DEVELOPMENT AGING

BIOPSYCHOSOCIAL PERSPECTIVES

SUSAN KRAUSS WHITBOURNE

ADULT DEVELOPMENT & AGING:

BIOPSYCHOSOCIAL PERSPECTIVES

Susan Krauss Whitbourne, Ph.D.

University of Massachusetts at Amherst



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Preface

teach this course for two reasons. One is because I love the field and think that it is the most interesting and important subject matter imaginable. To understand the aging process is to understand the very essence of life itself. Without getting morbid, think about what it means to understand why we age. It is to understand, also, why we die, since death is the natural ending of the aging process. The biological, psychological, and sociocultural aspects of adult development and aging can provide us with some very importance keys to existence.

Stepping down to a more practical level, I hope I will convince you of the field's importance as you start to learn about how you can apply what scientists know about adult development and aging to your own life. This is the second reason I love to teach the course to undergraduates. For students who are entering their twenties, there are many preventative steps that can be taken now. Once you have this knowledge, you can delay or perhaps even avoid altogether some of the changes associated with aging that are within your power to control. For students who are older than their twenties. it is not too late to apply this knowledge about aging, in fact, having gone through some changes already, the information may be taken even closer to heart. Older students will also be able to relate to many of the phenomena described in this text about adult life, including relationships, work, and involvement in the larger community.

The first time I was given the opportunity to develop a course on adult development and aging, I

was just starting out as an assistant professor. It was a thrill to have the chance to share with my students (some of whom were older than I was) the excitement I felt about this new and increasingly important field of study within psychology. After all, this was the 1970s, and it was clear that the field would grow by leaps and bounds in no time. Students needed to learn this vital information so that they could apply it to their jobs and future studies. I was right about the second point but a little premature about the first. Information about adulthood and aging is of vital importance, even more so now that the Baby Boomers are booming into their 50s. However, the optimism I felt about the growth of the field is only now beginning to be justified. It is impossible to turn on a news program, open the paper, or even pick up a popular magazine while waiting in line at the supermarket without reading something about the aging process and how it is affecting us all. I have also been encouraged by the strong and continued interest that students have shown over the years in this topic. If their desire to learn about the aging of their elders (and the aging of themselves) is any indication, the field has no where to go but up, and very shortly.

Themes of the Book

The book is based on a biopsychosocial model, a term that reflects the growing tendency in the study of development to examine the multiple interactions among the domains of biology, psychology, and sociology. According to this model, changes in one domain have effects on changes in other domains. The centerpiece of this model is identity, the individual's self-definition. Interactions between the individual and environment are interpreted through the framework provided by identity. These interactions, in turn, shape identity throughout the adult years and beyond. Terms and concepts relevant to this model will be introduced and elaborated upon throughout the text and will be focused on specifically through featured Biopsychosocial Perspectives boxes (see below).

This is an exciting time to be studying developmental processes in adulthood. Not only is the topic gaining increasing media attention, but it is also gaining tremendous momentum as an academic discipline within life-span development. The biopsychosocial model fits within the framework of several new approaches that emphasize the impact of social context on individuals throughout all periods of life. Entirely new concepts, sets of data, and practical applications of these models are resulting in a realization of the dreams of many of the classic developmental psychologists whose work shaped the field in the early twentieth century.

Organization

The text is organized in a manner that reflects the biopsychosocial theme. The opening chapters present introductory material, including basic concepts, demography, theoretical models, and research methods. The next section of chapters cover the physical aging process in adulthood and old age as well as the major health problems encountered by adults during these years. The middle section of the book includes topics within the psychology of adult development and aging, including cognitive and personality changes. The next set of chapters covers sociocultural aspects of adulthood aging, including relationships, vocational development, and retirement. Throughout these chapters biopsychosocial interactions are emphasized. In the final two chapters, these perspectives are brought together in a chapter on death and

dying, and a final chapter on successful aging. This final chapter includes a discussion of creativity and productivity in the latter years of life.

Learning Aids

The topics and features in this text are intended to involve the student at multiple levels. The Biopsychosocial Perspective Boxes present focused examples of research and theory that illustrate the biopsychosocial model. Interactions among sociocultural factors, physical age-related changes, and personality and identity are given emphasis. These boxes also present recent data on issues that are of practical as well as theoretical relevance, such as the topic of aging and driving.

The Behind the Research Boxes follow the format of popular music video channels that highlight the work of particular individuals who have been influential in the field. Although there were many notable individuals who could have been chosen for these boxes, I decided to feature people whose research provided a good example of the biopsychosocial theme. Each of these experts provided me with insightful commentaries about the aspects of their research that are most exciting or compelling for them, what they see as the major challenges, and what their predictions are about future research in this area. Their answers are presented as they were written by each individual, so you have their personal views truly in their own words. Photographs of each researcher provide you with a visual image to who this person is, a fact that should help enliven even further your understanding of what they are trying to accomplish in their work.

Finally, I decided to have a little fun with the Assess Yourself Boxes. As I was conducting research on the topics in the book and looking for additional lecture material to use in my class, I came across some interesting quizzes and exercises on the Web that were developed both by popular and professional sources. I would love to be able to have you enter these Web sites directly and look at these exercises, but given the limita-

tions of a textbook that must be printed on paper (rather than on the Web) I thought I would try the next best thing. The Assess Yourself Boxes give you a chance to test your knowledge and attitudes in each of the book's substantive content areas, with one of these tests per chapter. Short of being able to score yourself as you would on a Webbased test, you at least will be able to get some idea of how much you know or what your attitudes are toward the topic. Where the data were available, I summarized the answers of people who took these surveys.

Web icons placed throughout the chapters are the features that will allow you to enter the virtual world of adult development and aging. You will see little blue Web icons interspersed throughout the text. These mean that you can go to the John Wiley & Sons Web site that is specific to this book (www.wiley.com/whitbourne), and investigate the source that I have selected for that section of the book. Some of these sources contain updates of statistics and others are the sources for the Assess Yourself Boxes (or ones that are similar to the boxes when those become outdated). I encourage both student and instructor to visit the Web site frequently because new material will continue to be added and updated. The Web icons may also be thought of as interactive, in that I would greatly appreciate receiving updates from users that I may post on the site. Students have found some of the best Web sites for me to use in my own teaching, and I hope readers will become involved at a similar level

Other Learning Aids

Each chapter contains several pedagogical features, including a numbered summary, glossary terms, and suggested readings. These will assist students in reviewing the important material from the chapter and in pursuing further areas in more depth. Furthermore, the chapters have been written with ample illustrations, particularly tables and figures. These will help the student organize the information and can be used by the instructor as a basis for lecture material (see below).

Instructor's Manual and Test Bank

The Instructor's Manual and Test Bank were written by me, and reflect my 25 years plus of teaching the course. The Instructor's Manual provides chapter outlines, key terms, learning objectives, and lecture "talking points," extenders, and launchers. Material taken from what is now a rather vast movie and video collection that I possess is also described in the Instructor's Manual. More importantly, suggestions for incorporating new material as it becomes available, including documentaries, movies, and even pop music are described. Quotes that can be used in teaching each lecture topic are also provided.

Instructors will also be able to benefit from a set of PowerPoint slides that can be used for lectures and overhead transparencies. These will be available through Web downloads in a form that can be adapted for use by the individual instructor. Contained on the slides are highlights of chapters and extensive visual illustrations of chapter concepts and key terms.

I also wrote the Test Bank, and as with the Instructor's Manual, it reflects my many years of teaching the course. The test bank includes at least 50 to 70 (or 100 in long chapters) questions in each chapter. Each multiple-choice question is labeled according to which concept it tests, along with it's difficulty level. There are also short answer and essay questions corresponding to each section of the chapter.

Acknowledgments

My first set of acknowledgements go to my longsuffering family, who have put up for the last two years with more than the usual amount of papers, books, and general disarray around the dining room table, which served as the major work area for this book. Apart from the physical circum-

stances created by the writing of the book, though, was the emotional burden placed on everyone by my very intense desire to publish this particular text. My husband Richard O'Brien, as always, provided both important substantive help (his field is biology), but also continued to encourage me at every step along the way. My teenage daughter Jennifer O'Brien provided a constant source of humor and inspiration to make this book appealing to students. My older daughter, Stacey Whitbourne, is now herself in a graduate program at Brandeis studying the field of gerontology. Not only was she a student in my Psychology of Aging course (an interesting experience!) but she has continued to provide me with feedback and challenges about my approach to teaching and thinking about the aging process. Finally, my mother, Lisa Rock, deserves a special merit award for not only providing regular help in cooking dinner, but also continuing to demonstrate so many of the qualities of creativity that make up successful aging.

It is customary to thank the editorial and production staff of a publishing house, but in my case, I would like to go beyond the usual custom. Every individual from John Wiley Publishers who has been involved in this book has shown unusual dedication, care, and professionalism. The most centrally involved of these individuals has been Ellen Schatz, Psychology Editor, whose incredible insightfulness, collegiality, and knowledge of the field has guided me like a compass through the writing and revision process. Kate Cardegna, Editorial Assistant, has shown a virtually limitless willingness to be as helpful and efficient as possible. The production and design team on this book, Kelly Tavares, Harry Nolan, Hilary Newman, and Anna Melhorn, contributed ideas that were both wonderfully creative and sensible. I hope that readers like the look of this book as much as I do. Teri Stratford, the photo researcher, deserves special mention as her resourcefulness in finding exactly the right photo to illustrate the point allowed me to enliven the text to the maximum extent possible within the confines of a printed book.

Perhaps the best indication of the tremendous attitude at Wiley is the instantaneous speed with which emails are returned. An author can hardly ask for more.

My final thanks go to the reviewers who provided helpful comments and suggestions throughout the revision process. Their insightful observations and thoughtful proposals for changes helped me to tighten and focus the manuscript and to enhance the discussion of several key areas of interest in the field.

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In conclusion, I hope that I have given you something to look forward to as you venture into the fascinating field of adult development and aging, and that the subsequent pages of this book will fulfill these expectations. I have tried to present a comprehensive but clear picture of the area and hope that you will be able to apply this knowledge to improving your own life and the lives of the older adults with whom you may be preparing to work. I hope you will come away from the course with a positive feeling about what they can do to "age better" and with a positive feeling about the potentialities of later life. And maybe, just maybe, a few of you will decide to pursue this field more seriously and I can welcome you as colleagues in the coming years.

Susan Krauss Whitbourne, Ph.D. August, 2000

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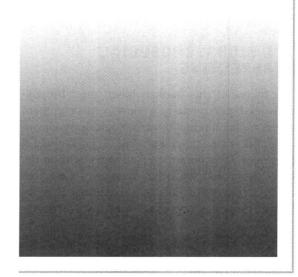
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Chapter One

Themes and Issues in Adult Development and Aging

f you are reading this book, you are an "adult." Even if you are, by all accounts, an average-aged college student, you nevertheless fit many of the criteria for this age category of human beings. The term "adult," which may conjure up the image of someone who is a "grown-up," refers to all individuals who have reached a certain level of physical, psychological, and social maturity. You and your fellow students may have difficulty entering certain commercial establishments without valid proof of age. Nevertheless, you are considered in many ways able to enjoy the privileges and carry out the responsibilities of those whom you tend to think of as from the "older generation." For those of you reading this book who have no difficulty thinking of yourselves as adults, you may be struggling with the issue of whether you are a "young" or "middleaged" version of this category of humans. And



for those students who clearly identify themselves as members of the older generation of adults, the issues you face with regard to selfdefinition may involve contemplating your status as a "senior citizen."

Questions involving self-definition based on age are very relevant to the scope and coverage of this book. We will be examining definitions of adulthood, the meaning and definition of "age," and the approaches researchers have taken to understanding the biological, psychological, and social changes that take place from the years of adolescence through old age. Readers will find that this information is of personal as well as theoretical and professional interest. We will explore the many ways individuals can affect their own aging processes through incorporating into their daily lives behaviors and activities that can maintain maximum levels of functioning well into the later decades of life. For college students of traditional age (18-22) taking the course, we will see that it is never too early to begin to make these adaptations. For those college students of nontraditional age, we will see that it is never too late to initiate these important interventions.

THE BIOPSYCHOSOCIAL PERSPECTIVE

The theme of this book is based on a **biopsy-chosocial perspective**, a view of development as a complex interaction of biological, psychosocial, and social processes (Fig. 1.1). Biological processes incorporate the changes within the body associated with the passage of time that alter the body's functions and structures. Psychological processes are those that involve cogni-

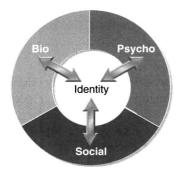


FIGURE 1.1
Biopsychosocial Perspective

tion, personality, and emotions. The social processes in development are those that reflect the environment or context, and they include indicators that reflect the individual's position within the social structure. Theories and models of life-span development, discussed in Chapter 2, attempt to sort out the relative influence of these sets of factors on the individual's progression through life.

The biopsychosocial model implies that biology, medicine, nursing, sociology, history, and even the arts and literature provide crucial perspectives to the psychology of adulthood and aging. Knowledge, theories, and perspectives from a variety of areas each contribute importantly to the study of the individual over time. Within this model, the concept of identity will have a central role. An individual's **identity** is defined as a composite of self-representations in biological, psychological, and social domains. The interaction of these domains as interpreted in terms of the individual's view of the self forms a central organizing concept within the biopsychosocial perspective.

PRINCIPLES OF ADULT DEVELOPMENT AND AGING

The field of adult development and aging is built on a set of principles that form the foundation of this book. Although theoretical differences exist within the discipline, there is general agreement on these underlying premises.

Continuity of Changes over the Life Span

The first principle of the study of adult development and aging is that changes over the life span occur in a continuous fashion. In other words, the changes that occur in later adulthood build on those that have occurred over the previous



Although people change in outward appearance over their lifetimes, they still feel that they are the same person on the "inside."

years of life. This principle has theoretical as well as practical implications.

Theories of adulthood and aging, from the biological to the sociological, take it as a given that the changes in old age occur against the backdrop of a prior developmental history for the individual. For example, in the biological realm, changes that occur in a particular organ system in later life depend in many ways on the prior functioning of that system throughout life.

The practical implications of the continuity principle relate to the ways that individuals feel about themselves and the ways that others feel about them. Adults do not feel that they become different people because they reach a certain birthday. In fact, older adults often say that they do not feel they have changed very much on the "inside" and that they still feel the same way they always have. Unfortunately, outward appearance plays a large role in the ways we are perceived by others. Consequently, when others look at a middle-aged or older adult, they are likely to

focus on that person's age rather than on some other characteristic of personality or ability. It is important to keep in mind that as people develop through adulthood they think of themselves as the "same," but older, and that many of them will resent being treated in a particular way because of their age. Think of the way you feel when you are lumped together with all other college students (for better or for worse) on the basis of your age and position in life rather than on "who" you are as an individual.

It Is the Survivors Who Grow Old

The second principle of adult development and aging that will be encountered throughout this book is one that is perhaps obvious but worth pointing out nevertheless. Simply put, in order for people to become old, they have to not die. Think about the ramifications of this principle. The people who have become old (and not died) are the ones who survived the many threats to life that cause other people to not survive. Such threats include car accidents, natural disasters, genetic vulnerabilities to diseases, and risky behaviors such as excessive drug use (see Table 1-1). The

TABLE 1-1
Five Ways to Shorten Your Life

The Centers for Disease Prevention and Control regards these five behaviors as the major obstacles that prevent people from living a longer and healthier life

1	Being overweight
2	Drinking and driving
3	Eating inadequate amounts of fruits and vegetables
4	Being physically inactive
5	Smoking

Source: Kamimoto, Easton, Maurice, Husten, & Macera, 1999.



fact that people manage to avoid death from these conditions suggests that they have inherited a good set of genes, made wise choices in lifestyles, and managed to avoid misfortune.



When you consider what it takes to become old then, you realize that these people have some special characteristics indeed. This fact has implications for the way that we make sense out of scientific data on human aging. All older people are survivors of the conditions that took away the lives of others. With increasing age into later life, they become even more select on important characteristics such as physical functioning, health, intelligence, and probably even personality style. Consequently, if you are looking at the differences between younger and older people on any given characteristic, you should realize that the older people are a more restricted (and perhaps superior) group than the younger ones. The younger ones have not been subjected yet to the same conditions that could threaten their lives.

A concrete example might help illustrate this principle. Consider the data on the psychological characteristic of cautiousness. Many studies have found that older people are less likely to take risks than are younger people. Along similar lines, older adults are also less likely to engage in criminal behavior. Why is this? One possibility is that people do in fact learn to moderate their behaviors as they get older. They choose not to engage in behaviors that will bring them harm or get them arrested. The other possibility is that the high risk-takers are no longer in the population because their risky behavior led to an early accidental death. The criminals are no longer in the population for study because they were either killed in their professional exploits or were imprisoned and could no longer commit these acts. These examples are worth keeping in mind as you read about some of the more subtle age-related "changes" in behavior reported as associated with the aging process.

Individual Differences Must Be Recognized

A long-held myth regarding development in adulthood and old age is that as people age, their individuality fades as the aging process takes its toll. This view is refuted by this third principle of adult development and aging: that as people grow older, they become more different, not more alike. Middle-aged and especially older adults are a highly diverse segment of the population in terms of their physical functioning, psychological performance, and conditions of living. Supporting this point, in one study, researchers examined a large number of studies of aging and compared the amount of variability in measures of older compared to younger adults. The researchers found that the variability was far greater in measures taken from older adults, suggesting increasing diversity over the adult years (Nelson & Dannefer, 1992).

This finding of increasing diversity with age in adulthood points to the importance of experiences in adulthood as shaping development. As people get older, their lives diverge increasingly from each other because of the many choice points that are offered to them and the many different choices they make. They may have gone to college or not gone to college, they may have joined the Army or not joined the Army, they may have moved to New York City or landed in Wichita, Kansas. They may have gotten married or not, had children or not, and as a result, they might have had grandchildren or not. Even little decisions can affect later outcomes in life, such as whether one chooses to go out to a movie on a stormy night and perhaps ends up with a broken leg after the car skids through an intersection. The possibilities in life are endless, and as a result, each individual's personal history moves in increasingly idiosyncratic directions with each passing day, year, and decade of life.

The principle that people become more different from each other with age relates to the notion of **inter-individual differences**. Another aspect of