

The chapter on motivation occurs later in this book than is typical, because recent evidence suggests that motivation is not just a modulator of learning but can serve as a discriminatory cue and in some cases may actually require learning. The final chapter starts with a discussion of aversive control (also typically presented earlier in learning texts), because Bouton recognizes the complex interaction among stimulus-reinforcer associations, response-reinforcer associations, and the cognitive and emotional mechanisms that are involved. He ends the book by proposing that all of these mechanisms are also involved in all instrumental behavior.

Any textbook about learning and behavior must be selective and omit discussion of topics that some teachers believe are important. I would like to have seen a discussion of social learning and, in particular, learning through observation. The ability of animals to acquire new behavior by observing the behavior of others has important implications for behavioral flexibility and poses an interesting challenge for learning theorists.

Although the book mentions contrast effects, so important because of their implications for the determination of associative strength, it does not address behavioral contrast (the effect that a change in one component of a multiple schedule has on the unchanged component). Behavioral contrast is of particular interest because the presumed instrumental effect has been attributed to Pavlovian associations involving the signal for the unchanged component, which has now become a better predictor of reinforcement than it was prior to the change. Furthermore, recent research has shown that behavioral contrast results primarily from the anticipation of the worsening of the rate of reinforcement (anticipatory contrast) rather than the sudden improvement in the rate of reinforcement (local contrast).

These omissions notwithstanding, Bouton's book presents an excellent picture of contemporary learning theory. I strongly recommend it, especially for a survey course on learning at the graduate level.

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OATES, J., WOOD, C., & GRAYSON, A. (2005). *Psychological development and early childhood*. Oxford, UK: Blackwell Publishing. ISBN 1-4051-1693-5.

In their collaboration, *Psychological Development and Early Childhood*, John Oates, Clare Wood, and Andrew Grayson aim to provide an introduction to the essential components of the primary years of childhood. The field of developmental psychology is open to a wide variety of perspectives, theories, and interpretations, and the authors of this book have not limited themselves by focusing on only certain models of early child development. Rather, they approach the field from various perspectives, including the biological, social, and cultural components that are involved in shaping a child's development. The breadth of viewpoints addressed in the authors' analysis includes behavioral approaches, social learning models, and Piagetian theory. Because of the global nature of the material, the book endows the reader with an excellent framework for understanding the early psychological development of children.

The structure of the book aids in the ease of understanding the topics addressed throughout the text. The content is divided into seven chapters, each focusing on one vital aspect of developmental psychology. These aspects include children and development, theories of development, sensation and

perception, early cognitive development, temperament and development, origins of development, and our first relationships. Each chapter begins with “learning outcomes,” an overview that primes the reader to the chapter’s content. The chapters are further separated into sections that cover the principal components of the main concept. Each section closes with a short summary highlighting crucial points. These summaries are a useful means of rehearsal, aiding in retention.

The first chapter addresses general concepts of childhood and development, for instance, the distinction between children and adults, and what constitutes the study of development. It provides an excellent historical background on the development of “childhood.” The chapter concludes with a consideration of theories and the limitations of developmental research. Chapter 2 offers the general explanations of child development presented by the four “grand” theories of developmental psychology: behaviorism, social learning theory, Piaget’s stage theory, and social constructivism. The third chapter examines the development and functions of the auditory and visual sensory systems in early childhood. The evolution of hearing and vision during a child’s first 18 months is the primary focus, with appropriate diagrams showcasing the ways in which information is processed and incorporated within these senses. In chapter 4, children’s representational ability and the issue of object permanence are explored. Chapter 5 examines temperamental differences between children, as well as how such differences relate to personality diversity in adulthood. Temperament theories, measurements, and the difficulty in defining the term are the foundation of this chapter, which asks, for instance, “How is temperament broken down?” and “How is temperament expressed at different ages?” The penultimate chapter delves into the controversial issue of environment versus genetics in relation to the development of children. Rather than offering one simple explanation, the authors highlight the need for an integrated approach to human development that includes roles for both factors. The final chapter’s central theme is the relationship between young children and others. The crucial relationship between infant and caregiver is emphasized.

The ancillary material, which includes examples, diagrams, illustrations, tables, and research summaries, is an excellent resource. It clearly demonstrates the application of psychological principles to development. Historical research design and results are explained through illustrations that provide easily interpretable references. Each chapter is supplemented with activities that encourage classroom interaction and group discussion, consequently allowing for critical thinking, debate, and feedback. Many of the chapters close with readings that are pertinent to the chapter topics. These segments of research articles, which relate to specific areas of developmental psychology, illustrate the way in which information is synthesized from actual research to the text. Similarly, students who further explore psychological study will find the bulk of their later reading to be similar to these documents. Finally, a list of references follows the text of each chapter. Positioning the references sections at the end of each chapter, instead of at the end of the book, provides quicker access. A possible addition to the end of the text would be a glossary as a quick reference tool, with boldfacing of important terms within the text. However, key terms are already found in the margins of the text.

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