



**PEARSON NEW
INTERNATIONAL EDITION**

Lives Across Cultures
Cross-Cultural Human Development
Harry W. Gardiner Corinne Kosmitzki
Fifth Edition



Pearson New International Edition

Lives Across Cultures
Cross-Cultural Human Development
Harry W. Gardiner Corinne Kosmitzki
Fifth Edition

PEARSON®

Pearson Education Limited

Edinburgh Gate
Harlow
Essex CM20 2JE
England and Associated Companies throughout the world

Visit us on the World Wide Web at: www.pearsoned.co.uk

© Pearson Education Limited 2014

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without either the prior written permission of the publisher or a licence permitting restricted copying in the United Kingdom issued by the Copyright Licensing Agency Ltd, Saffron House, 6–10 Kirby Street, London EC1N 8TS.

All trademarks used herein are the property of their respective owners. The use of any trademark in this text does not vest in the author or publisher any trademark ownership rights in such trademarks, nor does the use of such trademarks imply any affiliation with or endorsement of this book by such owners.

PEARSON®

ISBN 10: 1-292-04012-2
ISBN 13: 978-1-292-04012-7

British Library Cataloguing-in-Publication Data

A catalogue record for this book is available from the British Library

Printed in the United States of America

Table of Contents

| | |
|--|------------|
| 1. Introduction | |
| Harry W. Gardiner/Corinne Kosmitzk | 1 |
| 2. Theories and Methodology | |
| Harry W. Gardiner/Corinne Kosmitzk | 21 |
| 3. Culture and Socialization | |
| Harry W. Gardiner/Corinne Kosmitzk | 55 |
| 4. The Family in Cultural Context | |
| Harry W. Gardiner/Corinne Kosmitzk | 85 |
| 5. Culture and Social Behavior | |
| Harry W. Gardiner/Corinne Kosmitzk | 123 |
| 6. Culture, Language, and Cognition | |
| Harry W. Gardiner/Corinne Kosmitzk | 153 |
| 7. Culture, Self, and Personality | |
| Harry W. Gardiner/Corinne Kosmitzk | 181 |
| 8. Culture and Issues of Gender and Sexuality | |
| Harry W. Gardiner/Corinne Kosmitzk | 209 |
| 9. Culture, Health, and Illness | |
| Harry W. Gardiner/Corinne Kosmitzk | 241 |
| References | |
| Harry W. Gardiner/Corinne Kosmitzk | 273 |
| Index | 309 |



INTRODUCTION

Many books begin by introducing their readers to the history of the field. This is certainly essential (though sometimes boring), but will come later in this text (you can always skip it if you don't find it very interesting, but we would highly recommend you look at it). As one of the authors, I (Gardiner) would like to begin this text as I begin most of my classes—by relating a few of my own cross-cultural experiences.

My wife, Ormsin, is from Thailand and we have raised our four children in an Asian American family, where my wife is the Asian, I am the American, and our children are the Asian Americans and I am the minority—the one with the blond hair and blue eyes. I don't like to admit it, but I'm also the shortest, making me a double minority! As you might imagine, raising children in a cross-cultural and bilingual home has resulted in many interesting developmental experiences, some of which may help you better understand the processes involved in cross-cultural human development.

One experience concerns our eldest daughter, Alisa, and the way in which she became bilingual. Our cross-cultural family setting provided a unique opportunity for this to take place. We had been advised that the best approach to helping her become bilingual was to let her hear and speak both languages without emphasizing that they *were* two languages. So, when she was an infant and young child, her mother spent much of the day speaking to her in Thai, while I spoke to her in English. Then, one evening, when she was about three years old, one of my Chinese students came to baby-sit. Alisa opened the door, saw an Asian face, and began speaking Thai. The young lady patiently listened to her and then said, "I'm Chinese and I understand English, but I'll bet you were speaking to me in Thai, weren't you?" I watched as she thought about this and then turned to me and said, "I speak two languages, don't I? Daddy, I speak two languages!" I told her that indeed she did and asked, "What did you think was happening all this time?" Her reply, based on the experience of her unique developmental niche in a bilingual home, was,

From Chapter 1 of *Lives Across Cultures: Cross-Cultural Human Development*, Fifth Edition. Harry W. Gardiner, Corinne Kosmitzki. Copyright © 2011 by Pearson Education, Inc. All rights reserved.

INTRODUCTION

"I thought it was all one big language and Mommy understood some words and you understood others and I understood them all!"

In this chapter, we make reference to how important it is to understand another culture and realize that not everyone has the same understanding of topics and events. Sometimes, when traveling, studying, or working in another culture, our experiences are frustrating, scary, or humorous. I had an opportunity to live in England for three years while completing my doctoral studies at the University of Manchester. During that time, there was one food craving I found nearly impossible to fulfill—*popcorn!* My roommate and I searched everywhere for it. The only place anything resembling it was available was at the cinema. The only problem: It was sticky, caramel-covered "goop," not the white, fluffy kernels sprinkled with salt and hot butter with which we were familiar. Eventually, using the skills of Sherlock Holmes and Doctor Watson, we discovered small (tiny, actually) thirty-kernel bags of popping corn at the airport and bought the entire stock! A few days later, we visited a British family that had befriended these two "Yanks from across the pond" and took some with us. When we asked the husband whether we could make some popcorn, he replied (much to our surprise), "No, that's impossible." When we asked why, he said, "Popcorn grows on bushes. You pick it and put caramel on it." We told him he might be confusing this with cotton, which grows on bushes but is not eaten. Nevertheless, he supplied us with a pot, and we put in some oil and threw in some kernels. When it began to make noise, we tried to explain that this was the corn popping. When it was done, we showed him. He took one look and disappeared out the back door! A few minutes later, he returned with his neighbors, looked at us, and said, "Do it again!" One day, I think I'll open a popcorn stand at a street corner in London and surprise and amaze the British public with the wonders of popcorn! Now, if I could only get it to grow on bushes! The moral of this story: We all grow up in cultures where we understand what happens around us because the experiences are a familiar part of our environment and our daily lives. These experiences are not always easily understood by those living in different ecological settings.

More than two decades ago, the anthropologist Theodore Schwartz, writing about the acquisition of culture, declared that "anthropologists had ignored children in culture while developmental psychologists had ignored culture in children" (1981, p. 4). Just two years later, John Berry, a Canadian psychologist and pioneering researcher in cross-cultural psychology, noted that the discipline was "so culture-bound and culture-blind . . . [that] . . . it should not be employed as it is" (1983, p. 449). Shortly thereafter, Gustav Jahoda, a well-known European psychologist and early contributor to the developing discipline, was able to express a more optimistic view and point out that cross-cultural studies of human development had been steadily increasing (1986). Yet, at the same time, he also criticized the field for being "too parochial in its orientation" (p. 418).

INTRODUCTION



Harry Gardiner and his British friends making popcorn 30 years later.
(Courtesy of authors)

These were once serious criticisms of the newly emerging field. Fortunately, in recent years, great strides have been made in our approaches to, and understanding of, cross-cultural human development.

In this chapter, we introduce some historical perspectives and expanding on some of the major concepts, themes, and issues. Let us begin by exploring the origins of cross-cultural human development.

◆ WHAT IS CROSS-CULTURAL HUMAN DEVELOPMENT?

The field of cross-cultural psychology is remarkably diverse, and those who contribute to it bring with them a variety of viewpoints, including different definitions of the field itself. In Volume 1 of the revised *Handbook of Cross-Cultural Psychology*, Berry, Poortinga, and Pandey (1997) define **cross-cultural psychology** as “the systematic study of relationships between the cultural context of human development and the behaviors that become established in the repertoire of individuals growing up in a particular culture” (p. x). This definition clearly states that this is a *scientific* endeavor that shares with more familiar disciplines the use of theories, scientific methodologies, statistical procedures, and data analysis.

INTRODUCTION

The term human development has also been defined in a variety of ways. For the purpose of this text, we view **human development** as *changes in physical, psychological, and social behavior as experienced by individuals across the lifespan from conception to death*. While this definition encompasses a wide range of experiences, the intention of this text is not to provide exhaustive and comprehensive coverage of all aspects of human development (Aren't you glad to hear that?). Instead, our goal is more limited, focusing on a number of selected topics that provide insight and understanding into how individuals develop and live their lives in different cultural settings. In doing this, we provide examples from literally scores of societies throughout the world. Considering the important dimensions just discussed, and not finding the term **cross-cultural human development** defined elsewhere, we have chosen to view it as *cultural similarities and differences in developmental processes and their outcomes as expressed by behavior in individuals and groups*.

Since we just mentioned the term culture, it should be pointed out that most researchers agree that this is one of the most difficult terms in the social sciences to define. Almost everyone who studies culture has a different way of looking at it, reflecting in part, different theories for understanding the concept as well as for describing various forms of human behavior. E. B. Tylor was the first anthropologist to use the term in his two-volume work titled *Primitive Culture* (1871). He defined culture as *"that complex whole which includes knowledge, belief, art, morals, laws, customs and any other capabilities and habits acquired by man as a member of society"* (p. 1). More than fifty years ago, two other anthropologists, Kroeber and Kluckhohn (1952) compiled a list of 164 definitions of the term.

In 2002, UNESCO, an agency of the United Nations, stated that culture is the *"set of distinctive spiritual, material, intellectual and emotional features of society or a social group, and that it encompasses, in addition to art and literature, lifestyles, ways of living together, value systems, traditions and beliefs"* (UNESCO, 2002, p. 1).

Azuma (2005) has even proposed a new conceptualization of culture "beyond nationality, geography, class, and even ethnicity," which he tentatively calls "functional culture" (p. xii). It is his contention that "traditional culture" of past generations, uncontaminated, and with distinct and static systems "envisioned by cultural anthropologists in the early 1900s no longer exists" (p. xii). Rather, in the contemporary world, individuals come into contact with a variety of cultures as a result of the media, travel, reading, migration, and other activities, including, we might add, such currently popular Internet social networks as Facebook, MySpace, and YouTube. As a result, "cultures interact with and influence each other"; and traditions, which are part of functional culture, are "more fluid or fragmented" than they once were. In fact, cultures today import many of their features from other cultures and societies—features, which Azuma points out, "were quite foreign to people even a half century ago, and change and substitution of elements are constant" (p. xii). However, he goes on to emphasize that global

INTRODUCTION

culture does not become homogeneous, because the way in which these features are distributed within cultures will differ as a result of “traditional emphasis, condition of industry and labor, natural resources, climate, or just by chance” (p. xii); and this will determine cultural specificity. He stresses that “such culture forms a developmental niche not as a loose collection of fragments but as a configuration that is structured yet inevitably fluid . . . [and] . . . Human development must be studied as embedded in a dynamically functioning group culture . . . [in which] . . . More lively understanding results from carefully analyzing how specific behaviors interact with cultural conditions that are always bound by time and place” (p. xii). As you will see, later in this chapter, Azuma’s contemporary view of culture fits very well with our definition and theoretical approach to understanding cross-cultural human development.

In the absence of an as yet commonly agreed-upon definition of **culture**, when we use the term in this text we will be referring to *the cluster of learned and shared beliefs, values (achievement, individualism, collectivism, etc.), practices (rituals and ceremonies), behaviors (roles, customs, traditions, etc.), symbols (institutions, language, ideas, objects, and artifacts, etc.), and attitudes (moral, political, religious, etc.) that are characteristic of a particular group of people and that are communicated from one generation to another.*

A caveat regarding this definition may be in order before we proceed. Since there is no consensus regarding “the” definition of culture (and it is unlikely there ever will be), our definition is a compilation of several previously published definitions combined with some thoughts of our own as to what constitutes this concept. As Shwalb has accurately pointed out, in most comparative studies, culture is “unfortunately equated with nationality, which is convenient for readers to understand . . . but not satisfying. . . .” (personal communication, 2005). He goes on to say that he would like to see culture “better distinguished conceptually from nationality, ethnicity, race, and religion” (personal communication, 2005). We, and many other social scientists, would surely agree, but, as the reader might imagine, this effort, like defining culture, is a most difficult task and better left for another time.

As the field of cross-cultural psychology has evolved, concerns in the area of development have undergone a number of significant shifts. Parke, Ornstein, Rieser, and Zahn-Waxler (1994) succinctly summarized and discussed the changes in developmental focus over the past hundred years by looking at three periods. One hundred years ago, five major areas were of interest: emotional development, the biological basis of behavior, cognitive development, conscious and unconscious processes, and the role of self in development. During the 1950s and 1960s, the focus shifted to learning theory, the rise of experimental child psychology, interest in operant analysis of children’s behavior, investigations of infant sensory and perceptual development, and the objective measurement of cognitive understanding among preverbal infants. Today, there is a revitalized interest in emotional development

and cognitive abilities of children, the biological bases of behavior, and social relationships. According to the authors, the “most unanticipated theme is the continuing discovery of the precocity of infants and young children—not only cognitively but also socially and emotionally” (p. 8). More recently, Lickliter and Honeycutt (2003) have shown that advances in genetics, embryology, and developmental biology are transforming contemporary developmental and evolutionary theories that challenge once popular gene-centered explanations of human behavior.

◆ **CROSS-CULTURAL HUMAN DEVELOPMENT AND THE OTHER SOCIAL SCIENCES**

In commenting on the central role that culture plays in our efforts to better understand behavior, Segall, Lonner, and Berry posed an interesting and critical question: “Can it still be necessary, as we approach the millennium (as measured on the Western, Christian calendar), to advocate that all social scientists, psychologists especially, take culture seriously into account when attempting to understand human behavior?” (1998, p. 1101). At that time, the answer was (a qualified)—yes! Fortunately, as we enter the second decade of the twenty-first century, the situation has dramatically improved and only continues to get better.

When discussing cross-cultural psychology and its subdiscipline of cross-cultural human development, it is obvious they share a long historical connection with general psychology. Although, as the well-known psychologist-anthropologist Otto Klineberg has pointed out, “There is no specific date that can be identified with the onset of interest in cross-cultural comparisons” (1980, p. 34). Jahoda and Krewer have suggested that it might be as early as the seventeenth century since the “dominant perspective of enlightenment philosophy was highly compatible with cross-cultural psychology’s model of man” (1997, p. 11). Since the 1960s, much of our psychological research—particularly that, which has emphasized the cross-cultural approach—has focused on the areas of abnormal, cognitive, social, and developmental psychology (Jahoda, 2009).

In terms of the other social sciences, the closest links are to anthropology and sociology with shared interests in specific approaches, methodological procedures, and research interests, including the socialization process and family influences on development. At the same time, this relationship has not always been a smooth one. Some of the difficulties, especially those centering on comparative studies of infant development, were pointed out by Super nearly thirty years ago when he stated that, for several decades, psychology and anthropology “seem to have withdrawn from the interface . . . to tend to their own theories. Very few studies . . . achieve, or even attempt,

an integration of infant care and development, on the one hand, with functional and value characteristics of the larger culture, on the other" (1981, pp. 246–247). At the same time, he noted that success in these areas would require researchers to improve their ethnographic knowledge of cultures as well as to develop quantitative baselines of information for use in future studies. As you will discover in reading this text, this is precisely the path that much of present-day, cross-cultural human development research has taken (Gardiner, 2001b).

In a lively and entertaining book titled *Psychology and Anthropology: A Psychological Perspective*, Gustav Jahoda, a psychologist with a true appreciation and understanding of both psychology and anthropology, noted, "Anthropologists have always been concerned with psychology, even if unwittingly. . . . However, this interest has, in many respects, remained narrowly culture-bound, largely ignoring the wider perspectives provided by anthropology" (1982, back cover).

It is our sincere hope that in the future cross-cultural psychologists, in particular those interested in human development, will be able to forge a bond with other social scientists, notably anthropologists, and work together as partners in laying a firm foundation for an empirically based understanding of human behavior that places a greater focus on developmental processes within cultural contexts. A welcome step in this direction has been made with several volumes that focus on emerging concepts and methods for measuring environment (or context) across the lifespan (Friedman & Wachs, 1999; Sternberg & Grigorenko, 2004) and childhood and family life (Weisner, 2002). Another important contribution is the book, *Developmental Psychology and Social Change*, by Pillemer and White (2005) discussing the historical evolution of developmental psychology, its goals, and its current challenges. The chapter by Charles Super on the globalization of developmental psychology is of particular interest. Efforts such as these and others will greatly enrich our understanding of development and the vital role that culture plays in it.

◆ SOME IMPORTANT THEMES

This text differs in significant ways from most other volumes that focus on cross-cultural aspects of human behavior, most notably in its efforts to integrate a variety of important themes. Let us look at these in some detail.

A Cross-Cultural Perspective

Over the past two decades, social scientists have become increasingly aware of the contributions that cross-cultural research findings can make to our

understanding of human development. Any attempt to include all or even most of these findings in a book of this length would be impossible. Therefore, we have decided to be selective and discuss representative areas of interest using a chronological-within-topics approach. For readers desiring a more comprehensive view of cross-cultural human development, or for those wishing to explore particular topics in greater depth, we refer you to the Further Readings section at the close of this chapter. If you are eager to get started, you might consider looking at such classics as *Two Worlds of Childhood: U.S. and U.S.S.R.* by Urie Bronfenbrenner (1970) and a series of volumes on *Six Cultures* by Whiting (1963), Whiting and Whiting (1975), and Whiting and Edwards (1988). Edwards, Weisner, and others discuss the importance of these studies and the contributions of John and Beatrice Whiting in a special 2010 edition of the *Journal of Cross-Cultural Psychology*. There is the revised three-volume *Handbook of Cross-Cultural Psychology* (1997), edited by John Berry and others, which contains several chapters relevant to the study of cross-cultural development as well as the role of cross-cultural theory and methodology. In addition, there is the *Encyclopedia of Psychology*, eight volumes providing a definitive guide to the major areas of psychological theory, research, and practice (Kazdin, 2000). Finally, there is the *Handbook of Culture and Psychology* presenting the state of the art of major areas and issues in cross-cultural psychology, including development (Matsumoto, 2001).

Goals for the Field

As to the nature and purpose of the cross-cultural method, Berry, Poortinga, Segall, and Dasen (2002), in a comprehensive overview of cross-cultural psychology, set forth three goals for the field. The first goal involves *testing or extending the generalizability of existing theories and findings*. In earlier writings, Berry and Dasen (1974) referred to this as the “transport and test goal” in which hypotheses and findings from one culture are transported to another so that their validity can be tested in other cultural settings. For example, are parental speech patterns in English-speaking families similar or dissimilar to those in Spanish-speaking families? Are the stages of cognitive development proposed by Jean Piaget specific to certain types of cultures, or are they universal?

The second goal focuses on *exploring other cultures in order to discover variations in behavior that may not be part of one’s own cultural experience*. In other words, if findings cannot be generalized, what are the reasons for this, and are these behaviors unique to these other cultures? A good example is a study, by Jablensky and colleagues (1992), that successfully demonstrates that a number of symptoms characteristic of schizophrenia (a serious psychological disorder) exist in ten very different cultures, but that there is no single factor to explain differences in the formation or outcome of the disorder. At

INTRODUCTION

the same time, other psychological conditions appear to be “culture-bound” and occur only among certain groups of people. One example is *pibloktoq*, found only among specific groups of Eskimos, in which individuals, with little or no warning, perform irrational acts lasting a few minutes or as long as an hour, for example, ripping off clothes, shouting obscenities, throwing objects, and running wildly into snowdrifts (Kirmayer & Minas, 2000).

The third goal, which follows from the first two, is aimed at *integrating findings in such a way as to generate a more universal psychology applicable to a wider range of cultural settings and societies*. Examples of this include efforts by many cross-cultural researchers to refine and expand the usefulness of several theories.

We would add to this list a fourth goal—*applying research findings across professional disciplines*. For example, preparing students to study, work, and travel abroad; improving minority children’s academic and social success in school; assisting counselors, psychotherapists, social workers, and other professionals in better understanding and helping immigrants with the psychological and social adaptation to a new culture; helping managers and employees in public, private, and government organizations meet the challenges of cultural diversity in the workplace at home and abroad and contributing to greater success in business practices and negotiations; and drawing attention to the basic human rights of children, families, women, and others in cultures across the globe.

At this point, you might be wondering, “How can a cross-cultural perspective contribute to our understanding of human development?” In answer to this question, Gardiner (2001b) has pointed to a number of important benefits. First, looking at behavior from this perspective compels researchers to reflect seriously on the ways in which their cultural beliefs and values affect the development of their theories and research designs. Increased awareness of cross-cultural findings provides an opportunity to extend or restrict the implications of research conducted in a single cultural group, most notably the United States and similar Western societies. Nothing helps to reduce ethnocentrism as quickly as looking at behavior as it occurs in other cultures. **Ethnocentrism** is defined as *the tendency to judge other people and cultures by the standards of one’s own culture and to believe that the behavior, customs, norms, values, and other characteristics of one’s own group are natural, valid, and correct while those of others are unnatural, invalid, and incorrect*. If you have traveled to another culture, it is likely you have experienced ethnocentrism first hand. Can you think of some examples? What were your reactions to these differences?

Second, the number of independent and dependent variables to be investigated can be greatly increased in a cross-cultural design. Examples of studies in which this has been done include investigations of gender differences (Morinaga, Frieze, & Ferligoj, 1993), effects of parent–child relationships in diverse cultures (Gielen & Roopnarine, 2004), and individualism–collectivism

INTRODUCTION

and the attitudes toward school bullying of Japanese and Australian students (Nesdale & Naito, 2005). We generally think of an **independent variable (IV)** as *the condition introduced into or systematically manipulated in an experiment by the researcher*, and a **dependent variable (DV)** as *the subject's response or the behavior being measured in an experiment*. For example, you believe that watching violence in television cartoons makes young children more aggressive (your hypothesis). You show one group of children (matched for age, gender, socioeconomic background, etc.) violent cartoons and a similar group cartoons with no violence. You then measure the level of aggression shown by these children when in play situations. Your IV is the amount of cartoon violence to which children are exposed, and your DV is a child's resulting level of aggression when playing with others. Try to think of a hypothesis of your own and identify the IV and the DV.

Third, cross-cultural studies help us to separate **emics**, or *culture-specific concepts*, from **etics**, or *universal or culture-general concepts*. McDonald's is a good example of an emic approach to cultural consumer behavior. The fast food restaurant successfully sells market-specific items in very different cultures such as a Maharaja Mac (chicken burger) in India, McPalta (burger with avocado sauce) in Chile, and McBingsoo (shaved ice) in Korea. The etic approach is well illustrated by the coffee chain Starbucks, which provides a similar store structure in widely different cultures—strong coffee, soft lighting, and comfortable couches and beanbag seating. Can you think of some other examples?

The **emic (insider) approach** focuses on a single culture, using criteria that are thought to be relative to it, and studies behavior from *within* the system itself, making no cross-cultural inferences with regard to the universality of any observations. An example is an anthropological field study in which a researcher lives with a group of people and tries to understand the culture through their eyes and experiences, avoiding the ethnocentrism of his or her own cultural background. The **etic (outsider) approach**, on the other hand, looks at several cultures, comparing and contrasting them using criteria thought to be absolute or universal, and studies behavior from *outside* the system. An example, which (happily) we don't see as often as we once did in cross-cultural psychology, involves an investigator conducting what has been called "safari research." An illustration is a professor (not very familiar with the field) who goes on vacation to several countries, taking along a favorite questionnaire concerning _____ (you fill in the blank). He or she visits several universities, collects data from available students (who may or may not understand many of the colloquial English language terms), returns home, and publishes the findings as "universal" attitudes of those living in cultures X, Y, and Z.

Separating emics from etics is better accomplished by testing theories or principles developed in one cultural context in another. The work of Freud,

INTRODUCTION

Piaget, and Kohlberg are examples. In some cases, findings lend support to the universality of behaviors in vastly different cultural settings (e.g., stages in language development and the sequence and timing of such behaviors as smiling, walking, stranger and separation anxiety, and pubertal development). On the other hand, results have sometimes suggested a need for modification of certain culture-bound concepts (e.g., intelligence, medical diagnosis, and, sometimes, gender behavior). For a comprehensive review of some of the significant findings of indigenous (or native) psychologists, see Kim and Yang (2005).

One of the most frequently used approaches to describing, explaining, and understanding similarities and differences in a variety of cultural contexts was presented by Triandis (1989). This is the dimension of **individualism-collectivism** (IND-COL). A culture characterized as **individualist** is made up of *people who are responsible to themselves and their family and whose individual achievement is paramount*. Frequently mentioned examples of such cultures are the United States and most European societies. A **collectivist** culture, on the other hand, is thought to consist of *people who consider the group to be most important with an emphasis on traditions, cooperation, and a sharing of common goals and values*. Cultures so characterized include most of Asia, Africa, and South America. However, in recent years, use of these characteristics has often been too limiting and it has been recognized that components of each are found in most cultures and even within specific individuals (Green, Deschamps, & Paez, 2005; Triandis, 1995). Fischer and his colleagues (2009) have recently reported promising results on the development and validation of a research instrument for measuring the descriptive norms related to individualism-collectivism.

By focusing on cross-cultural material, we hope to provide readers with opportunities to expand their awareness and sensitivity to global similarities and differences in human development and to reduce ethnocentric thinking. The cross-cultural perspective complements and extends the work of earlier researchers who successfully presented the more traditional, but often culture-specific, approach to understanding lifespan development by offering a broader world view. By allowing readers to experience variations in behavior not normally found in their own societies (e.g., accelerated formal operational thought among some Asian populations, decreased susceptibility to visual illusions among certain African groups, and highly developed mathematical skills among Dutch children), this perspective contributes to our understanding of human adaptation. Perhaps most important, it encourages a closer look at the interconnections among culture, development, and behavior—a major theme in contemporary developmental psychology.

While we certainly are not the first to stress the importance of looking at cross-cultural data, we believe we give it greater emphasis because, as Segall so aptly stated three decades ago, “It is to . . . theories of ecological,

cultural, and socialization forces that we must turn for the most promising insights into why different peoples develop different . . . skills or develop the same skills at different rates" (1979, p. 129).

The mention of socialization practices, and the variety of ways in which we are influenced by ecological factors, leads us to another of our major themes.

An Ecological Model

The importance of viewing behavior within its social setting was first recognized not by psychologists but by sociologists, who stressed the importance of the individual's subjective view. Among the early proponents of this view were C. H. Cooley (1902), W. I. Thomas and F. Znaniecki (1927), and G. H. Mead (1934). When psychologists became interested in the topic, they tended to ignore the social context in favor of the cognitive processes. Such analysis was extended beyond the individual to the study of the environment with the introduction of the concepts of "psychological field" and "life space" by Kurt Lewin (1935). Explicit recognition of the need to study an individual's subjective view of social reality came with the pioneering work of MacLeod (1947) and has been extended by many others, including Triandis (2008).

One of the most important contributions to these evolving ideas, and one on which much of our presentation is based, is the ecological model presented in the work of Urie Bronfenbrenner (1975, 1977, 1979, 1986, 1989, 1993, and 2005). In its original form, this model divided a child's environment into four nested and interrelated systems or contexts (one more was added later) and allowed us to see and understand (within a broad framework) how patterns of interaction within the family and the wider society are influenced by and in turn influence the connection between development and culture. Each of these systems involves relationships defined by expected behaviors and roles. For example, a child behaves very differently at home, in school, or with playmates. Take a moment and reflect on your own behavior as a child in these settings. Can you remember how your behavior differed in each setting?

When relationships between systems are in harmony, development proceeds smoothly. Consider the relationship between home and school as an example. If expectations are much the same in both settings (e.g., try to do your best work, be careful and neat), individuals are more likely to succeed and do well than if expectations differ significantly from one setting or environment to another. Bronfenbrenner's family-centered approach has allowed others to adapt and apply his model to a variety of contemporary issues and to develop applied programs involving parent education, counseling, disabilities, day care, and early childhood programs.

INTRODUCTION



Can you find the Western anthropologist in this picture?
(© Marcin Jamkowski/Adventure Pictures / Alamy)



Noted anthropologist, Dr. Dawn Chatty, discussing local problems with Harsous tribal member in Sahmah, Oman, in the Arabian Peninsula.
(© James L. Stanfield/National Geographic Society)

The Developmental Niche

If Bronfenbrenner is correct in his view that culture and environment make significant contributions to one's development (and we believe that they do), one might ask, "How does this happen and how can we better understand the processes taking place?"

One possible answer is provided by the cross-cultural developmental work of Harkness (2005), Parmar, Harkness, and Super (2004), and Super and Harkness (1986, 1994, 1999, 2002). Based on an extensive series of studies among Kipsigis-speaking communities in Western Kenya, Super and Harkness, a psychologist–anthropologist research team, have presented a way of bringing together and integrating findings from the two disciplines. Called the **developmental niche**, it provides *a framework for understanding how various aspects of a culture guide the developmental process by focusing on the child as the unit of analysis within his or her sociocultural setting or context*. It is compatible, in many respects, with the ideas put forth by Bronfenbrenner and, in combination with it, comprises another major theme of this text.

A Developmental Orientation

It is well-recognized that most of our behavior does not take place at isolated periods in our lives but rather evolves and continually develops throughout the lifespan. Although the body of cross-cultural research literature is significant, it frequently resembles "a confused mosaic of contradictory findings" (Gardiner, 1994). This may explain, in part, why none of the books that currently examine cross-cultural topics systematically presents a developmental perspective as we do here. Not all of the behaviors covered in this text will always fit neatly into this orientation or be easily explained by some of the other themes or approaches. However, many do and, where appropriate, we demonstrate how these behaviors evolve and change as individuals develop across the lifespan and across cultures.

To illustrate the importance of looking at behavior from a developmental orientation, let us briefly consider the development of memory and attention, or the increased ability to organize information. As children, we begin to think, attend, and store away memories. As adolescents and adults we develop the ability to make inferences, understand reversibility, and make use of abstract thought. Information that may have been remembered in childhood as a list can now be recalled in adulthood as a total pattern. What is your earliest memory? How old do you think you were? Why do you think this memory is so important?

This brings us to another theme the chronological-within-topics approach.

A Chronological-Within-Topics Approach

In this text, we have decided to look at selected topics for which a large literature of cross-cultural research exists and discuss these topics chronologically—from the early beginnings of development through the last years of life.

Using this chronological-within-topics approach, we hope to effectively demonstrate how behavioral processes evolve and change as individuals pass from infancy and childhood through adolescence and into adulthood. As a result, it should become clear that our behavior is dynamic and involves change, which is at times orderly and predictable and at other times chaotic and unreliable, that both individual and cultural similarities and differences exist, and that specific cultural influences become important at different times and in different cultures. This approach includes basic concepts, principles, and theories that describe physical, psychological, cognitive, social, and personality changes that occur across the lifespan in a variety of cultural contexts.

Another Piece of the Developmental Puzzle: The Human Genome

In recent years, findings from the neurosciences have begun to significantly influence the study of human development. It is becoming increasingly necessary to take into account the role of genes and biological principles and their interaction with one's environment and psychological experiences. As Segalowitz and Schmidt (2003) point out, "While we see both cognitive and affective development—the mainstay of developmental psychology—as having interesting parameters being set by neurological factors, new discoveries in developmental neuroscience also highlight the plasticity and adaptability of the system. Patterns of development are both biologically rooted in our brains and heavily influenced by experience. And the biological influences are manifested through experience" (p. 65).

In addition, with the completion of the thirteen-year Human Genome Project (1990–2003), we have seen an explosion in the study of genetics and the discovery of specific genes that may be responsible for a variety of physical illnesses and psychological conditions, including cancer, diabetes, heart disease, multiple sclerosis, asthma, depression, and many others. There are even those who believe this knowledge could lead to the ability to double the lifespan through a variety of new treatments and therapies. For example, a group of Danish researchers have recently predicted that more than half of all babies born since the year 2000 in France, Italy, Germany, the United Kingdom, the United States, Japan, Canada, and other countries with long

INTRODUCTION

life expectancies will celebrate their hundredth birthdays (Christensen, Doblhammer, Rau, & Vaupel, 2009).

The Genome Project's goals of identifying all the approximately 20,000 to 25,000 genes in human DNA, determining the sequences of the 3 billion chemical base pairs that make up human DNA, storing this information in databases, improving tools for data analysis, and transferring related technologies to the private sector have largely been accomplished. However, analysis of the data, its application to specific situations, and implications for the legal, ethical, and social issues arising from this project will last long in the future. Nevertheless, its findings are exciting and, in many ways, will change the way individuals and their descendants across cultures will live their lives in the generations yet to come.

Advances in genetic engineering and biotechnology raise serious questions in terms of culture and human development. For example, what if you had a child who was born with a growth hormone deficiency? Would you (if you could afford it) pay large sums of money, perhaps as much as \$1,500 to \$2,500 or more, for a series of injections to increase the height of your child at critical stages of his or her development? Would you allow genetic engineering to increase the number of neurons in the brain during fetal development in order to have a potentially "smarter" baby?

Carey (2003) points out that in the past, the greatest effect of culture on humans has been to alter the frequency of alleles (paired genes, alike or different, that affect a trait) and/or genotypes (the genetic makeup of an individual, containing both expressed and unexpressed characteristics). Further advances in genetic engineering could allow scientists to create *new* alleles ". . . thus, changing mutations from a random phenomenon into a deliberate, scientifically guided enterprise" (Carey, p. 216). The result would be individuals with entirely new and unique genotypes that are not now a part of the human genome. We can only imagine (and even that is difficult) what the effect might be on human development and culture.

Physical and cultural changes in human development have always been intertwined. For example, we can observe the many ways in which a culture's attitudes and beliefs about birth control, abortion, and related topics influence its members' social and religious attitudes, as well as its concern with the physical factors of reproductive fitness. A culture's attitudes towards marriage—who and who will not make appropriate partners—affect the ways in which dating and mating are structured. Advances in international travel (and Internet communication) have increased contact among different cultures, sometimes resulting in an increased number of cross-cultural relationships, intermarriages, and bicultural children, with a subsequent reduction in "the reproductive isolation of human populations" (Carey, 2003, p. 215).

Only the future will determine how far the genetic revolution will take us. While genes and their influences will not be one of the major topics upon

which we will have much to say, we recognize the importance of this newly expanding research and urge the reader to learn more about it, as will we, when stories related to it appear in various media.

◆ PRACTICAL APPLICATIONS

We believe that a book emphasizing process, content, and skill (at understanding and interpreting cross-cultural behavior), but avoiding unnecessary jargon and seeking a broad perspective, provides a number of benefits to readers. Therefore, part of our focus is on the *everyday experiences* encountered by individuals of differing ethnic backgrounds within their own society as well as between individuals of different cultural settings. We further believe that if readers come to understand the processes involved, they can begin to understand how to apply these principles for a deeper insight into the events and issues that touch their lives beyond the boundaries of their home, neighborhood, classroom, community, and nation. The material is continually related to issues and concerns that are important and relevant to all of us. Efforts are made to encourage critical thinking that allows one to examine, question, explore, analyze, and evaluate a variety of everyday situations within diverse cultural contexts.

There is an adage that states, “Tell me and I’ll forget . . . show me and I’ll probably remember . . . involve me and I’ll never forget.” Simply stated, this is another of our important themes—practical application. Many of today’s texts are written for social science majors planning graduate study and frequently emphasize laboratory research—a shortcoming already recognized in our earlier comments on the need for an ecological point of view. While we feel a developmental text should be grounded in carefully researched theory, we also believe that if it is to be maximally useful, it should avoid jargon and focus on readers’ “real-life” experiences, and ultimately assist them to relate more effectively with other individuals and in diverse environments. This is especially true today as our world, even at the local neighborhood level, becomes increasingly multicultural.

These goals are accomplished in several ways. In writing this text, we have selected topics that have meaning for one’s daily living: socialization, the family, cognition and language, personality, social behavior, issues of gender and sexuality, and health and illness issues.

We don’t expect you to accept what we say without question. We believe in the adage mentioned earlier, and we try to practice what we preach by providing opportunities for you to question, explore, and analyze the topics presented. In doing this, we hope you will arrive at a better understanding of your own behavior, modifying it where necessary and desirable and developing and improving your cross-cultural interactions with others, now and in the future.

◆ OVERVIEW OF THE TEXT

Since the transition from theory to practice cannot be accomplished simply by reading about applications, we make an effort to present the material in the chapter in such a way that it explicitly encourages your active involvement.

First, this chapter opens with a focus on issues and behaviors that are to be addressed. This gives you an idea of what is covered in the chapter, and it allows you to formulate your own ideas. For example, “What are the benefits of studying development cross-culturally?” “What are the effects of culture on socialization?” “How does children’s play differ from one culture to another?” “In what ways are adolescents similar or different throughout the world?” “How do cultures treat their elders or older adults?”

Second, within the narrative, each new idea is defined, highlighted, and illustrated with cultural examples (many from the authors’ own experiences) that, hopefully, you would find both relevant and entertaining.

Third, real-life examples of cultural variations in childbirth, effects of culture on learning styles, growing old in different cultures, cultural variations in adolescent identity, and other important topics are presented and discussed.

Fourth, throughout the chapter you are frequently asked to stop and consider what you have read and try to apply ideas and concepts to your own life experiences. When you can do this, you will have a better understanding and are more likely to remember information that is relevant to your life.

Finally, this chapter closes with a section on “Further Readings.” Included are materials from a variety of sources that we think are interesting, informative, entertaining, and easy for you to locate. You will also find several “Study Questions” to help you focus on important points in this chapter.

◆ SOME CROSS-CULTURAL TEASERS

As we bring this chapter to a close, we would like to leave you with a few “cross-cultural teasers,” or questions for which we provide partial answers.

- Are there any universals in human development? If so, what are they? One example of a universal is gender-role assignment. All societies appear to socialize boys and girls into gender roles (e.g., generally allowing more aggressive behavior among boys and encouraging more caring behavior among girls).
- How can we explain cross-cultural differences in such behaviors as dependence and independence? Part of the answer depends on where infants sleep after they are born. The United States is known as a culture that emphasizes individual achievement; parents generally place babies

INTRODUCTION

in their own cribs in their own rooms. Japan, a collectivist culture, encourages dependence or interdependence; children are allowed to sleep with parents, often for many years. How does this affect development?

- Adolescents in many of the world's cultures confront the problem of identity, or try to answer the question "Who am I?" For some, living in Nigeria, it is a relatively easy task. For others, growing up bicultural in New York City, it is more difficult.
- Eating disorders, such as anorexia and bulimia, are common in many Western societies. Do young people throughout the world all strive to attain the ideal body image? You may be surprised by some of the answers found in Japan, Australia, and other countries.
- How do different cultures view their elderly? Is grandparenting the same everywhere? We'll give you some answers to these questions from China, Japan, the United States, and other countries.
- How does family life differ from one culture to another? In some societies, the roles of mothers and fathers may surprise you. Did you know children in some cultures become more closely attached to their fathers than to their mothers? Why would this be the case?
- An increasingly common disorder among older adults today is Alzheimer's disease. Did you know that people suffering from this disease are treated differently by their caregivers if the patient and caregiver are Hispanic, Native American, or Anglo?
- What's important in selecting a marriage partner—money, good looks, security, health? You'll be surprised at some of the views expressed by men and women from cultures around the world. How many chickens or cows do you think you're worth on the marriage market?

Have we gotten your attention? Do you want to know the answers to these and other interesting cross-cultural questions? Would you like to know about some of the similarities and differences in human behavior and how people live their "lives across cultures?" Then turn the page and read on.

◆ SUMMARY

This chapter introduces the topic of cross-cultural human development and provides definitions of important terms and concepts. Discussion centers on several themes to be used in organizing developmental topics in a variety of cultural settings. These themes include a cross-cultural perspective, an ecological model, the developmental niche, a developmental orientation, a chronological-within-topics approach, and an emphasis on practical applications. Suggestions are given for using the material in ways to help readers develop a greater understanding of, and sensitivity to, those of a different

INTRODUCTION

cultural background than their own and develop and improve any cross-cultural interactions they might experience.

◆ STUDY QUESTIONS

Explain what is meant by the term *cross-cultural human development*.

Demonstrate a familiarity with the important themes presented in this chapter, including the cross-cultural perspective, ecological model, developmental niche, developmental orientation, and chronological-within-topics approach.

Comment on the goals set forth for the field of cross-cultural psychology.

◆ FURTHER READINGS

Dave Barry. (1992). *Dave Barry Does Japan*. New York: Fawcett Columbine. An irreverent view of Japanese culture by one of America's premiere humorists. Witty and sometimes insightful. Contains discussion of such topics as "Failing to Learn Japanese in Only Five Minutes (Very much good morning, Sir)," "Lost in Tokyo (Looking for plastic squid)," and "Humor in Japan (Take my tofu! Please!)."

Michael Brannigan. (Ed.). (2004). *Cross-Cultural Biotechnology*. Rowman & Littlefield. Fifteen essays from international academics and practitioners address a broad range of legal, ethical, and social issues in biotechnology, underscoring the relevance of cultural values. Topics include the International Human Genome Project and research ethics in East Asia.

Hubert J. M. Hermans & Harry J. G. Kempen. (1999). Moving Cultures: The Perilous Problems of Cultural Dichotomies in a Globalizing Society." *American Psychologist*, 54, 1111–1120. The authors discuss the impact of globalization and compare Western cultural tradition with the rest of the world. They comment on the potential influence of cultural connections and some of the complexities associated with cultural change.

Terri Morrison & Wayne A. Conaway. (2006). *Kiss, Bow, or Shake Hands* (2nd ed.). Avon, MA: Adams Media. Updated and expanded guide to international behaviors. Most useful for business travelers but also of value for tourists and travelers or anyone living or interacting with a culture other than their own. Very informative.

James Shreeve. (2006). *The Greatest Journey*. National Geographic, 209 (3), 60–73. A very readable account of genes, DNA, migration, and the origins of modern human life and culture.

The Human Genome Project. For information about this project—its history, research, publications, educational resources, and new programs based on data and resources from The Human Genome Project, The Microbial Project, and systems biology—go to this Web site http://www.ornl.gov/sci/techresources/Human_Genome/home.shtml.



THEORIES AND METHODOLOGY

Justin Tyme, an undergraduate major in psychology, has returned from a month in Thailand, where he attempted to collect data for his senior thesis. This was his first visit to a foreign country, and it was a memorable, but unsatisfying, experience. Why? Because Justin was not well-prepared and made several serious (and avoidable) mistakes. First, he traveled to a culture he knew little about (because it sounded exotic). People spoke a language (Thai) he did not understand and which he found difficult to read, write, or speak in the brief time he was there because of its complexity (44 consonants, 28 vowel forms, 5 tones, and written script). He found the weather too hot and humid, the food too spicy, and life in the village where he was doing his research “too slow.” He had difficulty finding people to help translate his English-language, Western-designed, marital-role preference scale so that it would have comparable meaning in Thai. He was upset because the few subjects he was able to get often didn’t arrive exactly on time (Asians, in general, are not as time conscious as Westerners, especially Americans), and when they did, they usually told him “Mai pen rai” (Don’t worry). Finally, representative samples were difficult to obtain in a rural area that would match his samples back in Chicago, Illinois.



Dr. Kitty Litter, an anthropologist from Cornell University, recently spent six months doing an ethnographic field study among a group of Indians in the highlands of Peru. Not only was she fluent in Spanish, the most widely spoken language in the country, but she also had a working knowledge of two native languages—Quechua and Aymara—from two previous trips to the country. She had read extensively about the customs of the tribal groups in this area and was very fond of the food. She especially enjoyed the tropical climate along the coast and the cooler temperatures in the mountains. She had spent considerable time designing the questions she was going to ask and had even prepared a Quechuan-language version of a psychological instrument she hoped to validate while there.



From Chapter 2 of *Lives Across Cultures: Cross-Cultural Human Development*, Fifth Edition. Harry W. Gardiner, Corinne Kosmitzki. Copyright © 2011 by Pearson Education, Inc. All rights reserved.

Theories and methodology—sound exciting, don't they? Perhaps not, but these two topics are central to understanding what happens in cross-cultural human development. In this regard, we have two goals for this discussion of theories: first, to provide a foundation for those who do not have a background in human development (or could benefit from a review of major concepts) to appreciate their contributions to our efforts to better understand behavior; second, to provide a framework for identifying complex human behavior and experience as it occurs within different cultural contexts and to explore possible reasons for the similarities and differences that are found in societies around the world. If research (cross-cultural or otherwise) is not carefully designed, conducted, analyzed, and understood, any findings that result are of little value. So, we'll try to make the discussion of these topics as simple, relevant, and interesting as possible.

◆ THEORIES OF DEVELOPMENT

Why do we study human development? There are many reasons, but basically we do it to *understand, explain, predict*, and (in some instances) *control behavior*. To achieve these goals, we need to be familiar and comfortable with theories and their important concepts. As a graduate student in England, I (Gardiner), while trying to select a topic for my doctoral dissertation, was asked by my major adviser whether there were an area of psychology with which I felt particularly uncomfortable. Without hesitation, I immediately replied, "Theories." (I shouldn't say this but, as an undergraduate student, I frequently skipped over theories because I found them boring, confusing, and too abstract.) When it was suggested that I devote the next three years to the development of my own theory in order to decrease this discomfort (a form of theoretical desensitization, I guess), I thought this was a "daft idea." Of course, I didn't tell this to my adviser! However, develop my own theory I did (Gardiner, 1966). Not only did I really enjoy doing my original doctoral research (on "newspapers as personalities"), but, when it was over, I felt much less threatened by theoretical concepts and gained a greater appreciation for the central role theories play in the social sciences. We hope you feel the same way when you reach the conclusion of this chapter (don't skip over them; they *are* important!).

What Is a Theory?

Simply stated, a **theory** is a *set of hypotheses or assumptions about behavior*. A theory consists of guesses or speculations that allow us to answer such questions as "Why does a particular behavior occur?" For example, why are Chinese children generally calmer, less active, and easier to soothe when distressed than Western children? Why are ethnic customs and values of greater

importance to some minority youths than others? What factors most influence the ways in which contemporary cultures treat their elderly?

When we study human development, we can't look at all aspects of an individual's, group's, or culture's behavior. Theories help us organize our ideas and limit what we look at, and serve as a guide (or blueprint) in the collection of data. Sometimes, it seems as if there are as many theories as there are people. In a sense, there are, because each of us has our own informal, unscientific, unverified, and highly idiosyncratic theories. Built up over years of personal observation and experience, these informal theories help us understand the behavior of those with whom we come into contact. For example, when we meet someone for the first time, our informal theory of personality helps us decide whether we like or dislike this person, whether we want to interact with this person again, and so on. However, we must go beyond these informal theories to truly understand and explain the complexity of human development. We need theories that are more formalized and rooted in scientific principles if we are to be able to compare and contrast behavior within and across cultures and draw conclusions about similarities and differences. In the pages that follow, we discuss six theories. While you may (or may not) be familiar with some or all of them, it might be helpful, in terms of our discussion, to think of the theories of Piaget, Kohlberg, and Erikson as traditional or mainstream psychological theories that focus on the individual, with primary attention to internal cognitive processes (e.g., knowing and thinking, moral reasoning, and psychosocial development). On the other hand, the theories of Bronfenbrenner, Super and Harkness, and Vygotsky can be viewed as interactionist theories, because they focus on the interactions between the individual and his or her environment in specific psychological domains (e.g., ecology and the interrelationship of the developing individual and his or her changing physical and social environment, links between children's behavior and the developmental niche in which they are raised, and cultural influences on development of language, thinking, and guided participation).

Before looking at each of these theories, consider a comment made by Judith Rich Harris in her book *No Two Alike*, in which she proposes a new theory of personality but observes, "Someone who thinks up a new theory is the last person who should be trusted with the job of testing it. A new theory should be tested by independent researchers who aren't cronies of the theorist . . . proposing theories and doing research to test them are jobs that should be carried out by different entities" (2006, p. 265). In the case of the theories discussed here, this sometimes happens and sometimes not.

Bronfenbrenner's Ecological Model

One of the most important contributions to the study of human development within cultural contexts, and one on which much of our presentation is

based, is the ecological model presented in the pioneering work of Urie Bronfenbrenner (1975, 1977, 1979, 1986, 1989, 1993, 2005). At the center of Bronfenbrenner's thinking is his contention that human development is a dynamic, interactive process in which human beings create the environments in which they live and that these, in turn, help shape their own development.

Simply stated, this model views behavior and development as a shared function of the characteristics of the individual (biological or genetic factors and personality) and the environment (social, physical, and cultural aspects of one's present surroundings, such as family, school, and neighborhood), along with the larger contemporary and historical contexts of which these are an integral part, such as society and period in which one is born and lives his or her life.

Bronfenbrenner's original model has been "undergoing successively more complex reformulations to attain its present, still-evolving form" (Bronfenbrenner, 1999, p. 4). Recent versions of this approach (Bronfenbrenner, 2005; Bronfenbrenner & Morris, 1998) have been renamed the *bioecological model*. By doing so, it identifies a child's own biology as a critical environmental factor affecting development, while incorporating earlier concepts, along with new ideas, into a series of propositions that focus more directly on the role of environment and the concept of time. Those readers who want to know more about this evolving model, which remains more theoretical than practical at the moment, are directed to the references mentioned earlier.

In this text, we have chosen to focus primary attention on Bronfenbrenner's earlier model (without the recent propositions), which we believe continues to offer significant advantages for viewing and understanding the connection between culture and human development. Where appropriate, we refer to some of his more recent ideas and formulations.

The **ecology of human development**, as defined by Bronfenbrenner, involves "*the scientific study of the progressive, mutual accommodation throughout the life course, between an active, growing human being and the changing properties of the immediate settings in which the developing person lives, as this process is affected by relations between these settings, and by the larger contexts in which the settings are embedded*" (2005, p. 107). In short, an individual is seen not as a passive, static, and isolated entity on which the environment exerts great influence (much like a *tabula rasa*, or blank slate), but as a dynamic and evolving being that interacts with, and thereby restructures, the many environments with which it comes into contact. These interactions between individual and environment are viewed as two-directional and characterized by reciprocity. For example, while a child's development is being influenced and molded by parents, family, school, and peers, she is, at the same time, influencing and molding the behavior of others. Take a moment and try to think of examples from your own life where situations like this occurred in your family, at school, or among friends. Why were they important?

Bronfenbrenner has suggested that an individual's perception of the environment is often more important than "objective reality," and that this perception influences one's expectations and activities. A recognition and acceptance of the critical role played by the cultural or environmental context seem particularly suited to the study of human behavior and development.

In his critique of traditional research carried out on children, Bronfenbrenner has stated, "Much of contemporary developmental psychology is the science of the strange behaviors of children in strange situations with strange adults for the briefest possible periods of time" (1977, p. 513). In other words, while striving to achieve experimental rigor and control, we have often lost sight of the scientific and practical relevance of our findings by ignoring how the same phenomena might occur outside such artificial environments. One of the other major goals of this text is to stress the relevance and practicality of such findings. For example, while social workers have employed Bronfenbrenner's model since the 1970s, recent studies demonstrate a deeper understanding and wider application of ecological principles in actual practice (Ungar, 2002).

The ecological model allows us to go beyond the setting being immediately experienced—whether in a laboratory, a classroom, or a backyard—and permits the incorporation of indirect, but nevertheless very real, effects from other settings, as well as from the culture as a whole. Bronfenbrenner originally divided the ecological environment into four **nested systems**: *microsystem*, *mesosystem*, *exosystem*, and *macrosystem* (see Figure 1). This conceptualization of the ecological environment has been retained in his more recent bioecological model. A fifth system, the *chronosystem*, with its focus on time and sociohistorical conditions, has been mentioned only occasionally in the literature, and seldom by Bronfenbrenner himself. However, as we shall soon see, the concept and importance of time has become a more significant part of the newly reformulated bioecological model and was so recognized in the last integrative book he wrote on his model before he died in 2005 (Bronfenbrenner, 2005).

The Microsystem. In Figure 1, the first level, the microsystem, is the layer closest to the child and contains those structures with which the child has direct contact, for example, family or preschool and resulting behaviors, such as dependence, independence, cooperation, or competition. This is the most basic level, the one at which individuals engage in face-to-face interactions, and their behaviors frequently reflect social position. Bronfenbrenner (1994) expanded his original definition to include home, church, school, hospital, or day care center. Other factors include the effects of the physical environment on behavior, including background noise, crowding, and the number and types of toys available to a child. For a real-life example of the microsystem, consider Charlie, the youngest child in his

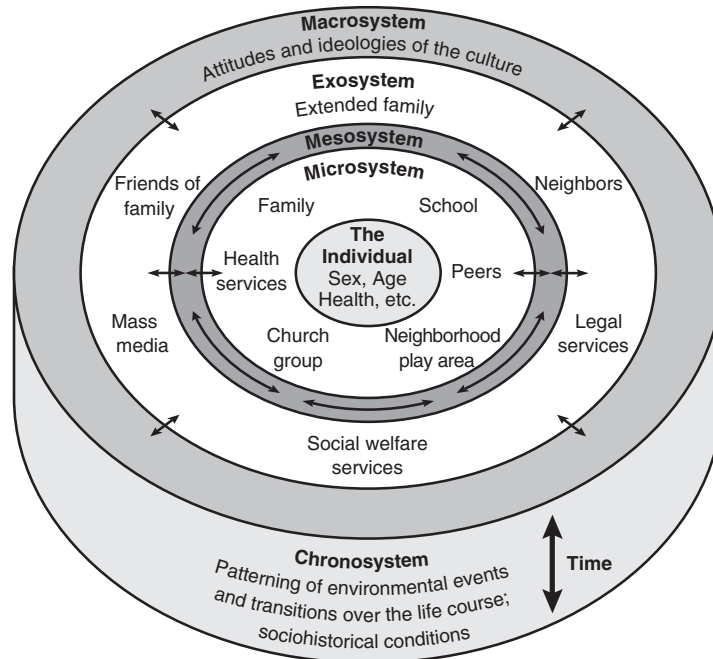


FIGURE 1 Bronfenbrenner's Ecological Model of Human Development

Source: From Kopp, C.B. and Kaslow, J.B., *The Child: Development in a Social Context*, 1st, © 1982. Based on data from *The Ecology of Human Development* by Urie Bronfenbrenner. Electronically reproduced by permission of Pearson Education, Inc. Upper Saddle River, NJ.

family. He attends preschool while his mother and father are at work. It is here that he learns to play “nicely” with other children, share toys, obey the teacher, and develop basic social skills.

The Mesosystem. The second level, the mesosystem, recognizes that the individual microsystems in which a child functions are not independent but are closely interrelated or connected and influence each other. This layer provides the connection between these structures. According to Bronfenbrenner's newly revised definition, the mesosystem is made up of two or more microsystems (e.g., home and day care, day care and school, or family and peer group). It is the mesosystem that links or ties together information, knowledge, and attitudes from one setting that help to shape behavior or development in another setting. For example, while parents emphasize the importance of learning at home, preschool teachers provide stimulating activities at school that motivate a child to learn more. In this regard, Steinberg, Darling, and Fletcher (1995) looked at authoritative parenting and adolescent adjustment within the ecological setting and reported a number of

benefits, including lower levels of delinquency and substance abuse among both male and female adolescents. Charlie's older sister, Sirina, is in second grade and is functioning in the mesosystem. For example, Siri's mother frequently meets with her daughter's teacher, Miss Santiago, to discuss her progress in school and seek advice on improving her study habits at home.

The Exosystem. Beyond the child's immediate environment are social settings of which he may not be a part but which, nevertheless, interact with one or more structures in his microsystem and influence his development in significant ways. These settings or institutions make up the third level—the exosystem. As defined by Bronfenbrenner, the exosystem includes formal settings, such as parents' place of work or community health and welfare institutions (e.g., hospitals). Bronfenbrenner (2005) provides an example of the link between the home and a parent's workplace for the developing child and of the link between the home and her children's peer group for the developing adult. Other less formal settings might include the extended family (aunts, uncles, cousins, friends, and neighbors). Malinee, Charlie and Siri's older sister, is experiencing daily activities within the exosystem; for example, although she doesn't know much about her father's work, she plays on a mixed-sex soccer team sponsored by his athletic apparel company after school and is learning the importance of team work and discipline.

The Macrosystem. This is the most complex system and is found in the outermost circle and consists of the customs, values, and laws considered important in the child's culture. The focus is on the consistencies among a wide variety of settings within a given society or culture. For example, in many countries there are striking similarities in the form and function of such familiar settings as school playgrounds, post offices, shopping malls, and even fast food restaurants. This system or level does not pertain to a specific context or environmental setting but is important because it has an effect on all the previous systems. It includes the customs, values, and laws of a child's culture and determines what are acceptable and unacceptable behaviors. For example, Macinnes, the oldest child in the family we have been looking at, is in high school, and, as a result of his accumulated experiences in these previous systems, is considered to be a smart, well-behaved, conscientious, helpful, and law-abiding member of his community and an example for his younger siblings, as well as friends and peers.

The Chronosystem. In Bronfenbrenner's ecological model, the exact role of the chronosystem is somewhat difficult to describe because it has not received the same attention as have the other four systems. In fact, the term does not always appear in the reformulated bioecological model although the elements that characterize it—time and sociohistorical conditions—constitute a major part of the new model (Bronfenbrenner,

2005). In his final writing, Bronfenbrenner makes the point that “the chronosystem is a methodological construct; the remaining four are theoretical but can also become substantive when put to empirical use” (p. 165). In general, this layer focuses on time as it relates to a child’s various environments. For example, it includes the physiological changes that occur as the child matures and his or her reactions to these changes as well as the changed environment in which he or she now functions. Another example is the timing of the death of an important person in the child’s life, such as a parent, sibling, or grandparent. Each of the children mentioned above was all exposed to the severe economic difficulties of the year 2009 and beyond. However, due to their age differences, they experienced events in unique ways, and the impact on their development varied. For example, Macinnes became much more aware of economic issues and moral behavior as they affected the country and his family, Malinee had to cut back on some of her activities due a reduction in family income, and Siri and Charlie, because they were so young, didn’t always understand what was happening but often heard their parents discussing concerns about money issues.

When studying individual behavior, a great deal of past and present developmental research has tended to view it either at a fixed point in time or, if over a long period of time (and if conducted longitudinally), has assumed little or no change in an individual’s personal characteristics or in his or her environmental or ecological setting. As Muuss (1996) has pointed out, “time used to be perceived as synonymous with changes in chronological age. In the ecological model, the constancy or change over time (of both E and P) is essential to assessing the nature of the changes during the life course” (p. 320). Bronfenbrenner has used this chronosystem model to help explain how time simultaneously affects the environment (E) and the person (P). According to Muuss, Bronfenbrenner “emphasizes the interacting nature of these changes, and it is the interacting nature of (E) and (P) that Lewin, and more explicitly, Bronfenbrenner, have brought to our attention” (p. 320).

In his later writings, Bronfenbrenner (2000), while not employing chronosystem terminology, placed increasing emphasis on “time and timing as they relate to features of the environment, as opposed to characteristics of the person” (p. 20)—what he has called “space through time: environment in the third dimension” (p. 20). Much of the progress in this area has emerged from researchers, primarily sociologists, using what Elder has called the “life course perspective.” For a discussion of the basic principles of this perspective and recent research, see Elder and Giele (2009).

Muuss provides an example of chronosystem research that might be conducted to investigate behavior among family members and the role time or timing might play in it. He points to the effect the arrival of a new baby might have on parents’ interactions with each other and with other children. “By assessing the mother’s interaction (with the older siblings) before, during, and after pregnancy, research suggests that the mother’s interaction patterns