
Changes in sexual functioning	940
16.4 Health behaviours in late adulthood	941
Diet	941
Exercise	942
Alcohol consumption	944
Medication use	945
16.5 Chronic illnesses	946
Cardiovascular disease	947
Cancer	948
Arthritis	949
Common symptoms in later years	950
16.6 Mental health and ageing	951
Elder suicide	954
Cognitive development	957
16.7 Wisdom and cognitive abilities	957
Cognitive mechanics	958
Cognitive pragmatics	959
Cognitive plasticity and training	961
16.8 The ageing brain	963
Brain changes	963
Multi-infarct dementia	965
Alzheimer's disease	968
16.9 Work and retirement	972
What is retirement?	973
Wellbeing in retirement	976
Summary	978
Key terms	979



Review questions 980  
Discussion questions 980  
Application questions 980  
Essay question 981  
Websites 981  
References 981  
Acknowledgements 996

## CHAPTER 17

### Psychosocial development in late adulthood 998

17.1 Personality development in late  
adulthood 999  
Continuity and change in late life 1000  
Integrity versus despair 1002  
Optimal ageing 1002  
17.2 Marriage and singlehood 1006  
Spouses as caregivers 1008  
Widowhood 1011  
Dating and remarriage 1015  
Older lesbians, gay men and transgender  
people 1017  
Ever-single older adults 1019  
17.3 Relationships with family and friends 1021  
Siblings 1023  
Adult grandchildren 1024  
Friends 1025  
Fictive kin 1026  
Childlessness 1027  
17.4 Problems of living: the housing  
continuum 1028  
Independent living 1029  
Assisted living 1031  
Long-term care 1032  
Control over living conditions 1033  
17.5 Interests and activities 1034  
Community involvement 1036  
Religion and spirituality 1040  
Looking back and looking forward 1045  
Summary 1046  
Key terms 1047  
Review questions 1048

Discussion questions 1048  
Application questions 1048  
Essay question 1049  
Websites 1049  
References 1049  
Acknowledgements 1061

## PART 9

### Endings 1062

## CHAPTER 18

### Dying, death and bereavement 1063

18.1 Attitudes towards death 1065  
Defining death 1066  
18.2 Facing one's own death 1067  
Death acceptance 1068  
The dying process 1074  
Quality of death 1076  
18.3 Caring for the dying 1080  
Terminal care alternatives 1080  
Euthanasia and assisted suicide 1086  
18.4 Bereavement 1091  
Grief 1091  
Support groups 1096  
Funeral and ritual practices 1096  
Mourning 1098  
Recovery 1101  
Looking back 1103  
Summary 1104  
Key terms 1104  
Review questions 1105  
Discussion questions 1105  
Application questions 1106  
Essay question 1106  
Websites 1106  
References 1106  
Acknowledgements 1113

*Name index* 1114  
*Subject index* 1163

# ABOUT THE AUTHORS

## **Michele Hoffnung**

Michele Hoffnung is Professor of Psychology at Quinnipiac University. She received her BA at Douglass College and her PhD at the University of Michigan. Her teaching has been in the areas of research methods, psychology of women, and adult development. She is editor of *Roles Women Play: Readings Towards Women's Liberation* (1971) and author of *What's a Mother to Do? Conversations About Work and Family* (1992) and numerous articles, essays, and book reviews.

## **Robert J Hoffnung**

Robert J Hoffnung is Emeritus Professor of Psychology at the University of New Haven and Associate Clinical Professor of Psychiatry at the Yale University School of Medicine. Robert has taught about childhood, adolescence, and lifespan development; he has also done clinical work with children, adolescents, adults, and families. He received his BA at Lafayette College, his MA at the University of Iowa, and his PhD at the University of Cincinnati. He has published articles on educational, developmental, and mental health interventions with children, adolescents and families.

## **Kelvin L Seifert**

Kelvin L Seifert is Professor of Educational Administration, Foundations and Psychology at the University of Manitoba. He received his BA at Swarthmore College and his PhD at the University of Michigan. Kelvin's teaching has focused both on teacher education and on the education of adult learners outside of school settings. His current research focuses on how teachers and other adults form communities online in order to develop their own learning. He is author of *Educational Psychology* (1991), *Constructing a Psychology of Teaching and Learning* (1999), and *Contemporary Educational Psychology* (2009), as well as articles and chapters about gender issues in teacher education and on the dynamics of online adult learning communities.

## **Alison Hine**

Alison Hine taught and supervised undergraduate and postgraduate students in the areas of developmental and educational psychology at Western Sydney University. She has received a top ten standing in the UniJobs Lecturer of the Year for Western Sydney University for two consecutive years, and was a national finalist in the awards in 2009. She holds a Masters degree in Educational and Developmental Psychology, and has worked extensively with leading international researchers in these fields. Alison has researched, published and presented at international and national conferences in the areas of mentoring, adult metacognition, gifted and talented, thinking skills, intelligence, and self-reflection strategies. In her career, Alison has had the privilege of meeting and dialoguing with B. F Skinner, Jerome Bruner, Howard Gardner, David Perkins and Robert Sternberg. Recently, Alison has researched and published in the areas of e-learning and metacognition, adult trust, self-efficacy and procrastination. She has researched in the area of first-year university student engagement and motivation and the emerging area of dance psychology, creativity, experiencing 'flow' and optimal performance. She enjoyed an active consultancy practice within these areas of interest, working with educators, administrators and business professionals. Alison also conducts workshops with parents and professionals in the areas of child and adolescent development, learning styles, motivation, intelligence, gifted and talented, and the development of thinking skills. Alison has 40 years of teaching experience and has taught extensively from preschool to tertiary education, specialising primarily in the areas of special education and gifted and talented. She recently retired but has been coaxed out of retirement to once again pursue her passion for teaching and learning at Western Sydney University.

### **Cat Pausé**

Cat Pausé is the lead editor of *Queering Fat Embodiment* (Ashgate). Her research focuses on the effects of fat stigma on the health and well-being of fat individuals and how fat activists resist the ‘fatpocalypse’. Her work appears in scholarly journals such as *Human Development*, *Feminist Review*, *HERDSA*, and *Narrative Inquiries in Bioethics*, as well as online in *The Huffington Post* and *The Conversation*, among others. She hosted *Fat Studies: Reflective Intersections* in 2012 and *Fat Studies: Identity, Agency, Embodiment* in 2016. Cat is also involved in sociable scholarship; her work is highlighted in her social media presence, Friend of Marilyn, on Twitter, Facebook, YouTube, iTunes, and her blog.

### **Lynn Ward**

Lynn Ward received her PhD from the University of Adelaide in 1995, and is a senior lecturer in the University’s School of Psychology. Since 1990 she has taught undergraduate courses in developmental psychology, adult development and ageing, cognitive psychology, and statistics, and a postgraduate course on clinical geropsychology. Her research supervision has covered diverse developmental topics including cross-cultural ageing, capacity assessment, resilience in parents, help-seeking in rural communities, leadership development, and health habits in older adults. She was awarded a Barbara Kidman Fellowship at the University of Adelaide in 2014, a High Commendation in the Stephen Cole the Elder Prize for Excellence in Teaching from the University of Adelaide in 2003, and was a national finalist in the UniJobs Lecturer of the Year in 2009. Her teaching is informed by her research on resilience and successful ageing, emotional functioning in older adults, and factors that influence age-related changes in cognitive abilities.

### **Tania Signal**

Associate Professor Tania Signal received her PhD in Psychology from Waikato University in New Zealand. In 2003, she moved to Australia and took up a position at Central Queensland University teaching Biological Foundations of Psychology and Learning. Since then she has taught a range of courses including Intro to Human Development, Personality and Social Foundations of Psychology. Tania’s research interests fall within the area of human–animal studies with a particular focus on the role of animals within interpersonal violence and animals as facilitators of emotional and psychological development across the lifespan.

### **Karen Swabey**

Karen Swabey is an Associate Professor in Health and Physical Education Pedagogy in the Faculty of Education at the University of Tasmania and is the Dean and Head of School. Before entering the university sector in 1994, she had an extensive career in primary, secondary and senior secondary teaching and school leadership in Tasmania, in both state and independent schools. At the postgraduate level, Karen coordinates a number of units relating to coaching and mentoring and health and wellbeing, and also supervises a number of research higher degree students. Her areas of research interest are in social and emotional wellbeing and student preparedness for teacher education. Karen’s publication output includes book chapters, academic journal articles and peer-reviewed conference papers. She is also a Consulting Editor for the *Australian Journal of Teacher Education*, and reviews for a number of international journals.

### **Karen Yates**

Karen Yates is a lecturer with the College of Healthcare Sciences at James Cook University in Cairns. She is a registered nurse and registered midwife, with a strong interest and background in midwifery clinical care, education and maternity service provision. Karen teaches in both undergraduate and postgraduate nursing and midwifery programs, including coordinating a first-year nursing lifespan development subject with over 500 students enrolled across five campuses. She received her PhD in 2011 from James Cook University. Karen has a keen interest in nursing and midwifery education and the use of technology in

teaching and learning. Her research interests include midwifery and new graduate nurse workforce issues, enhancing active learning for students enrolled across multiple campuses or in distance mode, and the use of technology and social media to enhance teaching and learning.

### **Rosanne Burton Smith**

Rosanne Burton Smith obtained her PhD in Psychology from the University of Tasmania and also holds a Masters degree in Educational Psychology from the University of Exeter in the United Kingdom. Her professional work as a psychologist includes several years in Papua New Guinea, mainly in educational and occupational psychology, and later in the United Kingdom and New Zealand, working in the area of developmental disabilities. Her teaching and research interests include psychological assessment, developmental issues such as childhood anxiety and the effects of divorce on children and adolescents, children's peer relationships, body image, dietary behaviour and gender differences. Rosanne has taught and supervised research at both undergraduate and postgraduate levels in the School of Psychology, University of Tasmania since 1989. Rosanne retired from teaching in 2007, but continues as an Honorary Research Associate at the School of Psychology, University of Tasmania.



# BEGINNINGS

One of the most influential thinkers of the twentieth century, Albert Einstein, is reputed to have said ‘all that is valuable in human society depends upon the opportunity for the development accorded the individual’. Development from infancy into childhood, childhood into adolescence, adolescence into adulthood, and throughout the adult years depicts how individuals change in some ways while remaining the same in others. Some changes may be small and fleeting, whereas others are profound and longlasting. We continue to grow, develop and change as we encounter new experiences, which serve as stimuli for greater understanding of ourselves and others. Change and constancy are the subjects of life and they are part of a larger interdisciplinary field known as developmental science which encompasses all changes we experience throughout the lifespan (Lerner, 2011). Among the constancies, some (such as your shoe size) matter little to personal identity, whereas others (such as your gender) matter a lot. The mix of change and constancy is the subject of this text and of the field known as *lifespan development* or *developmental psychology*.

The study of lifespan development offers much insight into human nature — why we are what we are and how we became that way. Because describing development is a complex task, this text begins with three chapters that orient you to what lies ahead. The first two chapters explain the concept of development and describe some of the important tools of lifespan development and developmental psychology, namely the methods and theories that guide our understanding of the developmental changes that occur from conception through to old age. The third chapter describes the genetic basis of human life and the three major events that occur at the beginning of the lifespan: conception, prenatal development and birth. After completing these three chapters, you will be ready to begin exploring the main focus of lifespan development: people changing and growing throughout their lives.



## CHAPTER 1

# Studying development

### LEARNING OUTCOMES

---

After studying this chapter, you should be able to:

- 1.1** describe what is meant by the term 'development'
  - 1.2** clarify the reasons why development is studied, and its importance for teachers, nurses, midwives, early childhood educators, social workers and psychologists
  - 1.3** compare how society's view of infancy, childhood and adolescence has changed over time
  - 1.4** evaluate the general issues that are important in developmental psychology
  - 1.5** explain how developmental psychologists study development
  - 1.6** identify and explain the ethical considerations that should guide the study of development.
-

## OPENING SCENARIO

How many childhood memories can you recall? Do you remember your preschool years where playtime seemed endless? Can you remember your primary school years where friends were important? Can you categorise your memories into family, schools and friends? What percentage make up each group and why? When thinking back, each of us remembers different details of our life and development, but we all experience a paradoxical quality about personal memories: when comparing the past and the present, we feel as though we have changed, yet also stayed the same. As a schoolchild, perhaps you loved spelling bees or contests. Now, as an adult, you no longer participate in spelling contests and have lost some of your childhood ability to figure out and remember truly unusual spellings. But perhaps you note, too, that you can still spell better than many adults of your age, and you seem to have a general knack for handling verbal information of other kinds — perhaps computer languages — without getting mixed up. Imagine another example. As an adolescent you may have constantly wondered whether you would ever overcome shyness and be truly liked and respected by peers. As an adult, in contrast, you finally believe you have good, special friends, but maybe you also have to admit that it took effort to become sociable enough to acquire them.

Continuity in the midst of change marks every human life. Sometimes changes seem more obvious than continuities, such as when a speechless infant becomes a talkative preschooler, or when a child reaches puberty and becomes an adolescent. At other times, continuities seem more obvious than changes, such as when a 60 year old still feels like a 10 year old whenever he visits his elderly parents. But close scrutiny of examples like these suggests both factors may be operating, even when one of them is partially hidden. The 60 year old feels like a child again, but, at the same time, feels different from that child. The 50-year-old professional who is now preoccupied with her job still cares deeply about her family. Although the adolescent has reached puberty they are still searching for a sense of identity. It takes both continuity and change to be fully human. We are linked to our past as part of our historical connectedness, but we are neither locked into it nor fully determined by it.



### Change and continuity are both integral to the experience of life.

This young girl's love for the outdoors may be motivated by a passion for nature that stays with her throughout her life. As an adult, she may choose an outdoors job, and at an older age, she may enjoy walks in her local neighbourhood with her partner and friends.

## 1.1 The nature of development

**LEARNING OUTCOME 1.1** Describe what is meant by the term 'development'.

The processes of continuity and change throughout the lifespan are called human **development**, a concept that explores both *changes* and *constancies* in physical growth, feelings and ways of thinking. As we will see in later chapters, a focus on change may be appropriate at certain points in a person's life. A girl undergoing her first menstrual period, for example, may experience a number of important and sudden changes at the same time: her body begins looking different, she begins thinking of herself differently, and other people begin treating her differently. But at other times of life, continuity dominates over change. As a young adult settles into a job and family, life may seem rather stable from day to day, month to month, or even year to year. However, with the birth of a child, this stability can suddenly change and take on different dimensions. Lifespan development is the field of study that explores these patterns of stability, continuity, growth and change that occur throughout a person's life, from birth to death. Although this

definition seems simplistic, we need to look deeper at the intricacies and complexities of human life to fully understand lifespan development.

Both continuities and changes can take many forms. Changes can be relatively specific, such as when an infant takes their first unassisted step. Others can be rather general and unfold over a long time, such as when an older middle-aged adult gradually becomes more aware of their growing wisdom. The same can be said of continuities. Some last for only a short time compared to the decades-long span of life: a 12 year old who enjoys a certain style of rock music, for example, is likely to become a 16 year old who enjoys the same style of music; but not necessarily a 30 year old who does. Other continuities seemingly last a lifetime: an extroverted teenager — one who seeks and enjoys social companionship — is likely to still seek and enjoy companionship as a 40 year old and as an 80 year old.

These examples may make the notion of *lifespan development* seem very broad, but note that not every change or continuity is truly ‘developmental’. Think about the impact of the weather. A sudden cold snap makes us behave differently: we put on warmer clothing and select indoor activities over outdoor ones. A continuous spell of cold weather, on the other hand, creates constancy in behaviour: we wear the same type of clothing for a period of time and engage in the same (indoor) set of activities repeatedly. In each case, our behaviour is triggered by relatively simple external events and has no lasting impact on other behaviours, feelings or thinking and so does not qualify as ‘development’.

Conversely, sometimes aspects of development can occur, yet be overlooked or dismissed as something other than development. Personal identity or sense of self is an example. For each of us, our identity evolves and changes as we grow older and the changes affect our actions and feelings differently when they occur. So, our identity is undergoing patterns of growth, stability and change throughout our lives.

Lifespan development researchers methodically apply scientific methods to develop theories about development, validate the accuracy of assumptions, and systematically investigate human development. A *theory* is a set of ordered, integrated statements that seek to explain, describe and predict human behaviour. *Developmentalists* are interested in how people grow and change, focusing on stability, continuity and consistency. They view development as a continuing process of growth, constancy and change.

## Multiple domains of development

As we have seen, human development can take many forms. For convenience of discussion, this text distinguishes among three major types, or **domains**, of development: physical, cognitive, and psychosocial. The organisation of the text reflects this division by alternating chapters about physical and cognitive changes with chapters about psychosocial changes. The domain of **physical development**, or biological change, includes changes in the body itself and how a person uses their body. Some of these changes may be noticeable to a casual observer, such as the difference in how a person walks when they are two, twenty and eighty years of age. Others may be essentially invisible without extended observation or even medical investigation, such as the difference in the ability to hear between a 40-year-old man and his 75-year-old father. Like other forms of development, physical changes can span very long periods — years or even decades — or very short periods. For example, changes in height and weight occur rather rapidly during the early teenage years but extremely slowly during middle age.

**Cognitive development** involves changes in methods and styles of thinking, language ability and language use, and strategies for remembering and recalling information. We tend to think of these abilities and skills as somewhat isolated within individuals; a person is said to ‘have’ a good memory, for example, as if he or she carries that skill around all the time and can display it anywhere with equal ease, no matter what the situation. As later chapters will discuss, these conceptions of cognitive development may be more convenient than accurate: memory, language and thinking are all heavily dependent on supports (and impediments) both from other people and from circumstances. A child

learns to read more easily, for example, if parents and teachers give lots of personal support for their efforts. In this sense, cognitive changes of reading ‘belong’ to the helpful adults as well as to the child who acquires them, and the changes are best understood as partially physical and social in nature, and not merely cognitive.



**Changes happen in all domains at once — physical, cognitive and psychosocial.**

As this baby learns to walk, walking will become less of a goal as such and more of a means to other ends, as it is for this elderly man.

**Psychosocial development** is about changes in feelings or emotions as well as changes in relations with other people. It includes interactions with family, peers, classmates and coworkers, but it also includes a person’s personal identity or sense of self. Because identity and social relationships evolve together, we often discuss them together in this text, and, as already pointed out, they also evolve in combination with physical and cognitive changes. A widower who forms satisfying friendships is apt to feel more competent than one who has difficulty doing so, and he is likely to stay healthier as well. Each domain — physical, cognitive and psychosocial — influences and relates to each of the others. The Multicultural view feature offers a cross-cultural perspective on parental acceptance and rejection, and shows how relationships can affect identity development.

**MULTICULTURAL VIEW**

**Cross-cultural parental acceptance and rejection**

Cross-cultural studies worldwide have confirmed the belief that children need acceptance — namely, love from parents and other attachment persons (Ali, Khaleque, & Rohner, 2015; Chyung & Lee, 2008; Khaleque, 2017; Khaleque & Rohner, 2002; Ripoll-Nunez & Alvarez, 2008; Rohner, 2014;



Rohner & Britner, 2002; Rohner, Khaleque, & Cournoyer, 2012; Rohner, Melendez, & Kraimer-Rickaby, 2008). Regardless of age, gender or ethnicity, individuals report specific forms of psychological maladjustment. Perceiving themselves to be rejected, individuals are more inclined to develop depression, substance abuse, behaviour and mental health-related issues. Also, investigations have found that universally the perceptions of acceptance and rejection by adults and children are organised around four aspects of behaviour: warmth/affection (coldness/lack of affection), hostility/aggression, indifference/neglect and undifferentiated rejection.

Parents can vary across and within cultures in the way in which they are accepting or rejecting of their children, particularly when resettling and parenting in a different environment or context (Deng, 2016; Deng & Marlowe, 2013; Rohner, Khaleque, & Cournoyer, 2012). Parents can express acceptance verbally through praise, compliments and support, or non-verbally through hugging, approving glances and smiling. Like acceptance, parents can express rejection verbally (bullying or harsh criticism) or non-verbally (hitting, smacking, shaking or simply neglecting). Worldwide interest in this phenomenon had led to the development of the parental acceptance–rejection theory (PART).

Parental acceptance–rejection theory (PART) is a socialisation theory that attempts to predict major psychological and environmental conditions whereby parents worldwide are likely to accept or reject their children (Rohner, 1980, 2014, 2016; Rohner, Khaleque, & Cournoyer, 2012; Rohner, Melendez, & Kraimer-Rickaby, 2008). This theory focuses mainly on the expressions, impact and origins of parental love. Parental acceptance and rejection were once considered polar opposites of a single dimension, and they are clearly related. However, like positive and negative affect, they can be measured independently and have somewhat independent effects. A parent who is often loving can also sometimes be harsh or even abusive (Pettit, 1997). However, in a recent study Tu, Gregson, Erath, and Pettit (2017) investigated whether parenting behaviours influenced adolescent adjustment to their peers and their peer status. The parenting behaviours studied included facilitating peer interactions, coaching on how to handle peer issues and suggesting strategies to adjust to peers. Results showed that parents facilitating in this way predicted enhanced friendship quality and lower levels of loneliness among adolescents with high peer acceptance but not among adolescents with low peer acceptance. In contrast, parental social coaching predicted better friendship quality among adolescents with low peer acceptance, but lower friendship quality among adolescents with high peer acceptance. This study concluded that not all forms of positive peer-related parenting are beneficial for all adolescents.

In general, findings both within the West and across cultures show that parental acceptance is quite consistently associated with high self-esteem, independence and emotional stability, whereas the opposite is true of parental rejection (MacKinnon-Lewis, Starnes, Volling, & Johnson, 1997; Rohner & Britner, 2002; see also Caspi & Barrios, 2016; Erkman & Rohner, 2006; Muñoz et al., 2017). One longitudinal study with a Western sample found that individuals who had a warm or affectionate parent are more likely, 35 years later, to have a long and happy marriage, children and close friendships in middle age (Franz, Carol, McClelland, David, & Weinberger, 1991; see also Waldinger & Schulz, 2016).

A converging body of data suggests that parents (particularly mothers) who interact with their infants and preschoolers in ways that show mutual responsiveness and ‘connectedness’ tend to have children with better peer relationships, greater empathy for others and accelerated moral development (Clark & Ladd, 2000; Ferreira, Cadima, Matias, Vieira, Leal, & Matos, 2016; Kochanska, Murray, & Harlan, 2000). Conversely, multiple studies find that abused children and adults with childhood histories of abuse are more likely than their non-abused peers to view the world as a dangerous place, have poor self-esteem and have difficulty maintaining close relationships (see Bolger & Patterson, 2001; Bolger, Patterson, & Kupersmidt, 1998; Finkelhor, 1994; Gelinis, 1983; Jud, Fegert, & Finkelhor, 2016).

A large cross-cultural study correlating parental acceptance–rejection with personality traits in children and adults demonstrated that these patterns are indeed universal (Khaleque, 2017; Rohner, 1975).



Findings across cultures show that parental acceptance is strongly associated with high self-esteem, independence and emotional stability in children throughout the lifespan.

Cultures in which parents were more rejecting (as rated from anthropological reports) produced children who were more hostile and dependent and adults who were less emotionally stable than cultures with more benign parenting practices.

Table 1.1 shows some major landmarks of development in each of the three domains. It also hints at some of the connections among specific developments, both between domains and within each single domain. Gender role awareness, for example, is noted as emerging in early childhood; it sets the stage for gender segregation in middle childhood and identity in adolescence. Retirement is noted as happening in late adulthood. Declines in health or physical strength often accompany this change in social circumstances.

Development is a continual unfolding and integration of changes in all domains, beginning at birth. Changes in one domain often affect those in another domain. In addition to the examples from table 1.1, numerous other relationships exist between and within domains of development. We will discuss these relationships in later chapters. Meanwhile, to obtain a better concept of what development from a lifespan perspective means, consider a more extended, complete example.

**TABLE 1.1 Selected landmarks of development**

	Domain		
	Physical	Cognitive	Psychosocial
Birth	<ul style="list-style-type: none"> <li>• Startle reflex</li> <li>• Grasping</li> <li>• Sucking</li> </ul>	<ul style="list-style-type: none"> <li>• Visual</li> <li>• Auditory</li> <li>• Tracking</li> </ul>	<ul style="list-style-type: none"> <li>• Cries</li> <li>• Soothes at feeding</li> </ul>
Infancy (ages 0–2)	<ul style="list-style-type: none"> <li>• Walking</li> <li>• Standing</li> <li>• Reaching and grasping</li> </ul>	<ul style="list-style-type: none"> <li>• Language acquisition</li> <li>• Searches for lost objects</li> </ul>	<ul style="list-style-type: none"> <li>• Becomes attached to caregiver(s)</li> </ul>
Early childhood (ages 2–5)	<ul style="list-style-type: none"> <li>• Climbing stairs</li> <li>• First throw of a ball</li> <li>• Simple drawings</li> <li>• Writing</li> </ul>	<ul style="list-style-type: none"> <li>• Vocabulary grows</li> <li>• Dramatic play</li> </ul>	<ul style="list-style-type: none"> <li>• Preferred playmates</li> <li>• Gender role awareness</li> <li>• Racial awareness</li> </ul>
Middle childhood (ages 6–12)	<ul style="list-style-type: none"> <li>• Skilful running</li> <li>• Throwing</li> <li>• Special skills (e.g. riding a bicycle)</li> </ul>	<ul style="list-style-type: none"> <li>• Problem solving</li> <li>• Reading</li> <li>• Writing</li> </ul>	<ul style="list-style-type: none"> <li>• Friendships</li> <li>• Gender segregation</li> </ul>
Adolescence (ages 12–18)	<ul style="list-style-type: none"> <li>• Puberty</li> <li>• Growth spurt</li> </ul>	<ul style="list-style-type: none"> <li>• Some abstract thinking</li> <li>• Development of adultlike interests</li> </ul>	<ul style="list-style-type: none"> <li>• Interest in sexual relations (for most)</li> <li>• Dating (for some)</li> <li>• First job</li> </ul>
Early adulthood (ages 20–40)	<ul style="list-style-type: none"> <li>• Peak of fertility, strength and speed</li> </ul>	<ul style="list-style-type: none"> <li>• Development of postformal thought</li> </ul>	<ul style="list-style-type: none"> <li>• Finding a mate</li> <li>• Earning a living</li> <li>• Making a home</li> </ul>
Middle adulthood (ages 40–60)	<ul style="list-style-type: none"> <li>• Decline in fertility</li> </ul>	<ul style="list-style-type: none"> <li>• Expertise and practical intelligence</li> </ul>	<ul style="list-style-type: none"> <li>• Family changes</li> <li>• Death of parents</li> </ul>
Late adulthood (ages 60 and beyond)	<ul style="list-style-type: none"> <li>• Decline in physical strength</li> </ul>	<ul style="list-style-type: none"> <li>• Achievement of wisdom</li> </ul>	<ul style="list-style-type: none"> <li>• Retirement</li> <li>• Death of spouse/partner</li> </ul>



## Development from a lifespan perspective: voices across the lifespan

Throughout the lifespan, individuals are trying to make sense of what it means to become a child, adolescent or adult and how at each stage their development changes or remains constant. What particular developmental issues are they facing at each stage and how are they influenced by differing contexts of development? To understand these developmental changes, we interviewed individuals at different developmental periods and asked them what being a child, adolescent, parent or adult meant to them. Watch the video to hear their voices across the lifespan!

The voices across the lifespan reveal several things about human development. The voices show that the domains of development unfold continuously across the lifespan and are influenced by differing contexts and environments, according to ages and stages. The voices of children, teenagers, adults and older adults depict the importance of unique, personal experiences when exploring human development. Some aspects of development may be unique to the individual, but other experiences can be understood as examples of human changes that are universal or nearly universal. From the point of view of lifespan development, these voices raise questions about continuity, change, developmental context and stages over time. To help organise thinking about the developmental questions expressed by these voices, developmental psychologists such as Bronfenbrenner, Baltes, and Ford and Lerner have investigated development from an ecological systems model, normative and non-normative development, and a dynamic systems perspective.



### Developmental perspectives

Developmental psychologist Urie Bronfenbrenner has created a widely used framework for thinking about the multiple influences on individuals (Bronfenbrenner, 1989, 2005; Bronfenbrenner & Evans, 2000;

Bronfenbrenner & Morris, 2006; Garbarino, 1992, 2014) to help organise thinking about developmental questions such as ‘What are some of the influences on human development?’ and ‘In making us who we are today, what do we owe to family, peers, societal values and attitudes?’ Bronfenbrenner’s framework depicts the individual as developing within a complex system of relationships and contexts — described as *ecological systems* — which are sets of people, settings, recurring events, cultural values and programs that are related to one another, have stability and influence the person over time. Table 1.2 and figure 1.1 illustrate Bronfenbrenner’s four ecological systems.

**TABLE 1.2** Bronfenbrenner’s model of ecological system levels

Ecological level	Definition	Examples	Issues affecting the individual
Microsystem	Situations in which the person has face-to-face contact with influential others. ‘A pattern of activities, social roles, interpersonal relationships experienced by the developing person in a given face to face setting with particular physical, social and symbolic features that invite, permit, more complex interaction.’ (Bronfenbrenner, 1994, p.1649)	Family, school, peer group, church, workplace	Is the person regarded positively? Is the person accepted? Is the person reinforced for competent behaviour? Is the person exposed to enough diversity in roles and relationships? Is the person given an active role in reciprocal relationships?
Mesosystem	Relationships between microsystems; the connections between situations	Home–school, workplace–family, school–neighbourhood	Do settings respect each other? Do settings present basic consistency in values?
Exosystem	Settings in which the person does not participate but in which significant decisions are made affecting the individuals who do interact directly with the person	Spouse’s place of employment, local school board, local government	Are decisions made with the interests of the person in mind? How well do social supports for families balance stresses for parents?
Macrosystem	‘Blueprints’ for defining and organising the institutional life of the society	Ideology, social policy, shared assumptions about human nature, the ‘social contract’	Are some groups valued at the expense of others (e.g. sexism, racism)? Is there an individualistic or a collectivistic orientation? Is violence a norm?

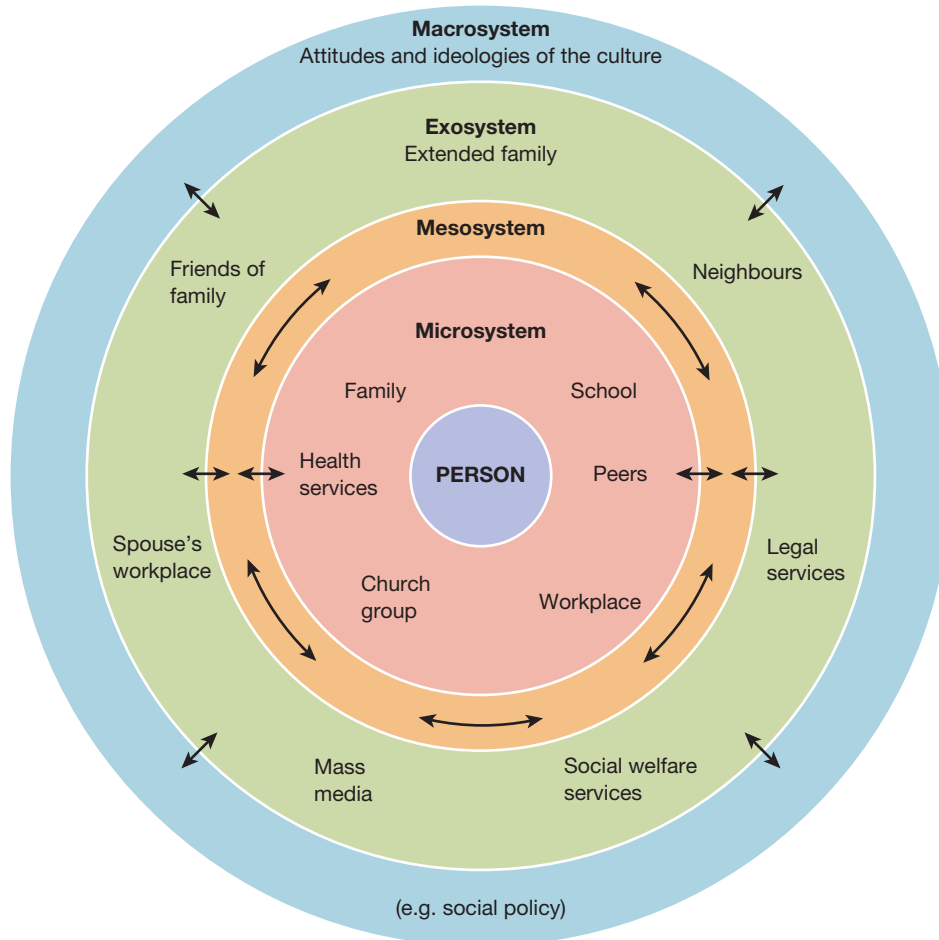
**Source:** Adapted from Garbarino (1992).

1. The *microsystem* refers to situations in which the person has face-to-face contact with influential others.
2. The *mesosystem* refers to the connections and relationships that exist between two or more microsystems and that influence the person because of their relationships.
3. The *exosystem* consists of settings in which the person does not participate but still experiences decisions and events that affect them indirectly.

4. The *macrosystem* is the overarching institutions, practices and patterns of belief that characterise society as a whole and take the smaller micro-, meso- and exosystems into account.

**FIGURE 1.1** Bronfenbrenner's four ecological settings for developmental change

As shown here, Bronfenbrenner describes human development as a set of overlapping ecological systems. All of these systems operate together to influence what a person becomes as they grow and develop. In this sense, development is not exclusively 'within' the person but is also 'within' the person's environment. The *chronosystem*, not included in the diagram, is part of the dynamic ever-changing environment of the individual that produces new conditions affecting development. The prefix 'chrono' means 'time'. In this temporal dimension, life changes can be imposed on the individual or they can arise from within the individual. For example, as children grow and develop, they select, create and modify many of their own experiences and settings. Therefore, time has a prominent place in each of the levels of microsystem, mesosystem, exosystem and macrosystem.

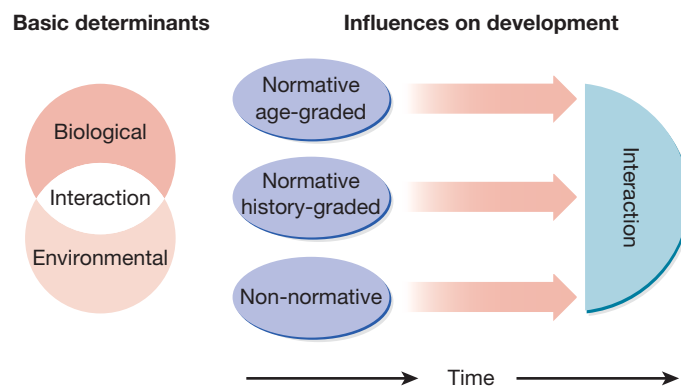


**Source:** Adapted from Garbarino (1992).

Recently, Bronfenbrenner characterised his model as the *bioecological* model (Bronfenbrenner & Morris, 2006). The bioecological model represents non-human interaction. The interaction is with objects and symbols, and the model has evolved as a theoretical system for the scientific study of human development over time. As Bronfenbrenner and Morris state, 'the new model is not a paradigm shift, but rather represents a transition from a focus on the environment to a focus on *proximal processes* as engines of development ... (process, person, context and time), and the dynamic, interactive relationships among them' (Abstract, p. 1).

Similarly to Bronfenbrenner, German-born psychologist Paul Baltes provides an important perspective through his emphasis on the nature of development and important historical influences on development. Baltes and Nesselroade (1979; Baltes, 2014) identified three influences that are determined by the interaction of biological and environmental factors. These three influences are normative age-graded, normative history-graded and non-normative (see figure 1.2). Normative age-graded influences have a strong relationship with chronological age. For example, the onset of puberty during adolescence is influenced by biological determinants, whereas beginning school at 5 or 6 years of age is an example of a normative age-graded influence with environmental, rather than biological, determinants. Normative history-graded influences are associated with historical time, such as plague and famine, which are examples of strong biological determinants of development. Historical events such as the introduction of television or changes in family size and composition have little biological determinants. Non-normative events do not occur in any normative age-graded or history-graded manner. The effects of brain damage after a car accident have strong biological determinants; however, the effects of divorce upon development have less strong biological determinants.

**FIGURE 1.2** Baltes' model of normative and non-normative development



*Source:* Baltes and Nesselroade (1979).

Two leading developmentalists, Ford and Lerner, present yet another perspective of development — the developmental systems perspective. Through this perspective, Ford and Lerner (1992; Lerner, 2015) investigate how an individual carries out transactions with their environment and how, through these transactions, their biological, psychological behavioural and environmental elements change or remain constant. Developmental systems theory attempts to understand how multiple elements interact and shape a person's life. This theory played an important role in the shaping of developmentalists' research agendas in the 1990s, and more recently in the 2000s.

Through these perspectives in developmental psychology, researchers also acknowledge consistency and variability in development. The dynamic systems approach to studying and explaining lifespan development views the individual's mind, body, physical and social worlds, and experiences as constantly in motion, creating an integrated system that is *dynamic*, constantly evolving and moving. The dynamic systems perspective actively reorganises and modifies the components of the system, responding to environmental and biological changes. The Focusing on feature looks at the critical disadvantages that Indigenous Australians today confront in relation to life expectancy, infant and child mortality, education, and employment.