# Adult Development and Aging

Myths and Emerging Realities

SECOND EDITION

RICHARD SCHULZ ROBERT B. EWEN

### Second Edition

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Myths and Emerging Realities

Richard Schulz
University of Pittsburgh

Robert B. Ewen

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To my grandmother Jullianna Voth and to my father Adolf—*R.S.* 

To Judy and Meredith—R.B.E.

### Preface

The study of adult development and aging is a young but rapidly growing science. Although we know much more about this area today than we did a decade ago, many of us still subscribe to unfounded myths about adult development and aging. Therefore, one of the major goals of this book is to contrast existing myths about adult development with the best available empirical data (wherever possible), in order to separate fiction from fact. To this end, we have attempted to summarize and synthesize the most current research literature available at the time of the writing of this second edition.

Much of what we know about adult development is emergent: We have some understanding of this complex process, but definitive answers are not always available. Indeed, we may never have definitive answers to some questions, because the answers change along with changes in the social and technological environments within which individuals develop. Therefore, throughout this book, we identify many important questions for which the existing empirical data are still speculative. New information may quickly alter existing conceptions of the field.

Writing a book on adult development and aging inevitably raises the question: Should individual chapters be organized by chronological age or by topic? We have opted for the latter strategy because age *per se* is not necessarily a good marker of adult development, and because we believe that the complexity and diversity of this material is easier to understand when organized by topic. Although our choice of topics is heavily influenced by our backgrounds in psychology and gerontology, we have not ignored important biological, sociological, and medical contributions to our understanding of adult development and aging. This book covers traditional psychological topics, such as sensation and perception, memory and learning, intelligence and creativity, and psychopathology; but it also includes separate chapters on such topics as stress and coping, social relationships, and work and retirement.

Our approach differs from existing topical treatments of adult development in that we place a strong emphasis on providing the reader with a fundamental understanding of a particular topic and the most current agerelated data. For example, in discussing memory and cognition, we provide sufficient background information on relevant theories and research methods to enable the reader to appreciate how research on age-related changes has evolved, and to understand the significance of the most current findings on this topic.

For this second edition, the chapter on adult psychopathology has been completely rewritten. All other chapters have been revised, updated, and thoroughly reviewed for readability. Many of these chapters have changed significantly: Some questions have been resolved since the previous edition was published, and new issues have been raised by recent findings. Among the topics added in this edition are

- · Aging: Geographic trends
- Aging: International trends
- Practical intelligence
- Wisdom
- · The "empty nest"
- The economic future of the elderly
- · The right to die
- · Bereavement and health outcomes

Numerous other topics that appeared in the first edition have been extensively revised and/or expanded, including

- The brain and aging
- · Cardiovascular disease, cancer, and stroke
- Adult friendships
- Type A and Type B individuals
- The diagnosis and assessment of adult psychopathology
- Alzheimer's disease
- Anxiety disorders
- The treatment of adult psychopathology
- · Understanding the dying patient

This book also includes several valuable aids designed to make this complex, interdisciplinary body of knowledge more accessible to the reader. Each chapter contains a section called "Myths About Aging" that highlights key issues and contrasts old beliefs with current views. At the end of each chapter is a summary of major concepts and a list of terms to remember, which are clearly defined in the Glossary at the end of this book. This edition also features study questions at the end of each chapter, which are designed to promote critical thinking about the material presented therein. An extensive reference list will enable students and instructors to pursue in depth topics of special interest. Finally, an *Instructor's Manual* is available to all instructors who adopt the text. It includes an extensive list of multiple-choice and discussion questions for each chapter, cumulative exams, learning objectives, and suggested readings rated by level of difficulty.

In sum, this book is designed for those who value textbooks based on the best available current data and who appreciate that knowledge about adult development is in a state of flux, with new data becoming available almost daily. This book will especially appeal to instructors who want to encourage their students' critical thinking skills and ability to understand and use research-based knowledge, along with conventional wisdom, as the basis for thought and action.

### Acknowledgments

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R.S. R.B.E.

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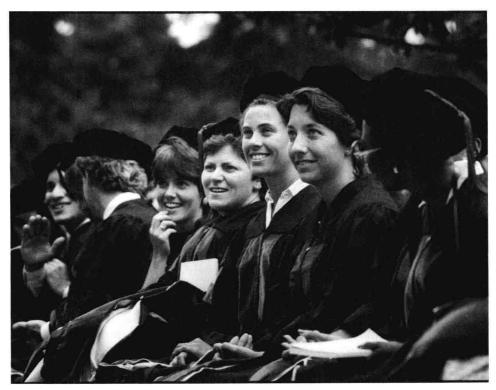
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### Part I Introduction

### Chapter 1

### Introduction



Susie Fitzhugh/Stock, Boston

4 Introduction

This book is about adult development and aging. Let us consider each of these terms separately.

Adult implies that we will not be concerned with such periods of life as infancy, childhood, and the early teens. Although the law specifies minimum ages for certain behaviors (driving an automobile, military service), there is no clearly identifiable age at which human beings leave adolescence and enter adulthood. As a general guideline, we will be dealing with events that occur after about age 20.

Development means that we will be studying changes that occur over time. Adult humans are not static entities; they change as they grow older, often substantially. However, it is also important not to exaggerate the magnitude of these changes. Many common beliefs about the negative effects of aging have proved to be mere myths when investigated scientifically. In this book, therefore, we will (1) describe important differences and similarities between younger and older adults, basing our observations on data derived from empirical research; (2) suggest likely explanations for those age-related differences that we discover; and (3) indicate how this information might help us to improve adult life. In addition to describing various phenomena and identifying the underlying causes, behavioral scientists also strive to apply their findings in ways that will modify our environment for the better.

The developmental approach focuses on changes within the individual throughout adulthood (intra-individual changes), the extent to which such changes occur at different rates among different adults (interindividual differences), and how individuals adapt to those changes. (See Baltes & Baltes, 1990; Baltes, Reese, & Nesselroade, 1977.) If the typical adult shows a moderate loss of hearing between ages 40 and 70, this is a significant *intra*-individual change. Having described this phenomenon, we next face the task of explaining why such auditory declines occur. For example, a specific part of the auditory system might degenerate with increasing age. If we correctly identify the cause, we may then be in a position to devise appropriate corrective methods (e.g., a mechanical device that takes over the function of the impaired organ).

Alternatively, we might find significant *inter*individual differences in the amount of intra-individual change. That is, some adults may experience much greater auditory declines than do others. Further investigation might then reveal that these hearing losses are caused primarily by frequent exposure to extremely loud noise. This would suggest such corrective measures as protective earmuffs for those who work with loud machinery, and greater caution by those who enjoy listening to rock music on personal headphones.

Some theorists define adult development in terms of a series of distinct stages, ones that are presumably experienced by most or all adults. According to one such model (Levinson, 1986), the period from age 17 to 22 is a bridge between pre-adulthood and early adulthood; the period from age 22 to 28 is a time for building and maintaining an adult mode of living; the period from age 40 to 45 is the time of midlife transition or "crisis," and so forth. If this model were supported by substantial research evidence, it

would provide an appealing framework for discussing adult development. In our opinion, however, the available data do *not* support the concept of universally applicable stages of adult development. (We will have more to say about this issue in Chapter 7.) Therefore, the chapters that follow are organized instead by substantive area: physiological aspects of aging, sensation and perception, learning and memory, personality, and so on.

Last, *aging* indicates that we will be paying considerable attention to the behavior of older adults. This is currently an extremely popular research area, for reasons that will be discussed in the following section.

### Human Aging and Life Expectancy

Journey back for a moment to the dawn of civilization. During this chaotic era, primitive humanity tried desperately to survive with rudimentary knowledge and few tools. Not surprisingly, very few achieved the age of 40; in fact, the average life span during these prehistoric times was in all probability a mere 18 years! Those who did succeed in reaching their mid-twenties or early thirties were regarded as unusually wise and capable because of this great accomplishment (Dublin, 1951; Lerner, 1976; Schulz, 1978).

As civilizations grew and living conditions improved, however, longevity increased. There are now more than 23,000,000 people in this country age 65 and older, including more than 100,000 over 100 years of age—a phenomenon that has been referred to as "the graying of America."

#### **DEFINITIONS**

Aging. Human **aging** consists of changes that are caused by processes within the individual and which significantly decrease the probability of survival. These changes are universal and inevitable. They cannot be avoided or reversed; no one can escape growing old, nor can a middle-aged or elderly person become young again (although some have tried, as we will see in Chapter 3). Thus aging differs from illnesses and diseases, which are evitable, may have external causes, and may be cured or alleviated.

The distinction between aging and illness is very important. (See, for example, Schaie, 1988.) Suppose a researcher finds that 70-year-olds have significantly poorer hearing than 40-year-olds. The researcher might be tempted to conclude that this difference in hearing is caused by aging. If so, nothing can be done about it. Growing older is inevitable, so you would simply have to expect some noticeable (and annoying) hearing losses by about age 70.

However, let us now suppose that the researcher properly decides to investigate this issue more carefully. She finds that the hearing losses among the 70-year-olds are actually caused by a disease that attacks part of the inner ear. This changes the conclusion dramatically! The real problem is that 70-year-olds are more susceptible to this disease than are 40-year-olds. Therefore,