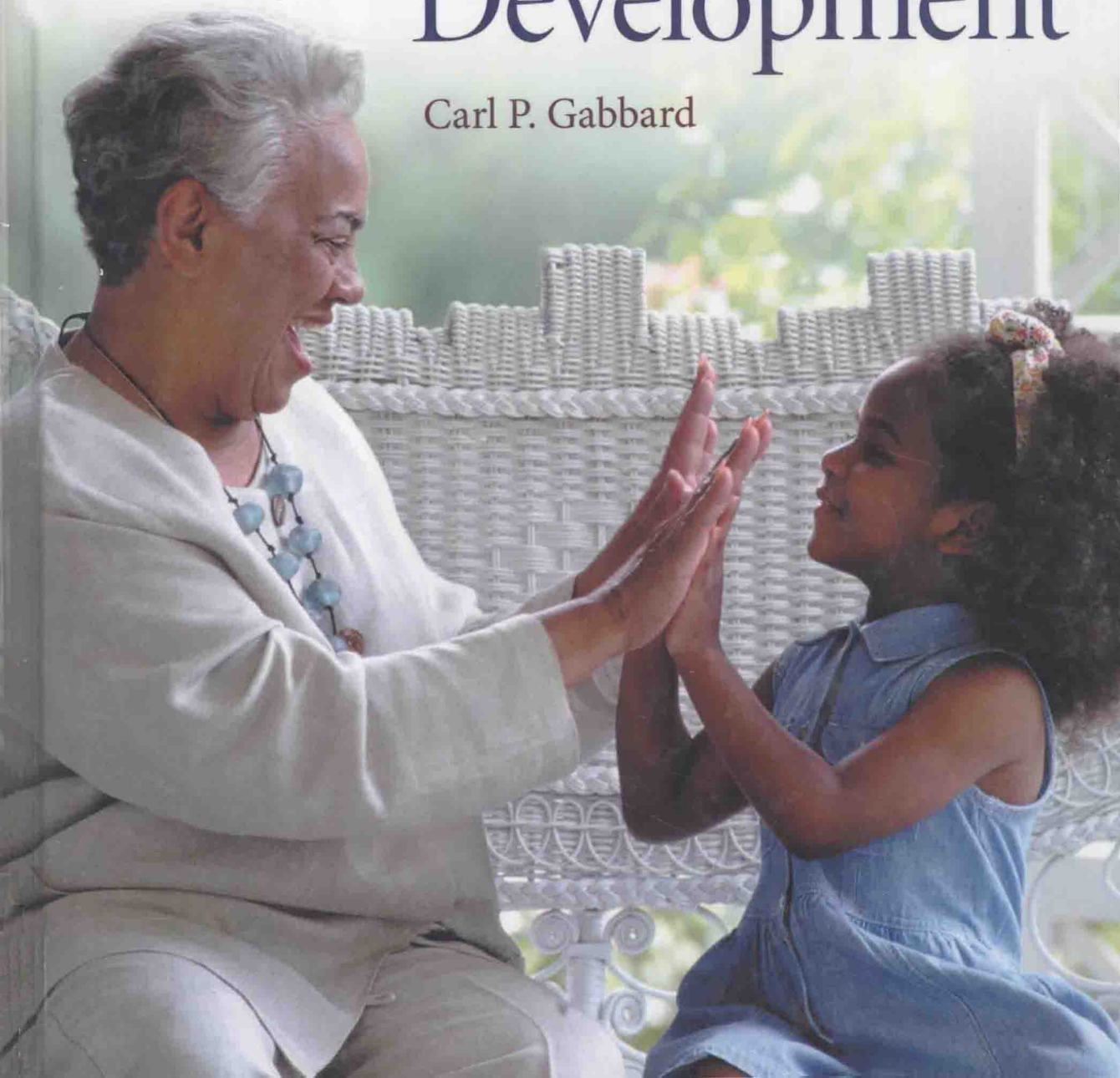


# Lifelong Motor Development

Sixth  
Edition

Carl P. Gabbard

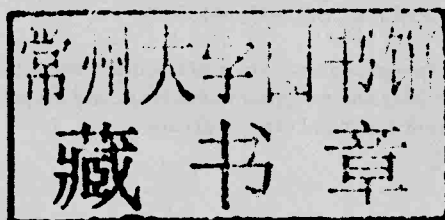


Sixth Edition

# Lifelong Motor Development

**CARL P. GABBARD**

Texas A&M University



**Benjamin Cummings**

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## to the student

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Once again, I want to address you in this special section because I realize not all students are overwhelmed at the notion of reading the preface of a college text. The sixth edition of *Lifelong Motor Development* is a study in one of the most fascinating and relevant subjects you will encounter. What could be more interesting than understanding how we develop and change across the life span—a look back and, perhaps more intriguing, a glance at days to come? This text is a window into the dynamics of one of our most natural, joyful, and important behaviors—movement! You are about to begin a fascinating journey through the study of motor behavior and the marvelous machine that controls it from its prenatal beginnings to older adulthood. Let the journey of a lifetime begin!

Carl Gabbard

P.S. Hints for success—read, know the objectives and key terms, work with a study group, and use the website resources. That is all there is to it!

# preface

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The sixth edition of *Lifelong Motor Development* is the most comprehensive research-based text of its kind. The ***developmental systems perspective*** provides a unique framework for the ***study of change*** in growth and motor behavior across the life span. *Lifelong Motor Development* is the study of coordinated movement and the processes that underscore perception and action. With this approach, students are provided information from multiple perspectives from which a broader and more in-depth understanding of development may be acquired. The developmental systems perspective advocates that development is the product of dynamic interacting processes between the various biological systems and environmental contexts. This approach incorporates, for example, Gibson's ecological theory, dynamic systems theory, Newell's (constraints) model, developmental cognitive neuroscience, and the latest environmental perspectives.

For the instructor and student, note how chapter objectives conform to the published *Undergraduate Motor Development Competencies* by the National Association for Sport and Physical Education. Visit [www.pearsonhighered.com/gabbard](http://www.pearsonhighered.com/gabbard) to view the correlation table.

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## What's New to This Edition?

Students will benefit from a variety of new content and features in the sixth edition, including:

- Complementing the central theme of *change*, new to this edition are margin *Focus on Change* notations (boxes), indicating key change effects.
- Added to the approaches to the study of motor development is *Developmental Cognitive Neuroscience*, a field that uses the latest technology to study the brain and behavior relationship.
- Expanded section on *Embodiment*—the idea that cognition is largely influenced by bodily (sensorimotor) actions.
- More discussion of *environmental effects* using ecological theory and application for studying motor development.
- New section on *Special Populations with Common Motor Disorders* and motor assessment tools.
- Expanded material covering *brain plasticity* and training effect.
- Updated and new motor assessment instruments, including *Movement ABC-2*, *BOT-2*, and *Senior Fitness Test*.

- More research examples with application to understanding *perception and action*.
- New views on gender performance trends, as opposed to gender differences.
- More *Think About It* critical thinking questions, located strategically in the margins to encourage the student to reflect on previous material and experience and create new lines of inquiry.
- New and timely *Focus on Application* features have been added; these highlight real-world issues and practical observations of relevance to the future professional.
- Accompanying this edition of *Lifelong Motor Development* is an Instructor's Manual with Test Bank. The Instructor's Manual with Test Bank includes updated guidelines for course development, a course outline, a chapter objectives and key terms section, Think About It questions, a new Focus on Change section, and over 75 new sample test questions and answer key! Find the Instructor's Manual with Test Bank downloadable at the Resources tab of the textbook's catalog page at [www.pearsonhighered.com](http://www.pearsonhighered.com).
- The sixth edition PowerPoint presentation lecture outlines offers comprehensive chapter outlines with key points and visuals from the text. Find the PowerPoint presentation lecture outlines downloadable at the Resources tab of the textbook's catalog page at [www.pearsonhighered.com](http://www.pearsonhighered.com).
- We have spent considerable time and effort in improving the interactive website (for students and instructors) accompanying this edition of *Lifelong Motor Development*. Features include quizzes, lab and field experiences, chapter summaries, and important links to instructional resources. New to this edition are links to videos illustrating the development and assessment of fundamental motor skills. Access this edition's Companion website by going to [www.pearsonhighered.com/gabbard](http://www.pearsonhighered.com/gabbard).
- And finally, a new CourseSmart eText version of the book is now available. CourseSmart eTextbooks are an exciting new choice for students looking to save money. As an alternative to purchasing the print textbook, students can subscribe to the same content online and save 40% off the suggested list price of the print text. Access the CourseSmart eText at [www.coursesmart.com](http://www.coursesmart.com).

## Basic Organization

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*Lifelong Motor Development* presents a topical and chronological approach to the study of human motor development. Although good arguments exist for using either format entirely, the intent is to provide the student with a multi-dimensional perspective of *change*. The topical sections offer a rich feel for the interrelatedness of the lifelong developmental process. On the other

hand, conceptualizing life-span development within a framework for study and placement of significant events necessitates a “general” time-related continuum; this text provides such a developmental framework.

The basic organization of the text is not different from the previous edition. For first-time users (in brief), *Lifelong Motor Development* is divided into six parts. Part One consists of a single chapter that presents a multidisciplinary overview of lifelong human development with emphasis on basic developmental principles, terms, issues, and theoretical approaches. Also provided is a conceptual model of the phases of motor behavior used as the framework for the material presented in Part Four, “Motor Behavior Across the Life Span.” Part Two is devoted to topical discussions on the body of information related to lifelong biological growth and development. Chapters 2, 3, and 4 provide information on the various hereditary, neurological, and physical characteristics that, together with experience, form the bases for motor behavior across the life span. Chapter 5 deals with factors and conditions that may affect the course of biological growth and development.

Chapters 6 and 7 (Part Three) present comprehensive, topical discussions of lifelong perceptual development and information-processing characteristics, including the latest theories on perception to action. The chapters in Part Four (8 through 11) provide a chronological (phase model) description of motor behavior characteristics across the life span. Coverage begins with early movement behavior (Chapter 8). It extends through early childhood (Chapter 9), later childhood and adolescence (Chapter 10), and finally motor behavior during the adult years characterized by peak performance and, with older age, regression (Chapter 11).

Part Five (Chapter 12) offers a broad perspective on the diversity of motor assessment techniques and discusses the considerations for selecting and implementing a wide variety of assessment instruments. Part Six (Chapter 13) presents a discussion of the influence and importance of sociocultural factors on motor development from a lifelong perspective.

## Pedagogical Features

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An important goal in creating this text was to make it a teachable resource with an *effective learning system*. Each of the six parts of the text begins with an overview of its content. Included in the introduction of each chapter are *chapter objectives* and *key terms*. The objectives reflect the conceptual framework used by identifying the important facts, topics, and concepts to be covered. Marginal notations are provided to aid the reader in identifying text material related to chapter objectives. Consistent feedback from users suggests that these characteristics are quite useful in developing (customizing) course materials. For example, in some instances, instructors may wish to designate selected (rather than all) chapter objectives for course coverage. This can be especially useful for advanced studies of motor development.

*Think About It* questions are found in the margins of each chapter with the intent of stimulating critical thinking and active involvement with the

subject matter. Like the objectives, they can be used for a variety of instructional purposes.

*Focus on Change* notations, also found in the margins, are intended to highlight significant characteristics of lifelong change effects.

**Key terms** appear in boldfaced type in the text and pinpoint the words of greatest importance to understanding the broader concepts of each chapter; these and other significant terms are highlighted (italicized) throughout. A chapter *Summary*, list of *Think About It* questions, *Suggested Readings*, and *Weblinks* are presented at the end of each chapter. *Focus on Application* features, which highlight real-world issues and practical observations, are found in selected chapters. Supplements available with the sixth edition of *Lifelong Motor Development* include an Instructor's Manual with Test Bank, a PowerPoint presentation with lecture outlines and key figures and tables from the text, a Companion website, and CourseSmart eTextbook.

And finally, a much desired outcome of the sixth edition of *Lifelong Motor Development* is that the reader will feel the excitement associated with studying and understanding human motor development from a life-span perspective.

## Acknowledgments

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The sixth edition of *Lifelong Motor Development* is the outcome of much more than my efforts. I am most grateful for the continuous and diligent efforts of the scientific community in providing the knowledge base. Much of the inspiration for creating the sixth edition came from comments from current users, colleagues, and students. Many thanks to the following reviewers: William Carleton, University of the Incarnate Word; Alberto Cordova, The University of Texas at San Antonio; Wendy Cowan, Athens State University; Walter Davis, Kent State University; Noreen Goggin, The University of North Texas; Dennis Newell Jr., University of Mary; Leah Robinson, Auburn University; and Timothy Sawicki, Canisius College.

With this edition, I also owe a special debt of gratitude to the staff at Benjamin Cummings, specifically Brianna Paulson, Sandra Lindelof, and Neena Bali, for their support and dedication in making this edition the very best text in lifelong motor development.

Finally, this edition is dedicated to all the students from the past and present that continue to fuel my desire to contribute to this exciting field of study.



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