

THIRD EDITION

Human Development
A Cultural Approach
Jeffrey Jensen Arnett
Lene Arnett Jensen



Human Development

A Cultural Approach

THIRD EDITION

Jeffrey Jensen Arnett Clark University

Lene Arnett Jensen
Clark University



VP, Product Development: Dickson Musslewhite **Senior Producer and Strategy Manager:** Kelli Strieby

Editorial Assistant: Louis Fierro Managing Editor: Debbie Coniglio Senior Development Editor: Nic Albert Content Producer: Lisa Mafrici

Content Production Manager: Amber Mackey

Executive Product Marketing Manager: Christopher Brown

Senior Field Marketing Manager: Debi Doyle

Associate Director of Design: Blair Brown

Design Lead: Kathryn Foot

Cover Art: Noma Bar, Pentagram © Pearson

Education, Inc.

Digital Content Producer: Elissa Senra-Sargent

Full-Service Project Management and

Composition: Integra Software Services Pvt. Ltd.

Printer/Binder: LSC Communications, Inc.

Cover Printer: Phoenix Color

Acknowledgments of third party content appear on appropriate page within the text or on pages C-1–C-6, which constitute an extension of this copyright page.

PEARSON, ALWAYS LEARNING, and REVEL are exclusive trademarks owned by Pearson Education, Inc. or its affiliates, in the U.S., and/or other countries.

Unless otherwise indicated herein, any third-party trademarks that may appear in this work are the property of their respective owners and any references to third-party trademarks, logos or other trade dress are for demonstrative or descriptive purposes only. Such references are not intended to imply any sponsorship, endorsement, authorization, or promotion of Pearson's products by the owners of such marks, or any relationship between the owner and Pearson Education, Inc. or its affiliates, authors, licensees or distributors.

Copyright © 2019, 2016, 2012 by Pearson Education, Inc. or its affiliates. All Rights Reserved. Printed in the United States of America. This publication is protected by copyright, and permission should be obtained from the publisher prior to any prohibited reproduction, storage in a retrieval system, or transmission in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise. For information regarding permissions, request forms and the appropriate contacts within the Pearson Education Global Rights & Permissions department, please visit www.pearsoned.com/permissions/.

Cataloging-in-Publication Data is available on file at the Library of Congress.

1 18

Student Edition

ISBN-10: 0-13-464134-5 ISBN-13: 978-0-13-464134-8

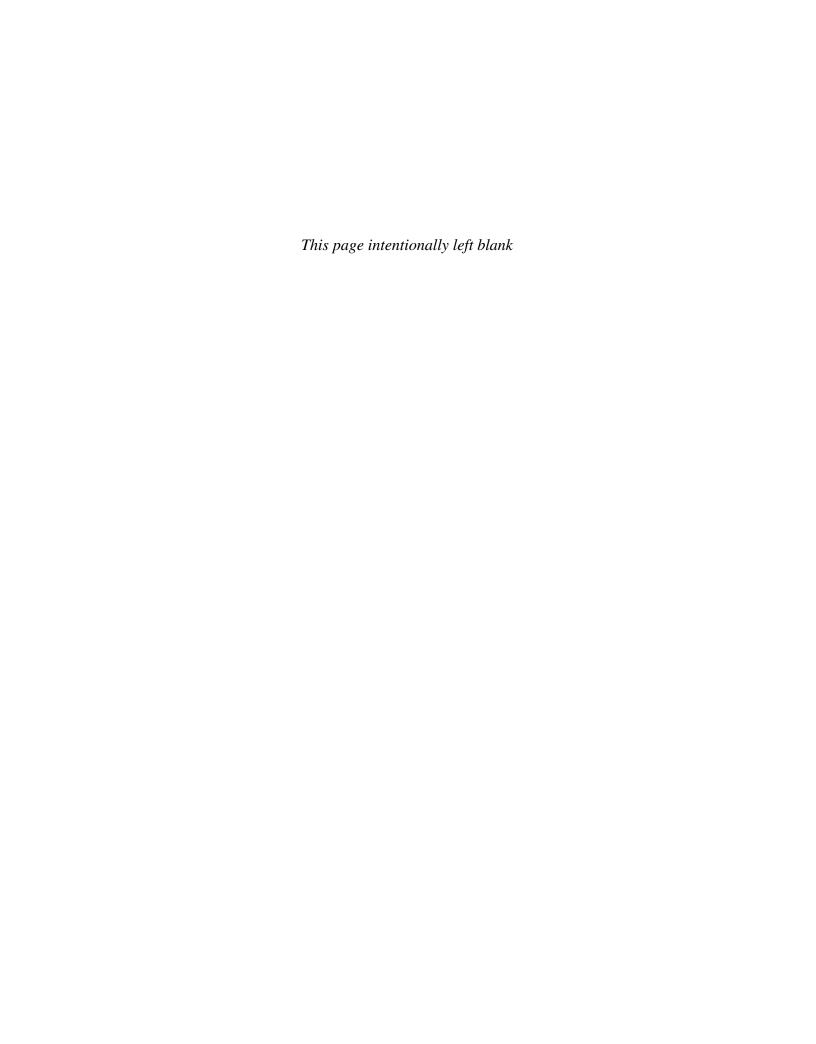
Books á la Carte

ISBN-10: 0-13-471141-6 ISBN-13: 978-0-13-471141-6

Instructor's Review Copy ISBN-10: 0-13-471142-4 ISBN-13: 978-0-13-471142-3



To our twins, who have taught us so much about the wonders of human development.



Contents

Preface	xi	The Theory of Genotype \rightarrow Environment Effects	54
About the Authors	xxi	■ RESEARCH FOCUS: Twin Studies: The Story of	
1 A Cultural Approach to Human		Oskar and Jack	55
1.1	1	Genes and Individual Development	57
Development	1	Sperm and Egg Formation	57
Section 1 Human Development Today		Conception	58
and Its Origins	4	Summary: Genetic Influences on Development	60
A Demographic Profile of Humanity	4	Section 2 Prenatal Development and Prenatal Care	61
Population Growth and Change	4	Prenatal Development	61
■ CULTURAL FOCUS: Niger and the Netherlands:		The Germinal Period (First 2 Weeks)	61
An Up-Close Look at the Demographic Divide	6	The Embryonic Period (Weeks 3–8)	62
Variations Across Countries	8	The Fetal Period (Week 9–Birth)	63
Variations Within Countries	10	Prenatal Care	65
Human Origins: The Rise of a Cultural and		Variations in Prenatal Care	65
Global Species	11	■ CULTURAL FOCUS: Pregnancy and Prenatal Care Across	;
Our Evolutionary Beginnings	12	Cultures	66
The Origin of Cultures and Civilizations	14	Teratogens	68
Human Evolution and Human Development Today	16	Summary: Prenatal Development and Prenatal Care	71
Summary: Human Development Today and Its Origins	17	Section 3 Pregnancy Problems	72
Section 2 Theories of Human Development	19	Prenatal Problems	72
Ancient Conceptions	19	Chromosomal Disorders	72
Conceptions of Development in Three Traditions	19	Prenatal Diagnosis	74
Scientific Conceptions	22	Infertility	75
Freud's Psychosexual Theory	22	Psychological and Social Implications	76
Erikson's Psychosocial Theory	23	Causes and Treatments	76
Bronfenbrenner's Ecological Theory	25	Summary: Pregnancy Problems	79
A Cultural-Developmental Model for This Text	27	Apply Your Knowledge as a Professional	79
Summary: Theories of Human Development	29		
Section 3 How We Study Human Development	30	3 Birth and the Newborn Child	80
The Scientific Method	30		
The Five Steps of the Scientific Method	30	Section 1 Birth and Its Cultural Context	82
Research Measurements, Designs, and Ethics	32	The Birth Process	82 82
Research Measurements	32	Stages of the Birth Process	
Research Designs	35	Birth Complications and Cesarean Delivery	84
■ RESEARCH FOCUS: Darwin's Diary, A Case Study	38	Historical and Cultural Variations	86
Ethics in Human Development Research	41	The Peculiar History of Birth in the West	86
Summary: How We Study Human Development	43	Birth Across Cultures: Who Helps?	89
Apply Your Knowledge as a Professional	43	Birth Across Cultures: Practices Aimed at Diminishing Danger and Pain	90
2 Genetics and Prenatal Development	44	Cultural Variations in Neonatal and Maternal Mortality	92
Section 1 Genetic Influences on Development	46	Summary: Birth and Its Cultural Context	93
Genetic Basics	46	Section 2 The Neonate	95
Genotype and Phenotype	46	The Neonate's Health	95
The Sex Chromosomes	49	Measuring Neonatal Health	95
Genes and the Environment	51	Low Birth Weight	98
Principles of Behavior Genetics	51	The Neonate's Physical Functioning	100
Gene-Environment Interactions: Epigenetics		Neonatal Sleeping Patterns	101
and Reaction Ranges	53	Neonatal Reflexes	102

Neonatal Senses	103	Goodness-of-Fit	162
Summary: The Neonate	106	Infants' Emotions	162
Section 3 Caring for the Neonate	108	Primary Emotions	163
Nutrition: Is Breast Best?	108	Infants' Emotional Perceptions	164
Historical and Cultural Perspectives		The Social World of the Infant	166
on Breast-Feeding	108	Cultural Themes of Infant Social Life	166
■ CULTURAL FOCUS: Breast-Feeding Practices		The Foundation of Social Development:	
Across Cultures	109	Two Theories	167
Benefits of Breast-Feeding	110	Summary: Social and Emotional Development	168
■ RESEARCH FOCUS: Breast-Feeding Benefits:		Apply Your Knowledge as a Professional	169
Separating Correlation and Causation	111	5 Toddlerhood	170
Social and Emotional Aspects of Neonatal Care	113	5 Toddlethood	170
Crying and Soothing	114	Section 1 Physical Development	172
Bonding: Myth and Truth	117	Growth and Change in Years 2 and 3	172
Postpartum Depression	118	Bodily Growth	172
Summary: Caring for the Neonate	120	Brain Development	174
Apply Your Knowledge as a Professional	121	Changes in Sleep	175
4 Infancy	122	Motor Development	176
1 maney	144	■ CULTURAL FOCUS: Gross Motor Development	
Section 1 Physical Development	124	Across Cultures	177
Growth and Change in Infancy	124	Socializing Physical Functions: Toilet Training	
Growth Patterns	124	and Weaning	178
Brain Development	126	Toilet Training	179
Sleep Changes	130	Weaning	180
Infant Health	133	Summary: Physical Development	180
Nutritional Needs	133	Section 2 Cognitive Development	182
Infant Mortality	135	Cognitive Development Theories	182
Motor and Sensory Development	137	Cognitive Development in Toddlerhood:	408
Motor Development	138	Piaget's Theory	182
■ CULTURAL FOCUS: Infant Fine Motor Development		Vygotsky's Cultural Theory of Cognitive Development	184
Across Cultures	141	Language Development	187
Sensory Development	141	The Biological and Evolutionary Bases of Language	
Summary: Physical Development	142	Milestones of Toddler Language: From First	107
Section 2 Cognitive Development	144	Words to Fluency	189
Piaget's Theory of Cognitive Development	144	Learning Language in a Social and Cultural Contex	
Basic Cognitive-Developmental Concepts	144	CULTURAL FOCUS: Language Development	
The Sensorimotor Stage	146	Across Cultures	194
■ CULTURAL FOCUS: Object Permanence Across Cultures	147	Summary: Cognitive Development	194
Information Processing in Infancy	148	Section 3 Emotional and Social Development	196
Information-Processing Approaches	149	Emotional Development in Toddlerhood	196
Attention	149	Toddlers' Emotions	196
Memory	150	The Birth of the Self	199
Assessing Infant Development	151	Gender Identity and the Biology of Gender	
Approaches to Assessing Development	151	Development	200
Can Media Enhance Cognitive Development?		Attachment Theory and Research	202
The Myth of "Baby Einstein"	152	Attachment Theory	202
The Beginnings of Language	153	■ CULTURAL FOCUS: Stranger Anxiety Across Cultures	204
First Sounds and Words	154	Quality of Attachment	205
Infant-Directed (ID) Speech	155	■ RESEARCH FOCUS: Early Child Care and Its	
Summary: Cognitive Development	157	Consequences	207
Section 3 Emotional and Social Development	159	The Social World of the Toddler	211
Temperament	159	The Role of Fathers	211
Conceptualizing Temperament	159	The Wider Social World: Siblings, Peers, and Friends	
■ RESEARCH FOCUS: Measuring Temperament	161	0-,,	

Autism Spectrum Disorder: A Disruption in Social		Health Issues	278
Development	215	Malnutrition and Obesity	278
Media Use in Toddlerhood	216	■ CULTURAL FOCUS: Is Contemporary American Culture	
Summary: Emotional and Social Development	218	Setting Off a Genetic Tripwire for Obesity?	280
Apply Your Knowledge as a Professional	219	Illness and Injuries	281
6 Early Childhood	220	Summary: Physical Development	283
6 Early Childhood	220	Section 2 Cognitive Development	284
Section 1 Physical Development	222	Theories of Cognitive Development	284
Growth from Age 3 to 6	222	Concrete Operations	284
Bodily Growth	222	Information Processing	286
Brain Development and "Infantile" Amnesia	224	Intelligence and Intelligence Tests	291
Health and Safety in Early Childhood	225	Language Development	296
Motor Development	228	Vocabulary, Grammar, and Pragmatics	297
Gross and Fine Motor Skills	228	Multilingualism	297
Handedness	229	School in Middle Childhood	300
Summary: Physical Development	230	School Experiences and Achievement	300
Section 2 Cognitive Development	232	■ CULTURAL FOCUS: School and Education in	
Theories of Cognitive Development	232	Middle Childhood Across Cultures	302
Piaget's Preoperational Stage of Cognitive		Learning the Cognitive Skills of School:	
Development	232	Reading and Mathematics	303
Young Children's Social Cognition: The		Summary: Cognitive Development	305
Development of Theory of Mind	235	Section 3 Emotional and Social Development	306
Cultural Learning in Early Childhood	237	Emotional and Self-Development	306
CULTURAL FOCUS: Guided Participation Across Cultures	238	Smooth Sailing: Advances in Emotional	206
Early Childhood Education	239	Self-Regulation	306
The Importance of Preschool Quality	239	Self-Understanding	308
Preschool as a Cognitive Intervention	241	Gender Development The Social and Cultural Contexts of Middle	310
Language Development	243	Childhood	312
Advances in Vocabulary and Grammar	243	Family Relations	312
Pragmatics: Social and Cultural Rules of Language	243	Friends and Peers	317
Summary: Cognitive Development	245	CULTURAL FOCUS: Friendship and Play in Middle	017
Section 3 Emotional and Social Development	246	Childhood Across Cultures	318
Emotional Regulation and Gender Socialization	246	Work	321
Emotional Regulation	246	Media Use	323
Moral Development	248	■ RESEARCH FOCUS: TV or Not TV?	324
Gender Development	250	Summary: Emotional and Social Development	326
Parenting	252	Apply Your Knowledge as a Professional	327
Parenting "Styles" Discipline and Punishment	253 256	777	
The Child's Expanding Social World	260	8 Adolescence	328
Mead's Classifications of Childhood Social Stages	260		0_0
Siblings and "Only Children"	261	Section 1 Physical Development	330
Peers and Friends	263	The Metamorphosis: Biological Changes of Puberty	330
■ RESEARCH FOCUS: Shyness in China and Canada:	203	The Physical Changes of Puberty	330
Cultural Interpretations	265	The Timing of Puberty	333
Media Use in Early Childhood	267	Cultural Responses: Puberty Rituals	336
Summary: Emotional and Social Development	270	Health Issues in Adolescence	337
Apply Your Knowledge as a Professional	270 271	Eating Disorders	338
_	-/ I	Substance Use	340
7 Middle Childhood	272	Summary: Physical Development	342
Section 1 Physical Davidson on t	0.74	Section 2 Cognitive Development	343
Section 1 Physical Development Growth in Middle Childhood	274 274	Adolescent Cognition	343
Physical Growth and Sensory Development	274	Piaget's Theory of Formal Operations	343
Motor Development	275	Information Processing: Selective Attention and Advances in Memory and Executive Function	345
THOO DO COPILICIA	410	The variety in intention y and indentity of anothern	UIU

Social Cognition: The Imaginary Audience and the		Section 3 Emotional and Social Development	412
Personal Fable	346	Emotional and Self-Development	412
Culture and Cognition	348	Self-Esteem	412
Education and Work	348	Identity Development	413
Schools: Secondary Education	349	Gender Development: Cultural Beliefs	
Work	352	and Stereotypes	418
Summary: Cognitive Development	354	Cultural Beliefs	420
Section 3 Emotional and Social Development	356	Religious Development	420
Emotional and Self-Development	356	Political Development	421
Emotionality in Adolescence: Storm and Stress?	357	The Social and Cultural Contexts of Emerging	
Self-Development in Adolescence	358	Adulthood	423
Gender Development	359	Family Relationships	423
Cultural Beliefs: Morality and Religion	362	Friendships	425
Moral Development	362	Love and Sexuality	426
Religious Beliefs	364	Media Use	429
The Social and Cultural Contexts of Adolescence	365	CULTURAL FOCUS: Media Use in Emerging Adulthood	
Family Relationships	365	Across Cultures	431
■ RESEARCH FOCUS: The Daily Rhythms of		Summary: Emotional and Social Development	431
Adolescents' Family Lives	366	Apply Your Knowledge as a Professional	433
CULTURAL FOCUS: Adolescent Conflict with Parents	368	10 Young Adulthood	434
Peers and Friends	369		
Love and Sexuality	372	Section 1 Physical Development	436
Media Use	376	The Transition to Adulthood	436
Problems	377	What Makes an Adult?	436
Crime and Delinquency	378	Aging Begins	438
Depression	380	Physical Health	439
Summary: Emotional and Social Development	381	Overweight and Obesity	439
Apply Your Knowledge as a Professional	383	RESEARCH FOCUS: What Is "Overweight"? What	
9 Emerging Adulthood	384	Is "Obesity"?	440
2 Entergrity Additiood	J04	The Importance of Exercise	443
Section 1 Physical Development	386	Summary: Physical Development	445
The Emergence of Emerging Adulthood	386	Section 2 Cognitive Development	446
Five Features	387	Adult Intelligence	446
The Cultural Context of Emerging Adulthood	391	IQ Scores and Career Success	446
CULTURAL FOCUS: The Features of Emerging Adulthood	392	Cultural Conceptions of Intelligence	447
Physical Changes of Emerging Adulthood	392	Cognitive Advances in Young Adulthood	448
The Peak of Physical Functioning	393	Expertise	448
Sleep Patterns and Deficits	394	Creativity	449
Risk Behavior and Health Issues	395	Summary: Cognitive Development	450
Injuries and Fatalities: Automobile Accidents	395	Section 3 Emotional and Social Development	451
■ RESEARCH FOCUS: Graduated Driver Licensing	397	Emotional Development in Young Adulthood	451
Substance Use and Abuse	398	Intimacy Versus Isolation: Erikson's Theory	452
Resilience	400	Sternberg's Theory of Love	452
Summary: Physical Development	402	The Social and Cultural Contexts of Young Adulthood	
Section 2 Cognitive Development	403	Marriage in Young Adulthood	454
Education and Work	403	CULTURAL FOCUS: Marriage and Love Relationships	4 ==
CULTURAL FOCUS: Tertiary Education Across Cultures	403	Across Cultures	457
Tertiary Education: College, University, and Trainir	_	Divorce in Young Adulthood	459
Programs	404	Single Adults	460 461
Tertiary Education's (Possible) Digital Future:	407	Gay and Lesbian Partnerships	
Online Learning Finding Adult Work	407	Sexuality in Young Adulthood	462 463
Summary: Cognitive Development	411	Becoming a Parent Work	468
	111	1 1 O 1 IV	TUC

Community Activities and Media Use	472	Changes in Sleep Patterns	535	
Summary: Emotional and Social Development	474			
Apply Your Knowledge as a Professional	475	Chronic Health Problems		
11 30111 41111 1	4=6	Health Care and Health Promotion	538	
11 Middle Adulthood	476	■ CULTURAL FOCUS: Physical Health in Late Adulthood		
Section 1 Physical Development	478	Across Cultures	539	
Physical Changes in Middle Adulthood	478	Successful Aging: A New Way to Think		
Changes in Sensory Abilities	479	About "Old Age"	541	
Changes in Reproductive Systems	480	Summary: Physical Development	543	
Health and Disease	482	Section 2 Cognitive Development	545	
Health Problems	482	Cognitive Changes and Decline	545	
Influences on Midlife Health and Later Development	487	Changes in Attention and Memory	545	
The Improving Health of Midlife Adults— With		Brain Changes and Brain Diseases: Dementia		
One Troubling Exception	487	and Alzheimer's Disease	547	
■ CULTURAL FOCUS: Physical Health in Middle Adulthood		Alternative Views of Cognitive Changes	551	
Across Cultures	489	Wisdom	551	
Summary: Physical Development	490	Responding to Cognitive Decline	552	
Section 2 Cognitive Development	491	Summary: Cognitive Development	555	
Intelligence, Expertise, and Career Development	491	Section 3 Emotional and Social Development	556	
Fluid and Crystallized Intelligence	491	Emotional and Self-Development	556	
The Peak of Expertise	492	Positive Emotions and Self-Concept	556	
RESEARCH FOCUS: Intelligence in Middle		Theories on Emotions in Late Adulthood	557	
Adulthood: Two Research Approaches	493	The Social and Cultural Contexts of Late Adulthood	558	
Work	495	Family Relationships	559	
Information Processing in Middle Adulthood	498	Living Arrangements in Late Adulthood	561	
Processing Speed	498	Love and Sexuality	562	
Attention and Memory	499	Work and Retirement	565	
Summary: Cognitive Development	500	■ CULTURAL FOCUS: Work and Retirement Across Cultures	565	
Section 3 Emotional and Social Development	501	Life Outside Work and Home: Leisure, Community,		
Emotional and Self-Development	501	Religion, and Media Use	567	
Changes in Self-Concept and Self-Acceptance	501	■ RESEARCH FOCUS: Do People Become More Religious		
The Mostly Mythical Midlife Crisis	503	with Age?	569	
Generativity	504	Summary: Emotional and Social Development	572	
Gender Issues in Midlife	505	Apply Your Knowledge as a Professional	573	
The Social and Cultural Contexts of Middle		12 Death and Attack Delica	E = 4	
Adulthood	508	13 Death and Afterlife Beliefs	574	
Family Relationships	508	Section 1 Physical Aspects of Death	576	
■ CULTURAL FOCUS: Family Relationships in		The Biological Processes of Death and Aging	576	
Middle Adulthood Across Cultures	510	Major Causes of Death	576	
Love and Sexuality	515	Beyond Death? Attempts to Extend the Human		
Community and Leisure Activities	519	Life Span	580	
Summary: Emotional and Social Development	521	■ RESEARCH FOCUS: Growing Telomeres	582	
Apply Your Knowledge as a Professional	523	The Sociocultural Contexts of Death	584	
12 Late Adulthood	E04	Where We Die: Homes and Hospitals	584	
Late Adulthood	524	Options and Decisions Regarding the End of Life	585	
Section 1 Physical Development	526	Summary: Physical Aspects of Death	589	
Cultural Beliefs About Late Adulthood	526	Section 2 Emotional Responses to Death	590	
How Old Is "Old"?	526	Bereavement and Grief	590	
Global Aging Patterns: The Worldwide Boom		The Emotional Arc of Grief	590	
in Older Adults	529	Variations in Grieving	591	
Physical Changes	532	Confronting Death	593	
Changes in Appearance	532	Stage Theory of Dying	593	
Changes in the Senses	532	Summary: Emotional Responses to Death	594	

x Contents

Section 3 Beliefs About Death and the Afterlife	595	Summary: Beliefs About Death and the Afterlife	605
Beliefs About Death Throughout the Life Span	595	Apply Your Knowledge as a Professional	606
Beliefs About Death in Childhood and Adolescence	595	Epilogue	607
Beliefs About Death in Adulthood	596		G-1
Afterlife Beliefs and Mourning Rituals	597	Glossary	G-1
What Do Individuals Believe About Life		References	R-1
After Death?	598	Answers	A-1
Mourning Rituals of the Major Religions	600	Allsweis	A-1
Remembering and Honoring the Dead	603	Credits	C-1
CULTURAL FOCUS: Remembering and Honoring the Dead Across Cultures	605	Name Index	NI-1
the Dead Across Cultures		Subject Index	SI-1

Preface

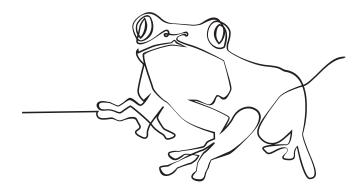
Introducing the Third Edition

elcome to the third edition of Human Development: A Cultural Approach! This edition features updated coverage and current research throughout, as well as an increased focus on the cultural diversity that exists within the United States. During the revision process, we have worked closely with the Pearson team to develop and enhance a wide range of interactive features that make the content and cultural approach even more engaging. Throughout the text, you'll see exciting new videos, interactive maps and figures, digital writing prompts, and self-assessments with instant feedback that will allow students to become more active and enthusiastic learners. We tailored this edition to fit the learning approach of the most tech-savvy generation of college students yet, and we think you will find that the interactive resources are unmatched by any other human development text.

Thinking Culturally

What sets this text apart more than anything else is that it presents a portrayal of development that covers the whole amazing range of human cultural diversity. Having taught human development courses for years and being familiar with the available texts, we are struck by how narrow they seem to be. They focus on human development in the United States as if it is the typical pattern for people everywhere, with only the occasional mention of people in other parts of the world. If you knew nothing about human development except what you read in a standard textbook, you would conclude that 95% of the human population must reside in the United States. Yet the United States makes up less than 5% of the world's population, and there is an immense range of patterns of human development in cultures around the globe, with most of those patterns strikingly different than the mainstream model characteristic of the American majority culture. Indeed, even within the United States, cultural diversity is much greater than what is found in the typical textbook.

So here, we take a cultural approach. We portray the different cultural pathways of development that people have devised in response to their local conditions and the creative inspiration of their imaginations. To be clear, this does not mean that biology is not important. Transcending the old "nature versus nurture" division, students will learn that



humans have evolved to be an incomparably cultural and global species, and that current research shows startling ways that genes and the environment influence one another.

While we cover scientific findings from across the world, our goal is to do something even more important. We wish to teach students to *think culturally*, so that when they apply human development to the work they do or to their own lives, they understand that there is, always and everywhere, a cultural basis to development. The cultural approach also includes learning how to critique research for the extent to which it does or does not take the cultural basis of development into account. We provide this kind of critique at numerous points throughout the text, with the intent that students will learn how to do it themselves by the time they reach the end.

We know from our experience as teachers that students find it fascinating to learn about the different forms that human development takes in various cultures, but there are also practical benefits to the cultural approach. It is more important than ever for students to have knowledge of the wider world because of the increasingly globalized economy and because so many problems, such as disease and climate change, cross borders. Whether they travel the globe or remain in their home towns, in a culturally diverse and globalized world, students will benefit from being able to think culturally about development. They are likely to encounter people from diverse backgrounds in social interactions with family, friends, and neighbors, or in their careers, as they may have patients, students, or coworkers who come from different cultures.

Were you surprised by the frog on the cover of the text? The Chinese have an expression that loosely translates as "the frog in the well knows not of the great ocean," and it is often used as a cautionary reminder to look beyond our own experience and not to assume that what is true for ourselves is true for everyone else as well. All of us are like that frog, in a way. We've grown up in a certain culture. We've learned to think about life in a certain way. And most of us don't realize how broad and diverse our world really is. On the cover, do you also see how the black dots are the eyes in the profiles of two human faces? With *Human Development: A Cultural Approach*, we hope that you will come to understand the interactions of culture and development in ways previously unseen.

The cultural approach makes this text much different from other life-span texts. This will be clear from the outset. Chapter 1 provides students not only with an introduction to major developmental theories and the scientific method, but also an account of how humans evolved to be an incomparable cultural species and a description of how the diverse cultures that exist both within and across nations often intersect in important ways with socioeconomic circumstances, ethnicity, and gender.

Rethinking the Life Span

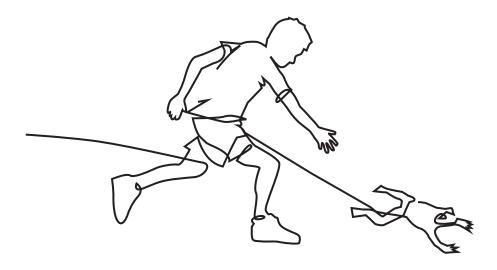
There are other features that make this text distinct. This is the only major text to include a separate chapter on toddlerhood, the second and third years of life. We have always been puzzled by the way other texts gloss over toddlerhood, usually including the second year of life as part of "infancy" and the third year of life as part of "early childhood." Yet any parent or caretaker knows that years 2 and 3 are a lot different from what comes before or after, and we remember this well from our own experiences as parents of twins. Infants cannot walk or talk, and once toddlers learn to do both in years 2 and 3, their experience of life and the experiences of those around them—change utterly. Toddlers are also different from older children, in that their ability for emotional self-regulation and their awareness of what is and is not acceptable behavior in their culture is much more limited.

This text is also alone among major texts in dividing the adult life span into stages of emerging adulthood, young adulthood, middle adulthood, and late adulthood. Emerging adulthood, roughly ages 18–25, is a new life stage that has arisen in developed countries over the past 50 years, as people have entered later into

the commitments that structure adult life in most cultures: marriage, parenthood, and stable work. Some texts call the whole period from age 18 through 40 "young adulthood," but that makes little sense, in that for most people in developed countries the ages 18–29 are vastly different than the ages 30–40. Jeff originally proposed the theory of emerging adulthood in 2000, and it has now become widely used in the social sciences. It is a fascinating and dynamic time of life, and we know students enjoy learning about it, as many of them are in that life stage or have recently passed through it.

Some texts do include a chapter on emerging adulthood, then lump young and middle adulthood together as "adulthood." That does not make much sense either, given that it means applying one life-stage term to ages 25–60. Being in the later part of middle adulthood ourselves, we are acutely aware on a personal level of how many changes take place in the course of adult development. More broadly, as the length of the typical life expectancy continues to increase worldwide, and the proportion of adults relative to children increases in every society, it is more important than ever to provide students with a full understanding of changes and cultural variations during the adult years.

This text is somewhat shorter than most other texts on human development. There is one chapter devoted to each phase of life, for a total of 13 chapters. Each chapter is divided into three major sections, which correspond to the physical, the cognitive, and the emotional and social domains of development. This is an introductory text, and the goal is not to teach students everything there is to know about every aspect of human development, but rather to provide them with a foundation of knowledge on human development that hopefully will inspire them to learn more, in other courses and throughout life.



What's New in the Third Edition?

The third edition marks the addition of a new coauthor, along with several exciting new enhancements to students' learning experience. Here, we also highlight some of the most important and compelling content changes to this edition.

Lene Arnett Jensen is Now a Coauthor with Jeffrey Jensen Arnett

As you might guess from our names, we are related. When we married, we each took the other person's last name as a new middle name. In addition to being partners in marriage and parenthood, for more than two decades we have thoroughly enjoyed coauthoring. Our first publication was in the journal *Child Development* in 1993 on the cultural bases of risk behavior among Danish adolescents. Our most recent publication is a first edition of a topical child development text, Child Development Worldwide: A Cultural Approach (Pearson, 2018).

Lene received her Ph.D. from the Committee on Comparative Human Development at the University of Chicago, a program renowned for its attention to culture. As described in more detail later in "About the Authors,"

her research focuses on moral development across the life course among diverse groups within the United States as well as in several other countries. She has also written extensively on identity development in the context of globalization. Just as is the case for Jeff, Lene has taught a wide range of developmental psychology courses at different colleges and universities.

While our attention to culture draws on our teaching and research experiences, it also grows out of our personal lives. Lene grew up in Denmark and Belgium, and Jeff in the United States. Together, we have lived in Denmark, France, India, and the United States. We have shared the wonderful experience of being involved in the development of our twins, now 18 years old, who have traveled with us to all those places and consider themselves fully American and fully Danish.

For decades, we have valued writing together and here, too, we have aimed to use a lively, clear, and coherent writing style to keep students focused and thinking. We ask questions, give vivid examples, and use active voice. We have also included a carefully chosen selection of anecdotes about our twins' adventures that have proven to be memorable and illustrative to students. Both of us take a cultural approach to understanding human development, but we have different childhood experiences and different areas of expertise in our research, so we hope students will benefit from the combination of our voices throughout the text.

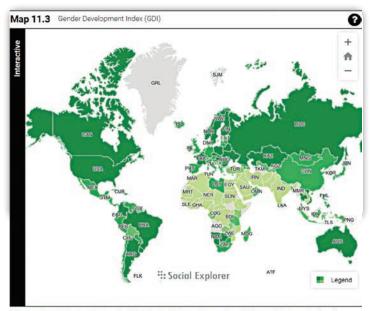
Enhanced Emphasis on Cultural Diversity

ADDITIONAL CULTURAL VIDEOS. The second edition introduced culturally-based "Chapter Introduction" videos with diverse Americans for each chapter, as well as "Cultural Focus" videos filmed in Botswana, Mexico, and the United States. In this third edition we have added new videos to broaden and deepen understanding of culture, for example on the interaction between genes and culture in childhood obesity, and an unforgettable account of a young adolescent boy in Congo who sells cakes on the street to help support his family. There are also new videos homing in on cultural diversity within the United States, including one with Latina adolescents recounting changes to views of gender in their community and one on religiosity among African American adolescents and emerging adults.



NEW INTERACTIVE RESEARCH AND ARTWORK.

Building on the previous edition, we have continued to incorporate interactive maps, figures, and tables to help students appreciate the diversity that exists within the United States, and understand the role of culture, ethnicity, SES, and other factors in human development. In this edition, we have also added new "Social Explorer" interactive maps of the world that allows students to examine both regional patterns and country-specific statistics for phenomena such as postpartum maternal depression and cosleeping.



The map shows GDI ratings from 1 to 5, with 1 indicating highest gender equality and 5 lowest. Click Legend and scroll over percentage ranges. Scroll over map to explore variations by country.

Source: Based on UNDP (2017).

Apply Your Knowledge as a Professional

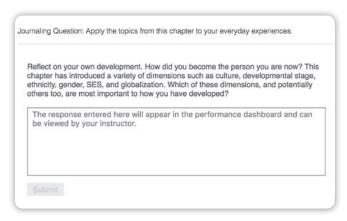
The topics covered in this chapter apply to a wide variety of career professions. Watch this video to learn how they apply to an instructor of maternity nursing.



NEW "JOURNALING QUESTIONS." A new feature in this edition is a "Journaling Question" at the end of each chapter in the digital Revel format of the text. This question encourages students to apply key information from across a chapter to their everyday experiences. Students' responses are easily shared with the instructor, providing the instructor with feedback on how well students are attaining and applying new knowledge.

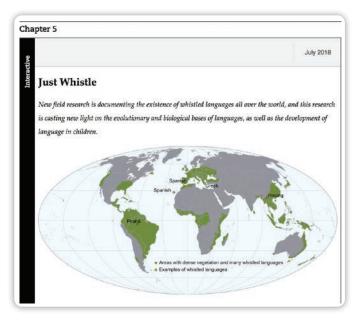
Expanded Opportunities to Apply Knowledge

UPGRADED "APPLY YOUR KNOWLEDGE AS A PROFESSIONAL" VIDEOS. The previous edition featured several videos at the end of each chapter with career professionals who describe their jobs and explain how a knowledge of human development and culture influence their work on a daily basis. In this edition, based on instructor and student feedback, we have chosen the best video clip for each chapter and shortened them all to 3-4 minutes. These pithy and engaging videos allow students to learn about a wide variety of career paths. Diverse careers are profiled in the course of the text, including a reproductive endocrinologist, a pediatric nurse practitioner, a nanny, an early learning specialist, a college counselor, a marriage and family counselor, and the president of the advisory board at a senior center.



New Feature to Stay Up-to-Date

"BREAKING DEVELOPMENTS." Important new findings on human development are published continuously. In the digital Revel format of the text we have added a new feature in this edition called "Breaking Developments," in which we summarize an exciting new research finding at the end of a chapter. We also include summaries of new landmark cultural trends pertaining to human development. This feature allows students and instructors to keep up with the latest findings in human development research, rather than waiting 3–4 years between editions for updates of current research. We will add "Breaking Developments" at the beginning of January and July of each year, in selected chapters as research warrants.



Content Highlights of New Research

Pooling our energies for this third edition, we have revised every chapter to incorporate the latest and most important human development research, as well as to enhance existing materials. While we cannot catalog every change here, we will highlight two key updates to each chapter. We have included:

Chapter 1: Introduction

- New data on the global demographic divide, including a new video.
- A differentiation of research measurements from research designs, including new summary tables.

Chapter 2: Genes and Prenatal Development

- The latest statistics on assisted reproductive technologies and age of viability in developed countries, as well as sex ratios at birth across diverse countries.
- New glossary terms and descriptions pertaining to neurogenesis, multifactorial disorders, and maternal blood screening.

Chapter 3: Birth and the Newborn

- Information from diverse countries on maternal and paternal postpartum depression.
- The latest statistics for episiotomies (within the United States) and C-section rates (across countries).

Chapter 4: Infancy

 Exciting contemporary cognitive development research on object permanence across species, and the roles of babbling, gesturing, and turn-taking in the emergence of speech. (The substages of Piaget's sensorimotor stage were deleted to make room for these current research foci). Findings on the impact of culture on the development of the social smile.

Chapter 5: Toddlerhood

- Updated information on the parent-child relationship, including findings from a meta-analysis on the longterm implications of early attachment, research on father involvement, and Scandinavian public policies to encourage paternal care of young children.
- Revised terminology and diagnostic criteria for autism spectrum disorder (ASD), including a new video with a clinician who diagnoses ASD in children.

Chapter 6: Early Childhood

- Information on the diets of American children, including the roles of SES, ethnicity, and immigrant generation.
- A new section on theory of mind, including how different measurement techniques yield different findings on when children acquire it.

Chapter 7: Middle Childhood

- A new section on executive function in middle childhood, including how its development is impacted by physical exercise and multilingualism.
- Explication of the revised Wechsler-V measurement of IQ.

Chapter 8: Adolescence

- New material on adolescents' work in developing countries, including a memorable new video on a Cambodian girl sifting through discarded food at a dump at dawn to find food for her family's pigs.
- Updated statistics and research on adolescents' uses of digital devices.

Chapter 9: Emerging Adulthood

- Important information about sleep in emerging adulthood, including the concepts of delayed sleep phase syndrome and sleep debt, as well as tips for sleep hygiene.
- A new section on the opportunities and limitations of online learning, and on blended learning, in which students learn partly online and partly through face-toface learning in the classroom.

Chapter 10: Young Adulthood

- Intriguing new ideas on the neuropsychology of expertise.
- New findings showing the relation between marriage timing and divorce risk.

Chapter 11: Middle Adulthood

- Exciting new research on the use of immunotherapy to treat cancer.
- The addition of the important concept of the "mother-hood penalty" that is evident in the careers of midlife

women who have been involved in caring for one or more children, along with a new video in which women in midlife discuss their diverse approaches to balancing work and family.

Chapter 12: Late Adulthood

- The latest research on the *ApoE* gene and the risk of Alzheimer's disease.
- Introduction of the concept of the bridge job, in which older workers reduce their work hours but remain in the labor force, or they take another job that is less demanding and involves fewer hours per week.

Chapter 13: Death and Afterlife Beliefs

- The latest statistics on the continued dramatic decline in rates of heart disease in the United States, across ethnic groups.
- Addition of the concept of "prolonged grief disorder," including an examination of the difficulty of determining what classifies as "prolonged."

Teaching and Learning Aids

Learning Objectives

Learning Objectives (LOs) for each chapter are listed at the start of each section as well as alongside every section heading. Based on Bloom's taxonomy, these numbered objectives help students better organize and understand the material. The end-of-section summary is organized around these same objectives, as are all of the supplements and assessment materials.

Five Features

LO 9.1 Name the four revolutions that contributed to the rise of emerging adulthood, and the five developmental features distinctive to emerging adulthood.

Perhaps the most obvious indicator of the emergence of emerging adulthood as a normative life stage in developed countries is the rise in the ages of entering marriage and parenthood. As recently as 1960 the median age of marriage in most developed countries was in the very early 20s, around 21 for women and 23 for men (Douglass, 2005). Now the median age of marriage is 28 in the United States, and close to 30 in most other developed countries, as **Figure 9.1** shows (Arnett, 2015). Age at entering parenthood followed a similar rise.

Summary: PHYSICAL DEVELOPMENT

LO 9.1 Name the four revolutions that contributed to the rise of emerging adulthood, and the five developmental features distinctive to emerging adulthood.

The rise of emerging adulthood was due to four revolutions that began in the 1960s and '70s: the Technological Revolution, the Sexual Revolution, the Women's Movement, and the Youth Movement. The five features of emerging adulthood include identity explorations, instability, self-focus, feeling in-between, and possibilities/optimism.

LO 9.2 Describe some of the ways emerging adulthood varies among cultures, with specific reference to European and Asian countries.

Good sleep hygiene includes waking up at the same time each day, getting regular exercise, and limiting caffeine and alcohol consumption.

LO 9.5 Explain why young drivers have the highest rates of crashes, and name the most effective approach to reducing those rates.

Rates of automobile fatalities are high in adolescence and emerging adulthood due to a combination of inexperience and risky driving behaviors such as driving too fast or while intoxicated. Factors that influence emerging adults' risky driving include being male, sensation seeking and aggressiveness, and the belief that peers approve of risky driving. Fatalities among novice drivers have been reduced substantially by GDL programs.

Section Summaries

Organized by Learning Objective (LO), a summary appears at the end of each major section.

Practice Quizzes and Chapter Quiz

In the digital Revel version of this third edition, multiple-choice practice quizzes appear after each section to help students assess their comprehension of the material. A cumulative multiple-choice test appears at the end of every chapter.





REVEL

Educational Technology Designed for the Way Today's Students Read, Think, and Learn

When students are engaged deeply, they learn more effectively and perform better in their courses. This simple fact inspired the creation of Revel: an immersive learning experience designed for the way today's students read, think, and learn. Built in collaboration with educators and students nationwide, Revel is the newest, fully digital way to deliver respected Pearson content.

Revel enlivens course content with media interactives and assessments—integrated directly within the authors' narrative—that provide opportunities for students to read about and practice course material in tandem. This immersive experience boosts student engagement, which leads to better understanding of concepts and improved performance throughout the course.

Learn More about Revel

http://www.pearsonhighered.com/revel/

The third edition includes integrated videos and media content throughout, allowing students to explore topics more deeply at the point of relevancy.

Research has also shown that newborns prefer tastes, smells, voices, and even languages that they experienced while in the womb (Mennella et al., 2001; Moon et al., 1993; Varendi et al., 2002). Even prenatally, then, fetuses are learning and remembering, and they are developing initial preferences that are culturally shaped, such as for spicy or mild flavors, and for French or Russian. For more, watch the video *Key Events in Prenatal Development*.



Revel also offers the ability for students to assess their content mastery by taking multiple-choice quizzes that offer instant feedback and by participating in a variety of writing assignments such as peer-reviewed questions and auto-graded assignments. Additionally:

• MyVirtualChild and MyVirtualLife. MyVirtualChild is an interactive simulation now available in Revel that allows students to play the role of a parent and raise their

own virtual child. By making decisions about specific scenarios, students can raise their children from birth to age 18 and learn firsthand how their own decisions and other parenting actions affect their child over time. In MyVirtualLife, students make decisions for a virtual version of themselves from emerging adulthood through the end of life.

- Media assignments for each chapter—including videos with assignable questions—feed directly into the gradebook, enabling instructors to track student progress automatically.
- The Pearson eText lets students access their text anytime and anywhere, and any
 way they want, including listening online.

Presentation and Teaching Resources

The Instructor's Resource Center (www.pearsonhighered.com/irc) provides information on the following supplements and downloadable files:

TEST BANK (ISBN: 0134635825) Revised by Professor Regina M. Hughes (Collin College), the Test Bank contains over 4,000 questions, many of which were class-tested in multiple classes at both 2-year and 4-year institutions across the country prior to publication. Item analysis is provided for all class-tested items. All conceptual and applied multiple-choice questions include rationales for each correct answer and the key distracter. The item analysis helps instructors create balanced tests, while the rationales serve both as an added guarantee of quality and as a time-saver when students challenge the keyed answer for a specific item. Each chapter of the test bank includes a Total Assessment Guide, an easy-to-reference grid that organizes all test items by learning objective and question type.

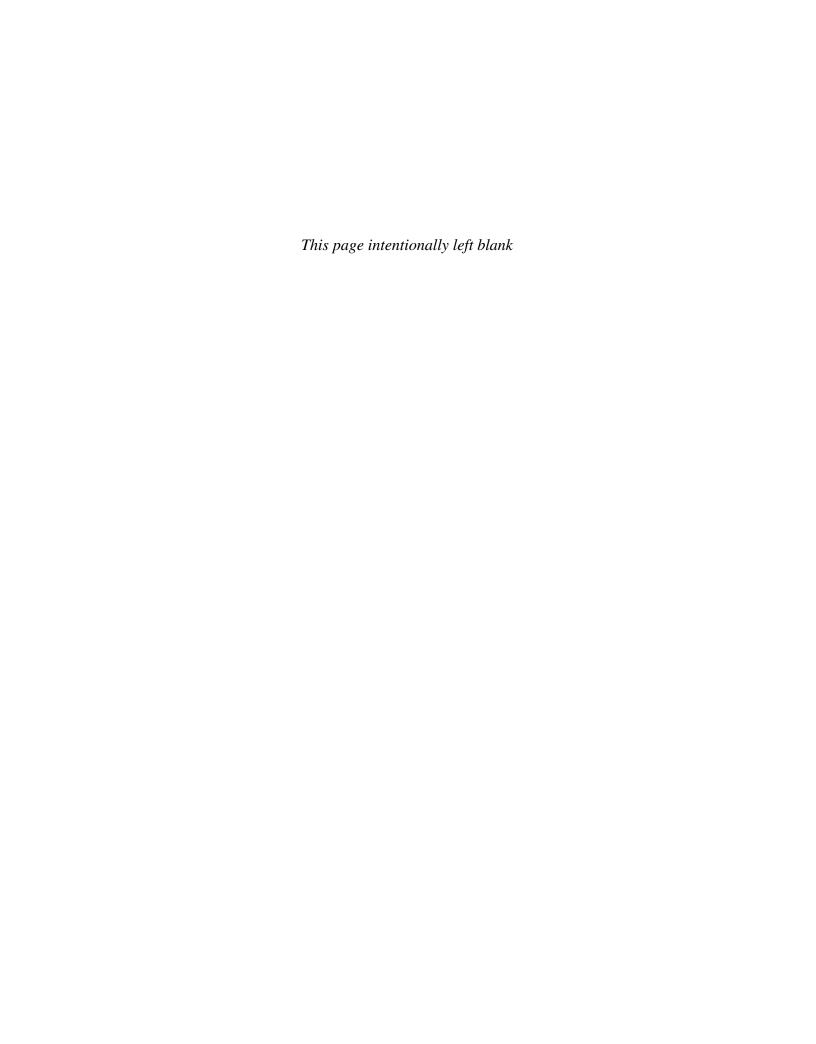
The test bank comes with Pearson MyTest (ISBN: 0134625366), a powerful test generation program that helps instructors easily create and print quizzes and exams. Questions and tests can be authored online, allowing instructors ultimate flexibility and the ability to efficiently manage assessments wherever and whenever they want. Instructors can easily access existing questions and then edit, create, and store using simple drag-and-drop and Word-like controls. Data on each question provides information relevant to difficulty level and page number. In addition, each question maps to the text's major section and learning objective. For more information go to www.PearsonMyTest.com.

(ISBN: 0134891856) The Enhanced Lecture PowerPoints offer detailed outlines of key points for each chapter supported by selected visuals from the text, and include the videos from the human development video series featured in the text. ADA compliant Standard

ENHANCED LECTURE POWERPOINT SLIDES WITH EMBEDDED VIDEOS

from the human development video series featured in the text. ADA compliant Standard Lecture PowerPoints (ISBN: 0134635744) without embedded videos are also available. A separate *Art and Figure* version (ISBN: 0134891864) of these presentations contains all art from the text for which Pearson has been granted electronic permissions.

INSTRUCTOR'S MANUAL (ISBN: 0134635752) Written and compiled by Paul G. Kochmanski (Niagara University), the Instructor's Manual includes suggestions for preparing for the course, sample syllabi, and current trends and strategies for successful teaching. Each chapter offers integrated teaching outlines and a list of the key terms for quick reference, and includes an extensive bank of lecture launchers, as well as activities. Answers to the in-text features are provided. Detailed critical-thinking problems with accompanying rubrics and a set of questions for using MyVirtualChild with the cultural approach are also included. The electronic format features click-and-view hotlinks that allow instructors to quickly review or print any resource from a particular chapter. This tool saves prep work and helps you maximize your classroom time.

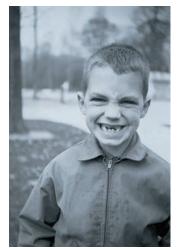


About the Authors

Jeffrey Jensen Arnett is a Research Professor in the Department of Psychology at Clark University in Worcester, Massachusetts. He received his Ph.D. in developmental psychology in 1986 from the University of Virginia, and did 3 years of postdoctoral work at the University of Chicago. From 1992 through 1998 he was Associate Professor in the Department of Human Development and Family Studies at the University of Missouri, where he taught a 300-student life span development course every semester. In the fall of 2005, he was a Fulbright Scholar at the University of Copenhagen in Denmark; in 2010–2011 he was the Nehru Chair at Maharaja Sayajirao University in India; and in 2017–2018 he was a Visiting Professor at the University of Bordeaux in France.

His primary scholarly interest for the past 20 years has been in emerging adulthood. He coined the term, and he has conducted research on emerging adults concerning a wide variety of topics, involving several different ethnic groups in American society. He is the Founding President and Executive Director of the Society for the Study of Emerging Adulthood (SSEA; www.ssea.org). From 2005 to 2014 he was the editor of the *Journal of Adolescent Research (JAR)*, and currently he is on the Editorial Board of *JAR* and five other journals. He has published many theoretical and research papers on emerging adulthood in peer-reviewed journals, as well as the book *Emerging Adulthood: The Winding Road from the Late Teens Through the Twenties* (2015, 2nd edition, Oxford University Press), among many others. For more information, see www.jeffreyarnett.com.







Jeff at ages 8 months, 6 years, and 12 years.

Lene Arnett Jensen is Associate Professor in the Department of Psychology at Clark University in Worcester, Massachusetts. She received her Ph.D. in developmental psychology in 1994 from the University of Chicago, and did a 1-year postdoctoral fellowship at the University of California–Berkeley. Prior to coming to Clark University, she taught at the University of Missouri and Catholic University of America. She has also been a visiting professor at Stanford University, Aalborg University in Denmark, Maharaja Sayajirao University in India, and the University of Bordeaux in France.

She aims through scholarship and professional collaboration to move the discipline of psychology toward understanding development both in terms of what is universal and what is cultural. She terms this a "cultural-developmental approach." Her research addresses moral development and cultural identity formation. Together with her students, she has conducted research in countries such as Denmark, India, Thailand,

Turkey, and the United States. Her publications include New Horizons in Developmental Theory and Research (2005, with Reed Larson, Jossey-Bass/Wiley), Immigrant Civic Engagement: New Translations (2008, with Constance Flanagan, Taylor-Francis), Bridging Cultural and Developmental Psychology: New Syntheses for Theory, Research and Policy (2011, Oxford University Press), the Oxford Handbook of Human Development and Culture (2015, Oxford University Press), Moral Development in a Global World: Research from a Cultural-Developmental Perspective (2015, Cambridge University Press), and the Oxford Handbook of Moral Development (forthcoming, Oxford University Press).

From 2004 to 2015, she was editor-in-chief for the journal New Directions for Child and Adolescent Development (with Reed Larson). She served as program chair for the 2012 biennial conference of the Society for Research on Adolescence (with Xinyin Chen), and currently serves on awards committees for the Society for Research on Child Development (SRCD) and the Society for Research on Adolescence (SRA). For more information, see www.lenearnettjensen.com.

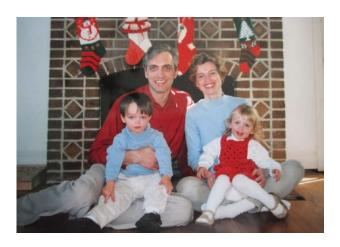






Lene at ages 3, 11, and 17 years.

Jeff and Lene live in Worcester, Massachusetts, with their twins, Miles and Paris.





The authors with their twins when they were toddlers and now on the cusp of emerging adulthood.

Acknowledgments

e are grateful to all of the talented and dedicated people who contributed to the third edition. We would especially like to thank Amber Chow, Senior Acquisitions Editor, and Kelli Strieby, Senior Producer and Strategy Manager, who enthusiastically supported our vision for this third edition and mobilized all the resources necessary to bring it to fruition. Debbie Coniglio, the Managing Editor, brought her characteristic thoughtfulness, energy, and organizational skills to the entire project. Nic Albert performed superbly as the Senior Development Editor, repeatedly reviewing and improving the writing, the artwork, and a variety of other features of every chapter. Thanks also go to Lisa Mafrici at Pearson and to Allison Campbell at Integra Software Services for coordinating all aspects of production. Katie Toulmin and Sabrina Avilés from Cabin 3 Media produced an outstanding slate of new videos, and Elissa Senra-Sargent produced the Revel product. Christopher Brown, Senior Product Marketing Manager, handled the marketing of the text and organized focus groups that provided valuable feedback on the Revel text. Liz Kincaid found the photos that do a great job of reflecting the cultural approach of the text, and Pentagram/ Lumina Datamatics Ltd. created the cover design. We'd also like to thank Noma Bar for the cover illustration, and Louis Fierro for coordinating the reviews.

Finally, we would like to thank the hundreds of reviewers who reviewed chapters, sections, and other materials in the course of the development of the text. We benefited greatly from their suggestions and corrections, and now instructors and students reading the text will benefit, too.

The Development of Human Development: A Cultural Approach

This text is the product of the most extensive development effort this market has ever witnessed. *Human Development: A Cultural Approach* reflects the countless hours and extraordinary efforts of a team of authors, editors, and reviewers that shared a vision for not only a unique human development text, but also the most comprehensive and integrated supplements program on the market. Over 250 manuscript reviewers provided invaluable feedback for making this text as accessible and relevant to students as possible. Each chapter was also reviewed by a panel of subject-matter experts to ensure accuracy and currency. Dozens of focus-group participants helped guide every aspect of the program, from content coverage to the art style and design to the configuration of the supplements. In fact, some of those focus-group participants were so invested in the project

that they became members of the supplements author team themselves. Dozens of students compared the manuscript to their current textbooks and provided suggestions for improving the prose and design. We thank everyone who participated in ways great and small, and hope that you are as pleased with the finished product as we are!

INSTRUCTORS

Alabama

Darlene Earley Andrews, Southern Union State Community College

Sarah Luckadoo, *Jefferson State Community College* Lillian Russell, *Alabama State University* Carroll Tingle, *University of Alabama*

Alaska

Karen Gibson, *University of Alaska AnchorageArizona*Richard Detzel, *Arizona State University* and *Northern Arizona University*

Elaine Groppenbacher, Chandler Gilbert Community College and Western International University

California

Patricia Bellas, Irvine Valley College
Bella DePaulo, University of California, Santa Barbara
Ann Englert, Cal Poly, Pomona
Lenore Frigo, Shasta College
Mary Garcia-Lemus, Cal Poly San Luis Obispo
Mary Gauvain, University of California, Riverside
Arthur Gonchar, University of La Verne
Brian Grossman, San Jose State University
Richard Kandus, Mt. San Jacinto College
Michelle Pilati, Rio Hondo College
Wendy Sanders, College of the Desert
Emily Scott-Lowe, Pepperdine University
Susan Siaw, Cal Poly, Pomona

Colorado

Silvia Sara Canetto, Colorado State University
Jessica Herrick, Mesa State College
Diana Joy, Community College of Denver
David MacPhee, Colorado State University
Peggy Norwood, Community College of Aurora

Connecticut

Carol LaLiberte, Asnuntuck Community College Edward Keane, Housatonic Community College

Florida

Maggie Anderson, Valencia College Diane Ashe, Valencia College Diana Ciesko, Valencia College Debra Hollister, Valencia College Sorah Dubitsky, Florida International University Shayn Lloyd, Tallahassee Community College Haili Marotti, Edison State Community College Daniel McConnell, University of Central Florida Seth Schwartz, University of Miami Anne Van Landingham, Orlando Tech Lois Willoughby, Miami Dade College

Georgia

Jennie Dilworth, *Georgia Southern University*Dorothy Marsil, *Kennesaw State University*Nicole Rossi, *Augusta State University*Amy Skinner, *Gordon College*Sharon Todd, *Southern Crescent Technical College*

Hawaii

Katherine Aumer, Hawaii Pacific University

Illinois

Gregory Braswell, Illinois State University
Carolyn Fallahi, Waubonsee Community College
Lisa Fozio-Thielk, Waubonsee Community College
Christine Grela, McHenry County College
Lynnel Kiely, City Colleges of Chicago: Harold
Washington College

Kathy Kufskie, Southwestern Illinois College Mikki Meadows, Eastern Illinois University Michelle Sherwood, Eastern Illinois University Beth Venzke, Concordia University Chicago

Indiana

Kimberly Bays, Ball State University
Bradley Mitchell, Ivy Tech Community College Northwest

Iowa

Shawn Haake, *Iowa Central Community College*Brenda Lohman, *Iowa State University*Jennifer Meehan Brennom, *Kirkwood Community College*James Rodgers, *Hawkeye Community College*Kari Terzino, *Iowa State University*

Kansas

Joyce Frey, *Pratt Community College*David P. Hurford, *Pittsburg State University*

Kentucky

Myra Bundy, Eastern Kentucky University
Janet Dean, Asbury University

George Martinez, Kentucky Community and Technical College

Louisiana

Kim Herrington, *Louisiana State University at Alexandria* Eartha Johnson, *Dillard University*

Maine

Diane Lemay, *University of Maine at Augusta*Elena Perrello, *The University of Maine* and *Husson University*

Ed Raymaker, Eastern Maine Community College

Maryland

Diane Finley, University of Maryland University College

Stacy Fruhling, Anne Arundel Community College
Carol Miller, Anne Arundel Community College
Gary Popoli, Harford Community College
Terry Portis, Anne Arundel Community College
Rachelle Tannenbaum, Anne Arundel Community College
Nicole Williams, Anne Arundel Community College

Massachusetts

Claire Ford, Bridgewater State University
Barbara Madden, Fitchburg State University
Candace J. Schulenburg, Cape Cod Community College

Michigan

Nancy Hartshorne, *Delta College*H. Russell Searight, *Lake Superior State University*

Minnesota

Jarilyn Gess, *Minnesota State University Moorhead*Dana Gross, *St. Olaf College*Rodney Raasch, *Normandale Community College*

Mississippi

Linda Fayard, Mississippi Gulf Coast Community College Donna Carol Gainer, Mississippi State University Linda Morse, Mississippi State University

Missouri

Scott Brandhorst, Southeast Missouri State University Sabrina Brinson, Missouri State University Steven Christiansen, St. Louis Community College Peter J. Green, Maryville University

Nebraska

Susan Sarver, University of Nebraska-Lincoln

Nevada

Bridget Walsh, University of Nevada, Reno

New Jersey

Christine Floether, *Centenary College*Carmelo Nina, *William Paterson University*Melissa Sapio, *Montclair State University*

New Mexico

Katherine Demitrakis, Central New Mexico Community College

New York

Paul Anderer, SUNY Canton
Rachel Annunziato, Fordham University
Sybillyn Jennings, Russell Sage College-The Sage Colleges
Judith Kuppersmith, College of Staten Island
Jonathan Lang, Borough of Manhattan Community College
Steven McCloud, Borough of Manhattan Community College
Julie McIntyre, The Sage Colleges
Elisa Perram, The Graduate Center, The City University of
New York

North Carolina

Paul Foos, *University of North Carolina, Charlotte*Donna Henderson, *Wake Forest University*Amy Holmes, *Davidson County Community College*Jason McCoy, *Cape Fear Community College*

Andrew Supple, University of North Carolina at Greensboro Maureen Vandermaas-Peeler, Elon University

Amie Dunstan, Lorain County Community College Jamie Harmount, Ohio University James Jackson, Clark State Community College James Jordan, Lorain County Community College William Kimberlin, Lorain County Community College Jennifer King-Cooper, Sinclair Community College Carol Miller, Sinclair Community College Michelle Slattery, North Central State College

Oklahoma

Matthew Brosi, Oklahoma State University Yuthika Kim, Oklahoma City Community College Gregory Parks, Oklahoma City Community College John Phelan, Western Oklahoma State College

Oregon

Alishia Huntoon, Oregon Institute of Technology

Pennsylvania

Melissa Calderon, Community College of Allegheny County Martin Packer, Duquesne University

Rhode Island

Clare Sartori, University of Rhode Island

South Carolina

Brantlee Haire, Florence-Darlington Technical College Salvador Macias, University of South Carolina Sumter Megan McIlreavy, Coastal Carolina University

Tennessee

Clark McKinney, Southwest Tennessee Community College

Texas

Terra Bartee, Cisco College Wanda Clark, South Plains College Trina Cowan, Northwest Vista College Stephanie Ding, Del Mar College Jim Francis, San Jacinto College-South Robert Gates, Cisco College Jerry Green, Tarrant County College-Northeast Campus Heather Hill, St. Mary's University Michael Miller, Navarro College Jean Raniseski, Alvin Community College Darla Rocha, San Jacinto College Victoria Van Wie, Lone Star College-CyFair Kristin Wilborn, University of Houston Kim Wombles, Cisco College

Utah

Ann M. Berghout Austin, Utah State University Thomas J. Farrer, Brigham Young University Sam Hardy, Brigham Young University Shirlene Law, Utah State University Volkan Sahin, Weber State University Julie Smart, *Utah State University*

Virginia

Christopher Arra, Northern Virginia Community College-Woodbridge

Geri M. Lotze, Virginia Commonwealth University Stephan Prifti, George Mason University

Steve Wisecarver, Lord Fairfax Community College

Washington

Pamela Costa, Tacoma Community College Dan Ferguson, Walla Walla Community College Amy Kassler, South Puget Sound Community College Staci Simmelink-Johnson, Walla Walla Community College

Wyoming

Ruth Doyle, Casper College

Australia

Laurie Chapin, Victoria University

Canada

Lillian Campbell, Humber College Lauren Polvere, Concordia University

REVIEWER CONFERENCE PARTICIPANTS

Ann Englert, California State Polytechnic University, Pomona Kathleen Hopkins, SUNY Rockland Community College David P. Hurford, Pittsburg State University Richard Kandus, Mt. San Jacinto College Yuthika Kim, Oklahoma City Community College Dorothy Marsil, Kennesaw State University Julie McIntyre, The Sage Colleges Carol Miller, Anne Arundel Community College Steve Wisecarver, Lord Fairfax Community College

TEXT FOCUS GROUPS

Teneinger Abrom-Johnson, Prairie View A&M University Triin Anton, *University of Arizona* A. Nayena Blankson, Valencia Community College Gina Brelsford, Penn State Harrisburg Guyla Davis, Ouachita Baptist University Mark Davis, University of West Alabama Ann Englert, California State Polytechnic University, Pomona Jessica Hehman, University of Redlands Diana Joy, Community College of Denver Richard Kandus, Mt. San Jacinto College Yuthika Kim, Oklahoma City Community College Carolyn Lorente, North Virginia Community College Connie Manos-Andrea, Inver Hills Community College Dorothy Marsil, Kennesaw State University Denise McClung, West Virginia University at Parkersburg

of San Diego Julie McIntyre, The Sage Colleges Robin Montvilo, Rhode Island College Natasha Otto, Morgan State University

Rachel M. Petty, University of the District of Columbia

David F. McGrevy, San Diego Mesa College and University

Marc Wolpoff, Riverside City College Christine Ziegler, Kennesaw State University

SUPPLEMENTS FOCUS GROUP

Darin LaMar Baskin, Houston Community College
Trina Cowan, Northwest Vista College
Mark Evans, Tarrant County College
Jerry Green, Tarrant County College
David P. Hurford, Pittsburg State University
Diana Joy, Community College of Denver
Rose Mary Istre, San Jacinto College
Yuthika Kim, Oklahoma City Community College

Franz Klutschkowski, North Central Texas College Dorothy Marsil, Kennesaw State University Darla Rocha, San Jacinto College-North

STUDENT REVIEWERS

Kacie Farrar Easha Khanam Christina Kroder Heather Lacis Samantha Piterniak Kaleigh Sankowski

STUDENT FOCUS GROUP PARTICIPANTS

Krista Anderson Hope Foreback Noelle Armstrong **Bailey Francis** Tori Bailey Leslie Frantz Alaynah Bakosh David Garcia **Kevin Barnes** Shannon Gogel Blake Bender Eric Gould Heather Bennett Che Grippon Dolly M. Guadalupe Ashlie Bogenschutz Chelsea Boyd Lucia Guerrero Bianca Brown Daniel Guillen Jasmine Brown Cassandra Hagan Kelsie Brown Jamie Hall Victor Calderon Ashton Hooper Antony Karanja Myndi Casey Flor Cerda Jesse Klaucke Kolbi Chaffin Joshua Laboy Jose Gabriel Checo Ashley Lacy Percilla Colley Abta Laylor Nicole Collier Janella Leach Alexandria Cornell Julien Lima Brandon Culver Kelsey Love Jayson De Leon Erica Lynn Cody Decker Chelsey Mann Melissa Methaney Tiarra Edwards Michelle England Nick McCommon Nicole Evans Kristie McCormick Emma Fialka-Feldman **Emily McWilliams**

Claudia Mendez Krystle Mercado Ashley Minning Paul Mitchell Sarah Mocherniak Francisco Moncada Isaiah Moore Juan Moreno **Austin Morris** Jodie Mudd Tia Nguyen Jacob Nieves Tiffany Potemra Veronica Poul Michelle Richardson David Riffle Trey Robb Kristin Serkowski

Amber Thichangthong Marilyn Toribio Tugce Tuskan Kelci Wallace Edyta Werner Ashley Williams

Richard Stillman

Chapter 1

A Cultural Approach to Human Development

SECTION 1 HUMAN DEVELOPMENT TODAY AND ITS ORIGINS

A Demographic Profile of Humanity

Population Growth and Change Variations Across Countries Variations Within Countries

Human Origins: The Rise of a Cultural and Global Species

Our Evolutionary Beginnings The Origin of Cultures and Civilizations Human Evolution and Human Development Today

SECTION 2 THEORIES OF HUMAN DEVELOPMENT

Ancient Conceptions

Conceptions of Development in Three Traditions

Scientific Conceptions

Freud's Psychosexual Theory Erikson's Psychosocial Theory Bronfenbrenner's Ecological Theory A Cultural-Developmental Model for This Text

SECTION 3 HOW WE STUDY HUMAN DEVELOPMENT

The Scientific Method

The Five Steps of the Scientific Method

Research Measurements, Designs, and Ethics

Research Measurements Research Designs Ethics in Human Development Research THE CHINESE HAVE AN EXPRESSION FOR THE LIMITED WAY ALL OF US LEARN TO SEE THE WORLD: *jing di zhi wa*, meaning "frog in the bottom of a well." The expression comes from a fable about a frog that has lived its entire life in a small well. The frog assumes that its tiny world is all there is, and has no idea of the true size of the world. It is only when a passing turtle tells the frog of the great ocean to the east that the frog realizes there is much more to the world than it had known.

All of us are like that frog. We grow up as members of a culture and learn, through direct and indirect teaching, to see the world from the perspective that becomes most familiar to us. Because the people around us usually share that perspective, we seldom have cause to question it. Like the frog, we rarely suspect how big and diverse our human species really is.

The goal of this text is to rise out of the well together, by taking a cultural approach to understanding **human development**, the ways people grow and change across the life span. This means that the emphasis of the text is on how persons develop as members of a culture. **Culture** is the total pattern of a group's customs, beliefs, art, and technology. In other words, a culture is a group's common way of life, passed on from one generation to the next. From the day we are born, all of us experience our lives as members of a culture (sometimes more than one), and this profoundly influences how we develop, how we behave, how we think, how we see the world, and how we experience life.

Biology is important, too, of course, and at various points we will discuss the interaction between biological and cultural influences. However, human beings everywhere have essentially the same biological constitution, yet their paths through the life span are remarkably varied depending on the culture in which their development takes place.

As authors of this text, we will be your fellow frogs, your guides and companions as we rise with you out of the well to gaze at the broad, diverse, fascinating cultural panorama of the human journey. The text will introduce you to many variations in human development and cultural practices you may not have known about before, which may lead you to see your own development and your own cultural practices in a new light. You will also learn to analyze and critique research based on whether it does or does not take culture into account. By the time you finish this text, you should be able to *think culturally*.

The field of human development is different from fields like geology or astronomy in that everyone studying human development has direct personal experience with it. As two developing humans, age 60 (Jeff) and 51 (Lene), we certainly draw upon our life experiences in understanding human development and in presenting it to you in this text. Our experiences have been culturally diverse: one of us grew up in Denmark (Lene) and one in the U.S. (Jeff), and together we have lived in the U.S., Denmark, France, and India. We have also had the wonderful and informative experience of being parents to our twins, Paris and Miles, now 18 years old, and we will occasionally share stories from their childhood that illustrate concepts presented in the text. However, we will also emphasize that although your personal experience is an important source of insights into human development, it may not be reflective of how most humans develop, either now or in the human past. In fact, if you have grown up in the United States, Canada, or Europe, you will find that your experience is in many ways highly unusual compared to most other people. Once you get to the top of the well—and we hope to bring you there, by the end of the text-you will see that human development is marvelously variable in ways you may find astonishing and remarkable.

In this chapter, we set the stage for the rest of the text. The first section provides a broad summary of human life today around the world, as well as an examination of

how cultures developed out of our common evolutionary history. In the second section, we look at the history of theoretical conceptions of human development along with a new cultural-developmental model that will be the framework for this text. Finally, the third section

Watch

provides an overview of human development as a scientific field. We review the steps and tools of the scientific method, including distinctive opportunities and challenges of conducting research across the life span and across cultures.

CHAPTER INTRODUCTION: A CULTURAL APPROACH TO HUMAN DEVELOPMENT

4 Chapter 1

SECTION 1 HUMAN DEVELOPMENT TODAY AND ITS ORIGINS



Learning Objectives

- **1.1** Describe how the human population has changed over the past 10,000 years and explain why the United States is following a different demographic path than other developed countries.
- 1.2 Distinguish between developed countries and developing countries in terms of income, education, and cultural values.
- **1.3** Define the term *socioeconomic status* (SES) and explain why SES, gender, and ethnicity are important aspects of human development within countries.
- **1.4** Explain the process of natural selection and trace the evolutionary origins of the human species.
- **1.5** Summarize the major changes in human cultures since the Upper Paleolithic period.
- **1.6** Apply information about human evolution to how human development takes place today.

HUMAN DEVELOPMENT TODAY AND ITS ORIGINS:

A Demographic Profile of Humanity

Since the goal of this text is to provide you with an understanding of how human development takes place in cultures all around the world, let's begin with a demographic profile of the world's human population in the early 21st century.

Population Growth and Change

LO 1.1 Describe how the human population has changed over the past 10,000 years and explain why the United States is following a different demographic path than other developed countries.

Perhaps the most striking demographic feature of the human population today is its sheer size. For most of history the total human population was under 10 million (McFalls, 2007). Women typically had from four to eight children, but most of the children died in infancy or childhood and never reached reproductive age. The human population began to increase notably around 10,000 years ago, with the development of agriculture and domestication of animals (Diamond, 1992).

Population growth in the millennia that followed was very slow, and it was not until about 400 years ago that the world population reached 500 million persons. Since that time, and especially in the past century, population growth has accelerated at an astonishing rate. As you can see in Figure 1.1, the total population passed the one billion threshold around the year 1800. Then came the medical advances of the

human development

ways people grow and change across the life span; includes people's biological, cognitive, psychological, and social functioning

culture

total pattern of a group's customs, beliefs, art, and technology

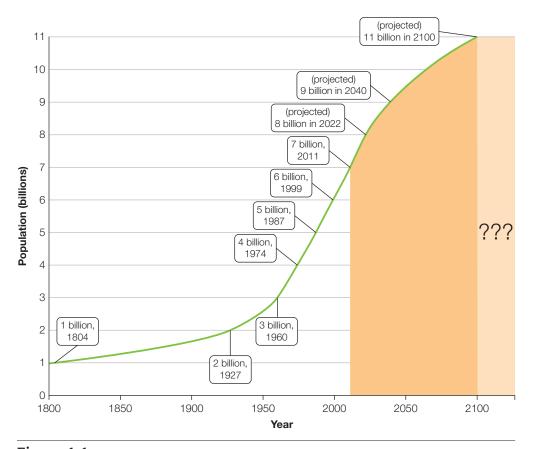


Figure 1.1 World Population Growth What happened in recent human history to cause population to rise so dramatically? SOURCE: United Nations (2017).

How high will the human population go? This is difficult to

20th century, and the elimination or sharp reduction of deadly diseases like smallpox, typhus, diphtheria, and cholera. Subsequently, the human population reached 2 billion by 1930, then tripled to 6 billion by 1999. The 7-billion threshold was surpassed just 12 years later, in early 2011. As of 2018, the total human population is about 7.6 billion.

say, but most projections indicate it will rise to 11 billion by 2100 and thereafter stabilize and perhaps slightly decline (United Nations, 2017). This forecast is based on the worldwide decline in birth rates that has taken place in recent years. The total fertility rate (TFR) (number of births per woman) worldwide is currently 2.5, which is substantially higher than the rate of 2.1 that is the replacement rate of a stable population. However, the TFR has been declining sharply for over a decade and will decline to 2.1 by 2050 if current trends con-

The population increase from now to 2100 will not take place equally around the world. On the contrary, there is a stark "global demographic divide" between the wealthy, economically developed countries that make up less than 20% of the world's population and the economically developing countries that contain the majority of the world's population (Haub & Gribble, 2011).

tinue (Population Reference Bureau, 2014).

total fertility rate (TFR)

in a population, the number of births per woman

Nearly all the world population growth from now to 2100 will take place in developing countries. Pictured here is a busy street in Jodhpur, India.



developed countries

world's most economically developed and affluent countries, with the highest median levels of income and education

developing countries

countries that have lower levels of income and education than developed countries but are experiencing rapid economic growth

Nearly all the population growth in the decades to come will take place in the economically developing countries. In contrast, nearly all wealthy countries are expected to decline in population during this period and beyond, because they have fertility rates that are well below replacement rate.

For the purposes of this text, we'll use the term **developed countries** to refer to the most affluent countries in the world. Classifications of developed countries vary, but usually this designation includes the United States, Canada, Japan, South Korea, Australia, New Zealand, Chile, and nearly all the countries of Europe (Organization for Economic Cooperation and Development [OECD], 2014). (The term "Western countries" is sometimes used to refer to most developed countries, because they are in the Western hemisphere, except Japan and South Korea, which are considered Eastern countries.) For our discussion, developed countries will be contrasted with **developing** countries, which have less wealth than the developed countries but are experiencing rapid economic growth as they join the globalized economy. Many developing countries are changing rapidly today. For example, India is a developing country, and most of its people live on an income of less than two dollars a day (United Nations Development Program [UNDP], 2018). About half of Indian children are underweight and malnourished (World Bank, 2011; UNICEF, 2017). Less than half of Indian adolescents complete secondary school. Only about half of adult women are literate, and about three-fourths of adult men. About two-thirds of India's population lives in rural villages, although there is a massive migration occurring from rural to urban areas, led mostly by young people. However, India's economy has been booming for the past 2 decades, lifting hundreds of millions of Indians out of poverty (UNDP, 2018). India is now a world leader in manufacturing, telecommunications, and services. If the economy continues to grow at its present pace, India will lead the world in economic production by 2050 (Price Waterhouse Coopers, 2011). Life is changing rapidly for Indians, and children born today are likely to experience much different economic and cultural contexts than their parents or grandparents have known.

Cultural Focus: Niger and the Netherlands: An Up-Close Look at the Demographic Divide

The stark global demographic divide can be illustrated by comparing Niger and the Netherlands, two countries with similar population sizes of 17 million in 2013. By 2050, Niger is projected to nearly quadruple its population to 66 million, whereas the population of the Netherlands will likely only grow very slowly to 18 million. At the root of this divide are differences in the average number of births per woman and the share of the population in their childbearing years. As Table 1.1 shows, women's total fertility rate in Niger is more than four times the rate of Dutch women. Also, one half of Niger's population is younger than age 15, compared to 17% of the Netherland's population. For more information on the global demographic divide and its implications for human development, watch the video The Demographic Divide.

Review Question:

Can you think of some ways that a high ratio of children to adults in a country might influence psychological development?

Table 1.1 The Demographic Divide: Niger and the Netherlands

	Niger	Netherlands
Population in 2013	17 million	17 million
Population Projected for 2050	66 million	18 million
Total Fertility Rate	7.6	1.7
Total Annual Births	845,000	176,000
Total Annual Deaths	195,000	141,000
Population Below Age 15	50%	17%
Life Expectancy at Birth	57 years	81 years
Infant Mortality Rate per 1,000 Births	51.0	3.7

SOURCE: Population Reference Bureau (2013)



The current population of developing countries is about 6.3 billion, about 80% of the world's population, and the population of developed countries is 1.3 billion, about 20% of the total world population (UNDP, 2018). Among developed countries, the United States is one of the few likely to gain rather than lose population in the next few decades. As of 2018 there are about 325 million persons in the United States, but by 2050 there will be 400 million. Nearly all the other developed countries are expected to decline in population between now and 2050. The decline will be steepest in Japan, which is projected to drop from a current population of 125 million to just 97 million by 2050, due to a low fertility rate and virtually no immigration (OECD Insights, 2016).

There are two reasons why the United States is following a different demographic path than most other developed countries. First, the United States has a total fertility rate of 1.8, which is slightly below the replacement rate of 2.1 but still higher than the TFR in most other developed countries (World Bank, 2017). Second, and more importantly, the United States allows more legal immigration than most other developed countries do, and there are millions of undocumented immigrants as well (Suárez-Orozco, 2015). The increase in population in the United States between now and 2050 will result entirely from immigration (Martin & Midgley, 2010). Both legal and undocumented immigrants to the United States come mainly from Mexico and Latin America, although many also come from Asia and other parts of the world.

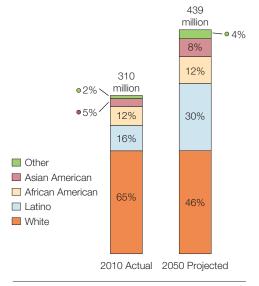


Figure 1.2 Projected Ethnic Changes in the U.S. Population to 2050

Which ethnic group is projected to change the most in the coming decades, and why?

SOURCE: Based on Kaiser Family Foundation (2013).

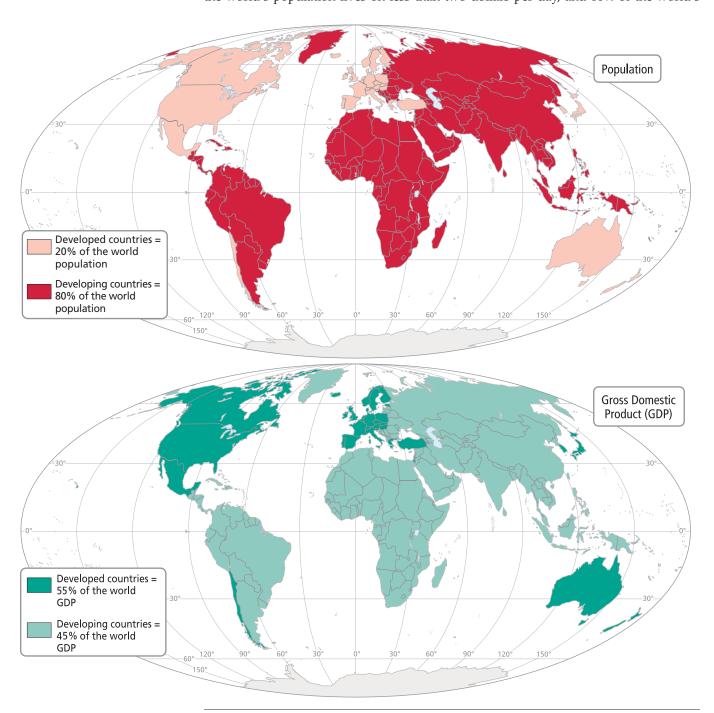
Consequently, as Figure 1.2 shows, by 2050 the proportion of the U.S. population that is Latino is projected to rise from 16% to 30%. Canada also has relatively open immigration policies, so Canada, too, may avoid the population decline that is projected for most developed countries (DeParle, 2010).

Critical Thinking Question: What kinds of public policy changes might be necessary in the United States between now and 2050 to adapt to 75 million more immigrants and a rise in the proportion of Latinos to 30%?

Variations Across Countries

LO 1.2 Distinguish between developed countries and developing countries in terms of income, education, and cultural values.

The demographic contrast between developed countries and the rest of the world is striking. As you can see from Map 1.1, this is not only with respect to population but also in other key areas, such as income and education. With respect to income, about 40% of the world's population lives on less than two dollars per day, and 80% of the world's



Map 1.1 Worldwide Variations in Population and Income Levels

Developed countries represent only 20% of the world population, yet they are much wealthier than developing countries. At what point in its economic development should a developing country be reclassified as a developed country?

SOURCE: Population Reference Bureau (2014), United Nations (2017).

population lives on a family income of less than \$6,000 per year (Population Reference Bureau, 2014). At one extreme are the developed countries, where 9 of 10 persons are in the top 20% of the global income distribution, and at the other extreme is southern Africa, where half of the population is in the bottom 20% of global income. Africa's economic growth has been strong for the past decade, but it remains the poorest region in the world (McKinsey Global Institute, 2010; UNDP, 2015).

A similar contrast between rich and poor countries exists regarding education. Your experience as a college student is a rare and privileged status in most of the world. In developed countries, virtually all children obtain primary and secondary education, and about 50% go on to tertiary education (college or other postsecondary training). However, in developing countries about 20% of children do not complete primary

school and only about half are enrolled in secondary school (UNDP, 2018). College and other tertiary education is only for the wealthy elite.

There are also some broad cultural differences between developed and developing countries, even though each category is very diverse. One important difference is that the cultures of developed countries tend to be based on individualistic values such as independence and self-expression, especially in Western developed countries (Greenfield, 2005; Hermans, 2015). In contrast, developing countries tend to prize collectivistic values such as obedience and group harmony (Sullivan & Cottone, 2010). These are not mutually exclusive categories and each country has some balance between individualistic and collectivistic values (Kağitçibaşi & Yalin, 2015). Furthermore, most countries contain a variety of cultures, some of which may be relatively individualistic whereas others are relatively collectivistic. Nevertheless, the overall distinction between individualism and collectivism is useful for describing broad differences between cultural groups.

Within developing countries there is often a sharp divide between rural and urban areas, with people in urban areas having higher incomes and receiving more education and better medical care. Often, the lives of middle-class persons in urban areas of developing countries resemble the lives of people in developed countries in many ways, yet they are much different than people in rural areas of their own countries (UNDP, 2018). In this text, the term traditional cultures will be used to refer to people in the rural areas of developing countries, who tend to adhere more closely to the historical traditions of their culture than people in urban areas do. Traditional cultures tend to be more collectivistic than other cultures are, in part because in rural areas close ties with others are often an economic necessity (Gaskins, 2018; Sullivan & Cottone, 2010).

This demographic profile of humanity today demonstrates that if you wish to understand human development, it is crucial to understand the lives of people in developing countries, who comprise the majority of the world's population. The tendency in most social science research, especially in psychology, has been to ignore or strip away culture in pursuit of universal principles of development (Jensen, 2011; Rozin, 2006). Most research on human development is on the 20% of the world's population that lives in developed countries—especially the 5% of the world's population that lives in the United States because research requires money and developed countries can afford more of it than developing countries can (Arnett, 2008). This is changing, and in recent years psychologists and other social scientists have paid more attention to the role of culture in human development (Bornstein, 2010; Goodnow & Lawrence, 2015; Jensen, 2015). By now, researchers have presented descriptions of human development in places all over the world, and researchers studying American society have increased their attention to cultures within the United States that are outside of the White middle class.



By age 10, many children in developing countries are no longer in school. Here, a child in Cameroon helps his mother make flour.

individualistic

cultural values such as independence and selfexpression

collectivistic

cultural values such as obedience and group harmony

traditional culture

in developing countries, a rural culture that adheres more closely to cultural traditions than people in urban areas do

globalization

increasing connections between different parts of the world in trade, travel, migration, and communication

Expanding our awareness of humanity's cultural diversity also has many practical applications. Increasingly the world is approaching the global village that the social philosopher Marshall McLuhan (1960) forecast over half a century ago. In recent decades there has been an acceleration in the process of globalization, which refers to the increasing connections between different parts of the world in trade, travel, migration, and communication (Arnett, 2002; Hermans, 2015; Jensen et al., 2012). Consequently, wherever you live in the world, in the course of your personal and professional life you are likely to have many contacts with people of diverse cultures. Those of you going into the nursing profession may one day have patients who have a cultural background in various parts of Asia or South America. Those of you pursuing careers in education will likely teach students whose families emigrated from countries in Africa or Europe. Your coworkers, your neighbors, and possibly your friends and family members may include people from a variety of different cultural backgrounds. Through the internet you may have contact with people all over the world, via email, Facebook and other social media, YouTube, and new technologies to come. Thus, understanding the cultural approach to human development is likely to be useful in all aspects of life, helping you to communicate with and understand the perspectives of many different people in a diverse, globalized world.

Variations Within Countries

LO 1.3 Define the term socioeconomic status (SES) and explain why SES, gender, and ethnicity are important aspects of human development within countries.

The contrast between developed countries and developing countries will be used often in this text, as a general way of drawing a contrast between human development in relatively rich and relatively poor countries. However, it should be noted that there is substantial variation within each of these categories. All developed countries are relatively wealthy, but human development in Japan is quite different from human development in France or Canada. All developing countries are less wealthy than developed countries, but human development in China is quite different than human development in Brazil or Niger. Throughout the text we will explore variations in human development within the broad categories of developed countries and developing countries.

Not only is there important variation in human development within each category of developed and developing countries, but there is additional variation within each country. Most countries today have a majority culture that sets most of the norms and standards and holds most of the positions of political, economic, intellectual, and media power (García Coll et al., 1996; Marks et al., 2015). In addition, there may be many minority cultures defined by ethnicity, religion, language, or other characteristics.

Variations in human development also occur due to differences within countries in the settings and circumstances of individual lives. The settings and circumstances that contribute to variations in pathways of human development are called contexts. Contexts include environmental settings such as family, peers, school, work, religious institutions, and media, all of which will be discussed in this text. Three other important aspects of variation that will be highlighted are socioeconomic status, gender, and ethnicity.

The term socioeconomic status (SES) is often used to refer to a person's social class, which includes educational level, income level, and occupational status. For children and adolescents, because they have not yet reached the social-class level they will have as adults, SES is usually used in reference to their parents' levels of education, income, and occupation. In most countries, SES is highly important in shaping human development. It influences everything from the risk of infant mortality, to the quality and duration of children's education, to the kind of work adults do, to the likelihood of obtaining health care in late adulthood. Differences in SES are especially sharp in developing countries (UNDP, 2018). In a country such as India or Egypt or Peru, growing up as a member of the upper-class SES elite is very different from growing

majority culture

within a country, the cultural group that sets most of the norms and standards and holds most of the positions of political, economic, intellectual, and media power

contexts

settings and circumstances that contribute to variations in pathways of human development, including SES, gender, and ethnicity, as well as family, school, work, religious institutions, and media

socioeconomic status (SES)

person's social class, including educational level, income level, and occupational status

up as a member of the relatively poor majority, in terms of access to resources such as health care and education. However, even in developed countries there are important SES differences in access to resources throughout the course of human development. For example, in the United States infant mortality is higher among low-SES families than among high-SES families, in part because low-SES mothers are less likely to receive prenatal care (Elder et al., 2016).

Gender is a key factor in development throughout the life span, in every culture (UNDP, 2018). The expectations cultures have for males and females are different from the time they are born (Hatfield & Rapson, 2005). However, the degree of the differences varies greatly among cultures. In most developed countries today, the differences are relatively blurred: Men and women hold many of the same jobs, wear many of the same clothes (e.g., jeans, T-shirts), and enjoy many of the same entertainments. If you have grown up in a developed country, you may be surprised to learn in the chapters to come how deep gender differences go in many cultures. Nevertheless, gender-specific expectations exist in developed countries, too, as we will see.

Finally, ethnicity is a crucial part of human development. Ethnicity may include a variety of components, such as cultural origin, cultural traditions, race, religion, and language. Minority ethnic groups may arise as a consequence of immigration. There are also countries in which ethnic groups have a long-standing presence and may even have arrived before the majority culture. For example, Aboriginal peoples lived in Australia for many millennia before the first European settlers arrived. Many African countries were constructed by European colonial powers in the 19th century and consist of people of a variety of ethnicities, each of whom has lived in their region for many generations. Often, ethnic minorities within countries have distinct cultural patterns that are different from those of the majority culture. For example, in the Canadian majority culture, premarital sex is common, but in the large Asian Canadian minority group, female virginity at marriage is still highly valued (Sears, 2012). In many developed countries, most of the ethnic minority groups have values that are less individualistic and more collectivistic than in the majority culture (Suárez-Orozco, 2015).

Ethnic minority cultures often retain distinctive rituals. Here, a Latina girl and her family in the United States celebrate her quinceañera (coming-of-age).

ethnicity

group identity that may include components such as cultural origin, cultural traditions, race, religion, and language

HUMAN DEVELOPMENT TODAY AND ITS ORIGINS: Human Origins: The Rise of a Cultural and Global Species

Using a cultural approach to human development, we will see that humans are fabulously diverse in how they live. But how did this diversity arise? Humans are one species, so how did so many different ways of life develop from one biological origin?

According to biologists, all animals have evolved to fit the conditions of an **ecological niche**, which is a set of environmental conditions in a particular place and time. For example, hummingbirds have evolved to have long, thin beaks that allow them to obtain nectar from deep within the bloom of a long, thin flower. You will find hummingbirds only in ecological niches that allow them to survive and reproduce by consuming the nectar of flowers that fit their evolved abilities. If, for some reason, those flowers disappeared, hummingbirds would have to evolve to adapt to other food sources, or become extinct.

The only species that is not confined to any specific ecological niche is us. Humans originally evolved in an ecological niche, the African savannah, as we will soon see.

ecological niche

the environmental conditions for which a given species has evolved

ontogenetic

typical pattern of individual development in a species

phylogenetic

pertaining to the development of a species

natural selection

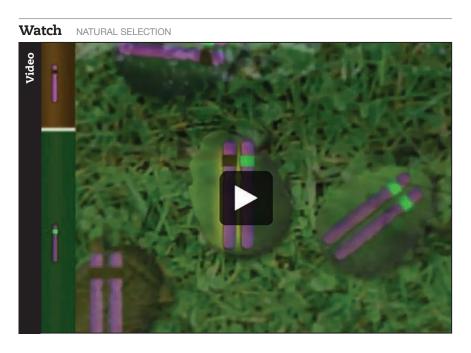
evolutionary process in which the offspring best adapted to their environment survive to produce offspring of their own

However, the characteristics we developed in the context of this niche, in particular our unusually large brains, made it possible for us to create cultural knowledge and customs that eventually enabled us to live anywhere, from the African savannah to the rain forests of South America to the deserts of Asia, and everywhere in between (Harari, 2015; Tomasello, 2010). We evolved into a cultural species, which eventually allowed us to become a global species. Before we turn our attention to the development of individuals-called ontogenetic development-it is important to understand our phylogenetic development; that is, the development of the human species. Let's take a brief tour now of human evolutionary history, as a foundation for understanding the birth of culture and the historical context of individual human development today. For students who hold religious beliefs that may lead them to object to evolutionary theory, we understand that you may find this part of the text challenging, but it is nevertheless important to know about the theory of evolution and the evidence supporting it, as this is the view of human origins accepted by virtually all scientists.

Our Evolutionary Beginnings

LO 1.4 Explain the process of natural selection and trace the evolutionary origins of the human species.

To understand human origins it is important to know a few basic principles of the theory of evolution, first proposed by Charles Darwin in 1859 in his book The Origin of Species. At the heart of the theory of evolution is the proposition that species change through the process of natural selection. In natural selection, the young of any species are born with variations on a wide range of characteristics. Some may be relatively large and others relatively small, some relatively fast and others relatively slow, and so on. Among the young, those who will be most likely to survive until they can reproduce will be the ones whose variations are best adapted to their environment. The video Natural Selection has more detail on this process.



When did human evolution begin? According to evolutionary biologists, humans, chimpanzees, and gorillas had a common primate ancestor until 6 to 8 million years ago (Shreeve, 2010). At about that time, this common ancestor split into three paths, leading to the development of humans, chimpanzees, and gorillas. The evolutionary line that eventually led to humans is known as the hominin line. The primate ancestor we share with chimpanzees and gorillas lived in Africa, and so did the early hominins, as chimpanzees and gorillas do today.

hominin

evolutionary line that led to modern humans

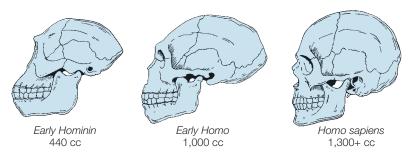


Figure 1.3 Changes in Brain Size in Early Humans

By 200,000 years ago the early hominin species had evolved into our species, **Homo sapiens** (Shreeve, 2010; Wilson, 2012). During the millions of years of evolution that led to Homo sapiens, several characteristics developed that made us distinct from earlier hominins and from other primates:

Homo sapiens species of modern humans

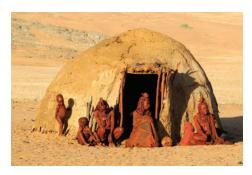
- 1. *Larger brain*. The most striking and important change during this period was the size of early *Homo's* brain, which became over twice as large as the brain of early hominins, as shown in **Figure 1.3** (brain sizes are shown in cubic centimeters [cc]).
- 2. *Wider pelvis, females.* The female *Homo's* pelvis became wider to allow the birth of bigger-brained babies.
- **3.** Longer dependency. The larger brains of early *Homo* babies were also less mature than in earlier hominins, resulting in a longer period of infant and childhood dependency.
- 4. *Development of tools*. Creating tools enhanced early *Homo's* success in obtaining food. The earliest tools were made by striking one stone against another to create a sharp edge. The tools may have been used for purposes such as slicing meat and whittling wood into sharp sticks for hunting.
- **5.** *Control of fire.* Controlled use of fire enabled our early ancestors to cook food, and because cooked food is used much more efficiently by the body than raw food, this led to another burst in brain size (Wrangham, 2009).





Humans evolved to be capable of living in a wide range of environments.





hunter-gatherer

social and economic system in which economic life is based on hunting (mostly by males) and gathering edible plants (mostly by females)

Upper Paleolithic period

period of human history from 50,000 to 10,000 years ago, when distinct human cultures first developed

Neolithic period

era of human history from 10,000 to 5,000 years ago, when animals and plants were first domesticated The long period of infant dependency may have made it difficult for early *Homo* mothers to travel for long distances to accompany males on hunting or scavenging expeditions (Wrangham, 2009). So, a **hunter-gatherer** way of life developed, in which females remained in a relatively stable home base, caring for children and gathering edible plants in the local area, while males went out to hunt or scavenge.

At some point between 125,000 and 60,000 years ago, *Homo sapiens* migrated out of Africa. Over time, these humans replaced other hominin species (such as Neanderthals) who had left Africa earlier (Meredith, 2011). In contrast to their nearest great ape relatives, who all still live close to the equator in Africa, humans adapted to life in highly different environments. For example, evidence indicates that at least 45,000 years ago humans lived in the Arctic (Gibbons, 2016). Successfully surviving in vastly different environments requires the highly flexible set of cognitive skills afforded by the human brain. As we will see next, successful human survival across the globe also requires the ability to form cultural communities and complex social institutions (Tomasello, 2010).

The Origin of Cultures and Civilizations

LO 1.5 Summarize the major changes in human cultures since the Upper Paleolithic period.

Physically, *Homo sapiens* has changed little from 200,000 years ago to the present. However, a dramatic change in the development of the human species took place during the **Upper Paleolithic period** from 50,000 to about 10,000 years ago, summarized in **Figure 1.4** (Ember et al., 2011; Wilson, 2012). For the first time, art appeared: musical instruments; paintings on cave walls; small ivory beads attached to clothes; decorative objects made from bone, antler, or shell; and human and animal figures carved from ivory or sculpted from clay.

Several other important changes marked the Upper Paleolithic, in addition to the beginning of artistic production:

- Humans began to bury their dead, sometimes including art objects in the graves.
- Trade took place between human groups.
- There was a rapid acceleration in the development of tools, including the bow and arrow, a spear thrower, and the harpoon.
- The first boats were invented, allowing humans to reach and populate Australia and New Guinea.
- For the first time, cultural differences developed between human groups, as reflected in their art, tools, and burial practices.

Why this sudden burst of changes during the Upper Paleolithic, when there is no evidence for changes in the brain or body? Many explanations have been proposed, but there is little definite evidence (Wrangham, 2009). So, for now the source of the revolutionary changes of the Upper Paleolithic remains a mystery.

The next period of dramatic change, from 10,000 years ago to about 5,000 years ago, is known as the **Neolithic period** (Johnson, 2005). During this time, humans broadened their food sources by cultivating plants and domesticating animals. The key contributor to this advance was climate change. The Upper Paleolithic was the time of the last Ice Age, when average global temperatures were about 50 degrees Fahrenheit (10 degrees Celsius) below today's temperatures. Glaciers covered Europe as far south as present-day Berlin, and in North America, as far south as what is now Chicago. By the Neolithic period the climate was much warmer, resembling our climate today.

As the climate became warmer and wetter, new plants evolved that were good human food sources, and humans began to produce more of the ones they liked best. The huge animals that had been hunted during the Upper Paleolithic became extinct, perhaps from overhunting, perhaps because the animals failed to adapt to the climate changes (Diamond, 1992). Domestication of animals may have developed as a food source to

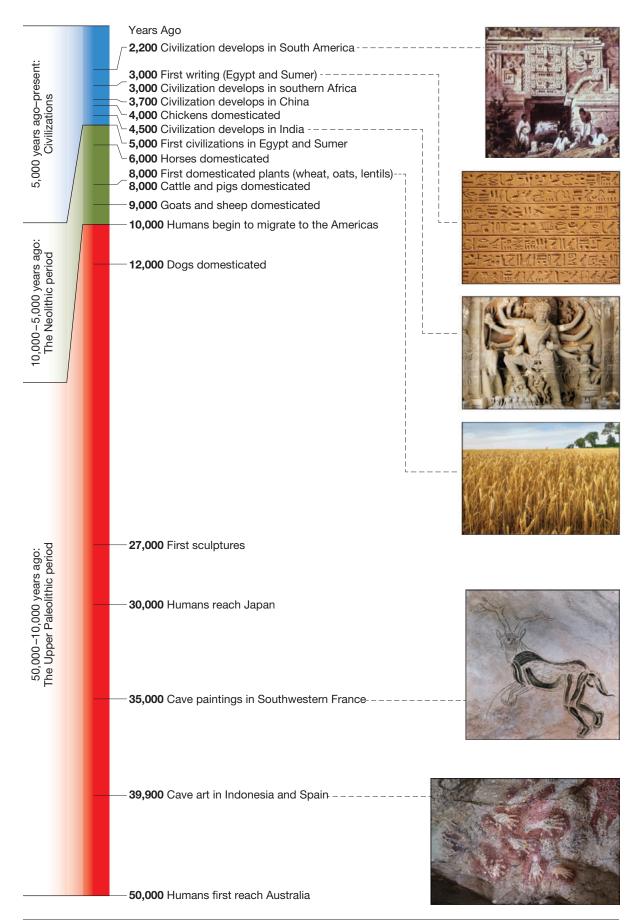


Figure 1.4 Key Changes in Human Species Development, Past 50,000 Years

civilization

form of human social life, beginning about 5,000 years ago, that includes cities, writing, occupational specialization, and states

state

centralized political system that is an essential feature of a civilization

evolutionary psychology

branch of psychology that examines how patterns of human functioning and behavior have resulted from adaptations to evolutionary conditions

replace the extinct animals. Along with agriculture and animal care came new tools: mortars and pestles for processing plants into food, and the spindle and loom for weaving cotton and wool into clothing. Larger, sturdier dwellings were built (and furniture such as beds and tables) because people stayed in settled communities longer to tend their plants and animals.

The final major historical change that provides the basis for how we live today began around 5,000 years ago with the development of civilization (Ridley, 2010). The characteristics that mark civilization include cities, writing, specialization into different kinds of work, differences among people in wealth and status, and a centralized political system known as a state. The first civilizations developed around the same time in Egypt and Sumer (part of what is now Iraq). Because people in these civilizations kept written records and produced many goods, we have a lot of information about how they lived. We know they had laws and sewer systems, and that their social classes included priests, soldiers, craftsmen, government workers, and slaves. We know they built monuments to their leaders, such as the pyramids that still stand today in Egypt. They produced a vast range of goods, including jewelry, sculpture, sailboats, wheeled wagons, and swords. Later civilizations developed in India (around 4,500 years ago), China (around 3,700 years ago), southern Africa (around 3,000 years ago), the Mediterranean area (Greece and Rome, around 2,700 years ago), and South America (around 2,200 years ago).

Why did civilizations and states arise? As agricultural production became more efficient, especially after the invention of irrigation, not everyone in a cultural group had to work on food production. This allowed some members of the group to be concentrated in cities, away from food-production areas, where they could specialize as merchants, artists, bureaucrats, and religious and political leaders. Furthermore, as the use of irrigation expanded there was a need for a state to build and oversee the system, and as trade expanded there was a need for a state to build infrastructure such as roadways. Trade also connected people in larger cultural groups that could be united into a common state (Ridley, 2010).

Human Evolution and Human Development Today

LO 1.6 Apply information about human evolution to how human development takes place today.

What does this history of our development as a species tell us about human development today? First, it is important to recognize that the way each of us develops today is based partly on our evolutionary history. We still share many characteristics with our hominin relatives and ancestors, such as a large brain compared to our body size, a relatively long period of childhood dependence on adults before reaching maturity, and cooperative living in social groups. Researchers working in the field of evolutionary psychology claim that many other characteristics of human development are influenced by our evolutionary history, such as aggressiveness and mate selection (Crawford & Krebs, 2008). We will examine their claims in the course of the text.

A second important fact to note about our evolutionary history is that biologically we have changed little since the origin of *Homo sapiens* about 200,000 years ago, yet how we live has changed in astonishing ways (Ridley, 2010; Wilson, 2012). Although we are a species that originated in the grasslands and forests of Africa, now we live in every environment on earth, from mountains to deserts, from tropical jungles to the Arctic. Although we are a species that evolved to live in small groups of a few dozen persons, now most of us live in cities with thousands or even millions of other people. Although human females are capable of giving birth to at least eight children in the course of their reproductive lives, and probably did so through most of history, now most women have one, two, or three children—or perhaps none at all.

It is remarkable that an animal like us, which evolved in Africa and adapted through natural selection to a hunting-and-gathering way of life, could have developed over the past 50,000 years an astonishing array of cultures, most of which bear little resemblance to our hunter-gatherer origins. Once we developed the large brain that is the most distinctive characteristic of our species, we became capable of altering our environments, so that it was no longer natural selection alone that would determine how we would live, but the cultures we created. As far as we can tell from the fossil record, all early hominins lived in the same way (Shreeve, 2010). Even different groups of early *Homo sapiens* seem to have lived more or less alike before the Upper Paleolithic period, as hunters and gatherers in small groups.

Today there are hundreds of different cultures around the world, all part of the human community but each with its distinctive way of life. There are wide cultural variations in how we live, such as how we care for infants, what we expect from children, how we respond to the changes of puberty, and how we regard the elderly. As members of the species *Homo sapiens* we all share a similar biology, but cultures shape the raw material of biology into widely different paths through the life span.

It is culture that makes us unique as a species. As noted, other animals have evolved in ways that are adaptive for a particular ecological niche. They can learn in the course of their lifetimes, certainly, but the scope of their learning is limited (Haun, 2015). When their environment changes, if their species is to survive it will do so not by learning new skills required by a new environment but through a process of natural selection that will enable those best suited *genetically* to the new environmental conditions to survive long enough to reproduce, while the others do not.

In contrast, once humans developed the large brain we have now, it enabled us to survive in any environment by inventing and learning new skills and methods of survival, and then passing them along to others as part of a cultural way of life. We can survive and thrive even in conditions that are vastly different from our environment of evolutionary adaptation, because our capacity for cultural learning is so large and, compared to other animals, there is relatively little about us that is fixed by instinct.

Summary: HUMAN DEVELOPMENT TODAY AND ITS ORIGINS

LO 1.1 Describe how the human population has changed over the past 10,000 years and explain why the United States is following a different demographic path than other developed countries.

The total human population was under 10 million for most of history, but it rose from 2 billion in 1930 to 7 billion in 2011, and is expected to increase to 11 billion by 2100. Unlike most developed countries, the United States is projected to increase in population during the 21st century, due primarily to immigration.

LO 1.2 Distinguish between developed countries and developing countries in terms of income, education, and cultural values.

Most people in developing countries are poorer than most people in developed countries, and more likely to live in rural areas, but developing countries are experiencing rapid economic development and a massive migration to urban areas. Also, young people in developing countries are receiving increasing levels of education as their countries become wealthier and enter the global economy. In general, cultural values are more individualistic in developed countries and more collectivistic in developing countries.

LO 1.3 Define the term socioeconomic status (SES) and explain why SES, gender, and ethnicity are important aspects of human development within countries.

SES includes educational level, income level, and occupational status. It influences access to resources such as education and health care. Gender shapes expectations and opportunities in most cultures throughout life. Ethnicity often includes a distinct cultural identity.

LO 1.4 Explain the process of natural selection and trace the evolutionary origins of the human species.

Natural selection results in species change because the young who are best adapted to the environment will be most likely to survive and reproduce. Humans arose from earlier hominins and developed distinctive characteristics such as large brains, long infancy, tool use, and control of fire. Our species, *Homo sapiens*, first appeared about 200,000 years ago.

LO 1.5 Summarize the major changes in human cultures since the Upper Paleolithic period.

The Upper Paleolithic period (50,000–10,000 years ago) was the first time human cultures became distinct from

one another in their art and tools. During the Neolithic period (10,000–5,000 years ago), humans first domesticated plants and animals. The first civilizations around 5,000 years ago were marked by writing, specialized work, and a centralized state.

LO 1.6 Apply information about human evolution to how human development takes place today.

Humans are one species, but since the birth of culture, human groups have developed remarkably diverse ways of life. Our exceptionally large brain has allowed us to create cultural practices that enable us to live in a wide range of physical environments.

SECTION 2 THEORIES OF HUMAN DEVELOPMENT



Learning Objectives

- **1.7** Compare and contrast three ancient conceptions of development through the life span.
- **1.8** Summarize Freud's psychosexual theory of human development and describe its main limitations.
- **1.9** Describe the eight stages of Erikson's psychosocial theory of human development.
- **1.10** Define the five systems of Bronfenbrenner's ecological theory and explain how it differs from stage theories.
- **1.11** Outline the cultural-developmental model that will be the structure of this text and describe the new life stage of emerging adulthood.

THEORIES OF HUMAN DEVELOPMENT: Ancient Conceptions

Although human development is young as an area of the social sciences, people have been thinking for a long time about how we change with age throughout life (Arnett, 2017). In this section we examine three ancient ways of conceptualizing human development, summarized in **Figure 1.5**. As you read these conceptions, observe that all three were written by and for men only. The absence of women from these conceptions of human development reflects the fact that in most cultures throughout history, men have held most of the power and have often kept women excluded from areas such as religious leadership and philosophy that inspired life-stage conceptions.

Conceptions of Development in Three Traditions

LO 1.7 Compare and contrast three ancient conceptions of development through the life span.

Probably the oldest known conception of the life course is in the *Dharmashastras*, the sacred law books of the Hindu religion, first written about 3,000 years ago (Kakar, 1998; Rose, 2004). In this conception there are four stages of a man's life, each lasting about 25 years in an ideal life span of 100 years.

- 1. Apprentice, ages 0–25
- 2. Householder, ages 26–50
- 3. Forest dweller, ages 51–75
- 4. Renunciant, ages 75–100

The apprentice stage comprises childhood and adolescence. This is the stage in which a boy is dependent on his parents, as he grows up and learns the skills necessary for adult life. In the householder stage, the young man has married and is in charge of his own household. This is a time of many responsibilities, ranging from providing for a wife and family to taking care of elderly parents to engaging in productive work.

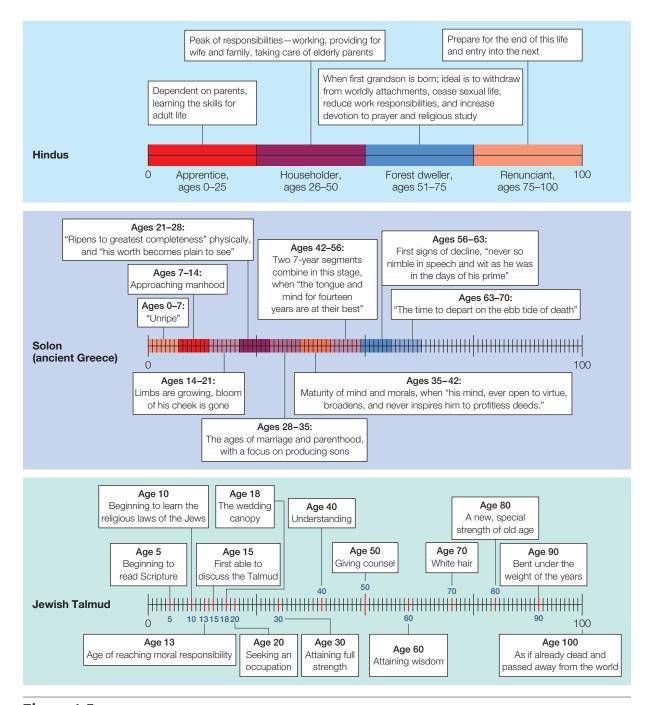


Figure 1.5 Life Stages in Three Traditions

The third stage, forest dweller, begins when a man's first grandson is born. The religious ideal in this stage is for a man to withdraw from the world and literally live in the forest, devoting himself to prayer and religious study, and cultivating patience and compassion. Few Hindus ever actually withdraw to the forest, but even those who remain within society are supposed to begin to withdraw from worldly attachments. This means an end to sexual life, a decline in work responsibilities, and the beginning of a transfer of household responsibilities to the sons of the family.

The final stage of life is that of renunciant. The renunciant goes even further than the forest dweller in rejecting worldly attachments. The purpose of life in this stage is simply to prepare for the end of this life and entry into the next. (Hindus believe in reincarnation.) Keep in mind, of course, that this stage begins at age 75, an age that few people

reached thousands of years ago when the Dharmashastras were written and that even now marks the beginning of a rather short stage of life for most people who reach it.

Another conception of life stages was proposed by Solon, a philosopher in ancient Greece about 2,500 years ago (Levinson, 1978). For Solon, the life span fell into 10 sevenyear segments lasting from birth to age 70.

Ages 0-7: A stage of being "unripe."

Ages 7–14: Signs of approaching manhood "show in the bud."

Ages 14-21: His limbs are growing, his chin is "touched with fleecy down," and the bloom of his cheek is gone.

Ages 21-28: Now the young man "ripens to greatest completeness" physically, and "his worth becomes plain to see."

Ages 28–35: The ages of marriage and parenthood, when "he bethinks him that this is the season for courting, bethinks him that sons will preserve and continue his line."

Ages 35-42: A stage of maturity of mind and morals, when "his mind, ever open to virtue, broadens, and never inspires him to profitless deeds."

Ages 42-56: Two 7-year segments combine in this stage, when "the tongue and mind for fourteen years are at their best."

Ages 56-63: The first signs of decline, when "he is able, but never so nimble in speech and wit as he was in the days of his prime."

Ages 63–70: The end of life. At this point the man "has come to the time to depart on the ebb tide of death." (Levinson, 1978, p. 326)

A third ancient conception of the life course comes from the Jewish holy book the Talmud, written about 1,500 years ago (Arnett, 2017). Like the Hindu Dharmashastras, the life course described in the Talmud goes up to age 100, but in smaller segments.

Age 5 is the age for beginning to read Scripture.

Age 10 is for beginning to learn the religious laws of the Jewish people.

Age 13 is the age of moral responsibility.

Age 15 is for first being able to discuss the Talmud.

Age 18 is for the wedding canopy.

Age 20 is for seeking an occupation.

Age 30 is for attaining full strength.

Age 40 is for understanding.

Age 50 is for giving counsel.

Age 60 is for becoming an elder and attaining wisdom.

Age 70 is for white hair.

Age 80 is for reaching a new, special strength of old age.

Age 90 is for being bent under the weight of the years.

Age 100 is for being as if already dead and passed away from the world.

Although the three conceptions of human development just presented were written in widely different places and times, they share certain similarities (Arnett, 2017). All are ideal conceptions, a portrayal of how we develop if all goes well: Preparation for life is made in youth, skills and expertise are gained in adulthood, and the peak of influence and status is reached in midlife. All three conceptions also see the final stages of life as a time of withdrawal and

decline.

In the life course according to the Jewish holy book the Talmud, 13 is the age of moral responsibility.



One important difference among the three ancient conceptions of human development is that they have very different ways of dividing up the life span, from just four stages in the Dharmashastras to 14 in the Talmud. This is a useful reminder that for humans the life span is not really divided into clear and definite biologically-based stages, the way an insect has stages of larva, juvenile, and adult. Instead, conceptions of human development are only partly biological—infants everywhere cannot walk or talk, adolescents everywhere experience puberty—and are also culturally and socially based.

THEORIES OF HUMAN **DEVELOPMENT:** Scientific Conceptions

The scientific study of human development has been around for a relatively short time, only about 120 years. During that time there have been three major ways of conceptualizing human development: the psychosexual approach, the psychosocial approach, and the ecological approach.

Freud's Psychosexual Theory

LO 1.8 Summarize Freud's psychosexual theory of human development and describe its main limitations.

The earliest scientific theory of human development was devised by Sigmund Freud (1856–1939), a physician in Vienna, Austria, in the late 19th century (Breger, 2000). Working with persons suffering from various mental health problems, Freud concluded that a consistent theme across patients was that they seemed to have experienced some kind of traumatic event in childhood. The trauma then became buried in their unconscious minds, or repressed, and continued thereafter to shape their personality and their mental functioning even though they could no longer remember it.

In an effort to address their problems, Freud developed the first method of psychotherapy, which he called *psychoanalysis*. The purpose of psychoanalysis was to bring patients' repressed memories from the unconscious into consciousness, through having them discuss their dreams and their childhood experiences while guided by the psychoanalyst. According to Freud, just making the repressed memories conscious would be enough to heal the patient.

Freud's experiences as a psychoanalyst were the basis of his **psychosexual theory**. He believed that sexual desire was the driving force behind human development. Sexual desire arises from a part of the mind Freud called the *id*, and operates on the basis of the *plea*sure principle, meaning that it constantly seeks immediate and unrestrained satisfaction. However, from early in childhood, adults in the environment teach the child to develop a conscience, or superego, that restricts the satisfaction of desires and makes the child feel guilty for disobeying. At the same time as the superego develops, an ego also develops that serves as a mediator between id and superego. The ego operates on the reality principle, allowing the child to seek satisfaction within the constraints imposed by the superego.

For Freud, everything important in development happens before adulthood. In fact, Freud viewed the personality as complete by age 6. Although sexual desire is the driving force behind human development throughout life in Freud's theory, the locus of the sexual drive shifts around the body during the course of early development. See Table 1.2 for a summary of Freud's stages. Infancy is the oral stage, when sexual sensations are concentrated in the mouth. Infants derive pleasure from sucking, chewing, and biting. The next stage, beginning at about a year and a half, is the anal stage, when sexual sensations are concentrated in the anus. Toddlers derive their greatest pleasure from the act of elimination and are fascinated by feces. The phallic stage, from about age 3 to 6, is the most important stage of all in Freud's theory. In this stage sexual sensations

psychosexual theory

Freud's theory proposing that sexual desire is the driving force behind human development

Table 1.2 Freud's Psychosexual Stages

Age period	Psychosexual stage	Main features
Infancy	Oral	Sexual sensations centered on the mouth; pleasure derived from sucking, chewing, biting
Toddlerhood	Anal	Sexual sensations centered on the anus; high interest in feces; pleasure derived from elimination
Early childhood	Phallic	Sexual sensations move to genitals; sexual desire for other-sex parent and fear of same-sex parent
Middle childhood	Latency	Sexual desires repressed; focus on developing social and cognitive skills
Adolescence	Genital	Reemergence of sexual desire, now directed outside the family

become located in the genitals, but the child's sexual desires are focused on the other-sex parent. Freud proposed that all children experience an *Oedipus complex* in which they desire to displace their same-sex parent and enjoy sexual access to the other-sex parent, as Oedipus did in the famous Greek myth.

According to Freud, the Oedipus complex is resolved when the child, fearing that the same-sex parent will punish his or her incestuous desires, gives up those desires and instead identifies with the same-sex parent, seeking to become more similar to that parent. In Freud's theory this leads to the fourth stage of psychosexual development, the *latency stage*, lasting from about age 6 until puberty. During this period, the child represses sexual desires and focuses the energy from those desires on learning social and intellectual skills.

The fifth and last stage in Freud's theory is the *genital stage*, from puberty onward. The sexual drive reemerges, but this time in a way approved by the superego, directed toward persons outside the family.

From our perspective today, it's easy to see plenty of gaping holes in psychosexual theory (Breger, 2000). Sexuality is certainly an important part of human development, but human behavior is complex and cannot be reduced to a single motive. Also, although his theory emphasizes the crucial importance of the first 6 years of life, Freud never studied children. His view of childhood was based on the retrospective accounts of patients who came to him for psychoanalysis, mainly upper-class women in Vienna. (Yet, ironically, his psychosexual theory emphasized boys' development and virtually ignored girls.) Nevertheless, Freud's psychosexual theory was the dominant view of human development throughout the first half of the 20th century (Robins et al., 1999). Today, few people who study human development adhere to Freud's psychosexual theory, even among psychoanalysts (Grunbaum, 2006). However, it is important to be familiar with it, as it was extremely influential in the early decades of the field of human development.

Erikson's Psychosocial Theory

LO 1.9 Describe the eight stages of Erikson's psychosocial theory of human development.

Even though Freud's theory was dominant in psychology for over a half century, from the beginning many people objected to what they regarded as an excessive emphasis on the sexual drive as the basis for all development. Among the skeptics was Erik Erikson (1902–1994). Although he was trained as a psychoanalyst in Freud's circle in Vienna, he doubted the validity of Freud's psychosexual theory. Instead, Erikson proposed a theory of development with two crucial differences from Freud's theory. First, it was a **psychosocial theory**, in which the driving force behind development was not sexuality but the need to become integrated into the social and cultural environment. Second,

psychosocial theory

Erikson's theory that human development is driven by the need to become integrated into the social and cultural environment

Erik Erikson was the first to propose a life span theory of human development.





Trust vs. mistrust Main developmental challenge is to establish bond with trusted caregiver



Toddlerhood: Autonomy vs. shame and doubt Main developmental challenge is to develop a healthy sense of self as distinct from others



Early Childhood: Initiative vs. guilt Main developmental challenge is to initiate activities in a purposeful way



Middle Childhood: Industry vs. inferiority Main developmental challenge is to begin to learn knowledge and skills of culture



Adolescence: Identity vs. identity confusion Main developmental challenge is to develop a secure and coherent identity



Early Adulthood: Intimacy vs. isolation Main developmental challenge is to establish a committed, long-term love relationship



Middle Adulthood: Generativity vs. stagnation Main developmental challenge is to care for others and contribute to well-being of the young



Late Adulthood: Ego integrity vs. despair Main developmental challenge is to evaluate lifetime, accept it as it is

Figure 1.6 Erikson's Eight Stages of Psychosocial Development

Erikson viewed development as continuing throughout the life span, not as determined solely by the early years as in Freud's theory.

Erikson (1950) proposed a sequence of eight stages of development, shown in Figure 1.6. Each stage is characterized by a distinctive developmental challenge or "crisis" that the person must resolve. A successful resolution of the crisis prepares the person well for the next stage of development. However, a person who has difficulty with the crisis in one stage enters the next stage at high risk for being unsuccessful at that crisis as well. The stages build on each other, for better and worse.

In the first stage of life, during infancy, the developmental challenge is trust versus mistrust. If the infant is loved and cared for, a sense of basic trust develops that the world is a good place and need not be feared. If not well-loved in infancy, the child learns to mistrust others and to doubt that life will be rewarding.

In the second stage, during toddlerhood, the developmental challenge is autonomy versus shame and doubt. During this stage the child develops a sense of self distinct from others. If the child is allowed some scope for making choices, a healthy sense of autonomy develops, but if there is excessive restraint or punishment, the child experiences shame and doubt.

In the third stage, during early childhood, the developmental challenge is initiative versus guilt. In this stage the child becomes capable of planning activities in a purposeful way. With encouragement of this new ability a sense of initiative develops, but if the child is discouraged and treated harshly then guilt is experienced.

The fourth stage, during middle to late childhood, is industry versus inferiority. In this stage children expand their social worlds and begin to acquire the knowledge and skills required by their culture. If a child is encouraged and taught well, a sense of industry develops that includes enthusiasm for learning and confidence in mastering the skills required. However, a child who is unsuccessful at learning what is demanded is likely to experience inferiority.

The fifth stage is adolescence, with the crisis of identity versus identity confusion. Adolescents must develop an awareness of who they are, what their capacities are, and what their place is within their culture. For those who are unable to achieve this, identity confusion results.

The sixth stage, intimacy versus isolation, takes place in early adulthood. In this stage, the challenge for young adults is to risk their newly formed identity by entering a committed intimate relationship, usually marriage. Those who are unable or unwilling to make themselves vulnerable end up isolated, without an intimate relationship.

The seventh stage, in middle adulthood, involves the challenge of generativity versus stagnation. The generative person in middle adulthood is focused on how to contribute to the well-being of the next generation, through providing for and caring for others. Persons who focus instead on their own needs at midlife end up in a state of stagnation.

Finally, in the eighth stage, late adulthood, the challenge is ego integrity versus despair. This is a stage of looking back and reflecting on how one's life has been experienced. The person who accepts what life has provided, good and bad parts alike, and concludes that it was a life well spent can be considered to have ego integrity. In contrast, the person who is filled with regrets and resentments at this stage of life experiences despair.

Erikson's psychosocial theory has endured better than Freud's psychosexual theory. Today, nearly all researchers who study human development would agree that development is lifelong, with important changes taking place at every phase of the life span (Baltes, 2006; Jensen, 2015; Lerner, 2006; Lerner et al., 2013). Similarly, nearly all researchers on human development today would agree with Erikson's emphasis on the social and cultural basis of development. However, not all of Erikson's proposed life stages have been accepted as valid or valuable. It is mainly his ideas about identity in adolescence and generativity in midlife that have inspired substantial interest and attention among researchers (Clark, 2010). We will examine those ideas and the research they have inspired in the chapters to come.

Critical Thinking Question: Based on your own experiences, which theory of human development do you consider more valid, Erikson's or Freud's?

Bronfenbrenner's Ecological Theory

LO 1.10 Define the five systems of Bronfenbrenner's ecological theory and explain how it differs from stage theories.

A more recent theory of human development is Urie Bronfenbrenner's **ecological theory** (Bronfenbrenner, 1980, 1998, 2000, 2005). Unlike the theories proposed by Freud and Erikson, Bronfenbrenner's is not a stage theory of human development. Instead, his theory focuses on the multiple influences that shape human development in the social environment.

Bronfenbrenner presented his theory as a reaction to what he viewed as an over-emphasis in developmental psychology on the immediate environment, especially the mother–child relationship. The immediate environment is important, Bronfenbrenner acknowledged, but much more than this is involved in children's development. Bronfenbrenner's theory was intended to draw attention to the broader cultural environment that people experience as they develop, and to the ways the different levels of a person's social environment interact. In later writings, Bronfenbrenner added a biological dimension to his framework and it is now sometimes called a *bioecological theory*, but the distinctive contribution of the theory remains its portrayal of the social environment (Bronfenbrenner, 2000, 2005; Bronfenbrenner & Morris, 1998).

According to Bronfenbrenner, there are five key levels or *systems* that play a part in human development, shown in **Figure 1.7**:

- 1. The *microsystem* is Bronfenbrenner's term for the immediate environment, the settings where people experience their daily lives. Microsystems in most cultures include relationships with each parent, with siblings, and perhaps with extended family; with peers and friends; with teachers; and with other adults (such as coaches, religious leaders, and employers). Bronfenbrenner emphasizes that the child is an *active* agent in the microsystems. For example, children are affected by their parents but children's behavior affects their parents as well; children are affected by their friends but they also make choices about whom to have as friends. The microsystem is where most research in developmental psychology has focused. Today, however, most developmental psychologists use the term *context* rather than microsystem to refer to immediate environmental settings and relationships.
- **2.** The *mesosystem* is the network of interconnections between the various microsystems. For example, a child who is experiencing abusive treatment from parents may

ecological theory

Bronfenbrenner's theory that human development is shaped by five interrelated systems in the social environment

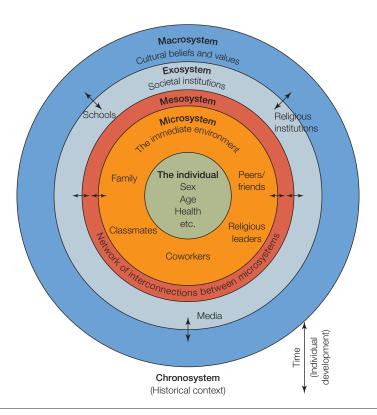


Figure 1.7 The Systems in Bronfenbrenner's Ecological Theory How does this theory of human development differ from Freud's and Erikson's?

become difficult to handle in relationships with teachers; or, if an adult's employer demands longer hours in the workplace the adult's relationship with family members may be affected.

- 3. The exosystem refers to the societal institutions that have indirect but potentially important influences on development. In Bronfenbrenner's theory, these institutions include schools, religious institutions, and media. For example, in Asian countries such as South Korea, competition to get into college is intense and depends chiefly on adolescents' performance on a national exam at the end of high school; consequently, the high school years are a period of extreme academic stress.
- 4. The macrosystem is the broad system of cultural beliefs and values, and the economic and governmental systems that are built on those beliefs and values. For example, in countries such as Iran and Saudi Arabia, cultural beliefs and values are based in the religion of Islam, and the economic and governmental systems of those countries are also based on the teachings of Islam. In contrast, in most developed countries, beliefs in the value of individual freedom are reflected in a free-market economic system and in governmental systems of representative democracy. These macrosystems underlie development from childhood through adulthood.
- 5. Finally, the *chronosystem* refers to changes that occur in developmental circumstances over time, both with respect to individual development and to historical changes. For example, with respect to individual development, losing your job is a much different experience at age 15 than it would be at 45; with respect to historical changes, the occupational opportunities open to young women in many countries today are much broader than they were for young women half a century ago.

There are many characteristics of Bronfenbrenner's ecological theory that make it important and useful for the approach that will be taken in this text. His theory recognizes the influence of historical contexts on development, as we will in this text. Also,

Bronfenbrenner emphasized that children and adolescents are active participants in their development, not merely the passive recipients of external influences, and that will be stressed throughout this text as well.

A Cultural-Developmental Model for This Text

LO 1.11 Outline the cultural-developmental model that will be the structure of this text and describe the new life stage of emerging adulthood.

The structure of this text combines elements of Erikson's and Bronfenbrenner's approaches and goes beyond them. Today there is a widespread consensus among researchers and theorists that human development is lifelong and that important changes take place throughout the life span, as Erikson proposed (Baltes, 2006). There is also a consensus in favor of Bronfenbrenner's view that it is not just the immediate family environment that is important in human development but multiple contexts interacting in multiple ways (Lerner, 2006; Lerner et al., 2013).

However, neither Erikson nor Bronfenbrenner recognized sufficiently the essential importance of culture in shaping human development through the life span. The framework for this text will be the cultural-developmental model of human development (Jensen, 2008, 2011, 2015). There are three essential features of this model.

- 1. Humans always develop within a culture. It is crucial to recognize that throughout the life span, from infancy through the final years of old age, people live within cultural communities where they continuously interact and negotiate with others who convey cultural beliefs, skills, and knowledge. In the course of their development, people learn and respond to the ways of their culture and become participants in shaping the culture's future. The biological basis of development is important in many ways, but it is culture that determines what we learn, what we aspire to become, and how we see ourselves in relation to the world.
- 2. It is necessary to study development in diverse cultures. According to the culturaldevelopmental model, a full understanding of development requires us to study development across diverse cultures. Because we are a cultural species, we have developed many different ways of living. Most of the research in human sciences such as psychology and sociology has taken place in wealthy countries, because these are the countries that have the most money available to spend on research (Arnett, 2008). However, research in psychology and sociology is increasingly international, and anthropological studies have been recording cultural diversity for over a century. The cultural-developmental model entails drawing from a wide range of cultural examples across the life span, to emphasize the different ways that individuals may experience their development depending on their culture.
- 3. Today, many cultures are changing rapidly, and cultural identities are becoming more complex for many people. The cultural-developmental model also highlights that in today's globalizing world, cultural change can be quite rapid. Especially in developing countries, cultural change is occurring so fast that today's children are experiencing a much different cultural life than their parents or grandparents did. For example, in China, until about 40 years ago, most people worked on small farms in rural villages, as their ancestors had for centuries, but today many of the sons and daughters of those rural villagers are living in large cities and working in factories or going to university (Arnett & Zhong, 2014).



In countries such as Iran, the macrosystem is based on Islam, which influences all aspects of life.

cultural-developmental model

a model for understanding human development that includes three principles: 1) humans always develop within a culture; 2) it is necessary to study people in diverse cultures for a full understanding of human development; and 3) today, cultural identities are becoming more complex around the world

Furthermore, as a consequence of increased immigration worldwide, today it is not uncommon for individuals to identify with more than one culture. Allow us a small family story to illustrate. In 2005, we moved from the United States to Denmark with our sixyear-old twins for a sabbatical year. Some months into the year, we visited Copenhagen, where we were delighted to find an Indian restaurant. After ordering a selection of our favorite dishes, we were talking away in a mix of Danish and English when the waiter ambled back to our table. With a friendly smile he asked in English: "Where are you from?" Our son, Miles, explained that his mother is Danish and his father American. To which the waiter replied, "Oh, so you are half Danish and half American." Almost instantly Miles rejoined, "Oh no, I am 100% Danish and 100% American." This was not a math error—his friends call him the "human calculator"—but an enthusiastic affirmation that he does not consider himself half of anything, but a full member of both cultures.

In this text, the stages of human development will be divided as follows:

- Prenatal development, from conception until birth
- Infancy, birth to age 12 months
- Toddlerhood, the 2nd and 3rd years of life, ages 12–36 months
- Early childhood, ages 3–6
- Middle childhood, ages 6-9
- Adolescence
- Emerging adulthood
- Young adulthood
- Middle adulthood
- Late adulthood

You are probably familiar with all of these stage terms, with the possible exception of emerging adulthood. Emerging adulthood is a new stage of life between adolescence and young adulthood that has appeared in recent decades, primarily in developed countries (Arnett, 2000, 2011, 2014, 2015). The rise of this new life stage reflects the fact that most people in developed countries now continue their education into their 20s and enter marriage and parenthood in their late 20s or early 30s, rather than in their late teens or early 20s as was true half a century ago (Schwartz, 2016; Syed, 2015). Emerging adulthood is a life stage in which most people are not as dependent on their parents as they were in childhood and adolescence but have not yet made commitments to the stable roles in love and work that structure adult life for most people. This new life stage exists mainly in developed countries, because for most people in developing countries, education still ends in adolescence and marriage and parenthood begin in the late teens or early 20s (Arnett, 2015). However, emerging adulthood is becoming steadily more common in developing countries (Jensen et al., 2012).

emerging adulthood

new life stage in developed countries, in between adolescence and young adulthood, in which people are gradually making their way toward taking on adult responsibilities in love and work

Emerging adulthood arose partly because economies changed to require longer education.



Age ranges can be specified for the early stages, but the age ranges of later stages are more ambiguous and vari-

able. Adolescence begins with the first evidence of puberty, but puberty may begin as early as age 9 or 10 or as late as age 15 or 16, depending on cultural conditions. Emerging adulthood exists in some cultures and not others, and consequently, youngadult responsibilities such as marriage and stable work may be taken on as early as the teens or as late as the early 30s. Middle adulthood and late adulthood are also variable and depend on the typical life expectancy in a particular culture.

Stages are a useful way of conceptualizing human development because they draw our attention to the distinctive features of each age period, which helps us understand how people change over